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quarterly period ended September 30, 2024 Â or Â â˜ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Â For the transition period from _____ to_____ Â Commission File Number 001-40069 Â AmpliTech Group, Inc. (Exact name of registrant as specified in its charter) Â Nevada Â 27-4566352 (State or other jurisdiction of incorporation or organization) Â (I.R.S. Employer Identification Number) Â 155 Plant Avenue Hauppauge, NY 11788 (Address of principal executive offices) (Zip Code) Â (631)-521-7831 (Registrantâ€™s telephone number, including area code) Â Securities registered pursuant to Section 12(b) of the Act: Â Title of each class Â Trading Symbol(s) Â Name of each exchange on which registered Common Stock, par value $0.001 per share Â AMPG Â The Nasdaq Stock Market LLCÂ Warrants to Purchase Common Stock Â AMPGW Â The Nasdaq Stock Market LLCÂ Â Indicate by check mark whether registrant (1) has filed all reports to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes â˜’ No â˜ Â Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Â§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes â˜’ No â˜ Â Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of â€œlarge accelerated filer,â€ â€œaccelerated filer,â€ â€œsmaller reporting companyâ€ and â€œemerging growth companyâ€ in Rule 12b-2 of the Exchange Act: Â Large accelerated filer â˜ Accelerated filer â˜ Non-accelerated filer â˜’ Smaller reporting company â˜’ Â Â Emerging growth company â˜ Â If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. â˜ Â Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes â˜ No â˜’ Â As of November 8, 2024, the registrant had 11,091,601 shares of common stock, par value $0.001 per share, issued and outstanding. Â Â Â Â Â Â AMPLITECH GROUP, INC. Â QUARTERLY REPORT ON FORM 10-Q September 30, 2024 TABLE OF CONTENTS Â Â Â Â Â PAGE PART I - FINANCIAL INFORMATION Â Â Â Â Â Â Item 1. Financial Statements (Unaudited) Â 4 Â Â Â Â Â Item 2. Managementâ€™s Discussion and Analysis of Financial Condition and Results of Operations Â 32 Â Â Â Â Item 3. Quantitative and Qualitative Disclosures About Market Risk Â 37 Â Â Â Â Item 4. Controls and Procedures Â 37 Â Â Â PART II - OTHER INFORMATION Â 38 Â Â Â Â Item 1. Legal Proceedings Â 38 Â Â Â Â Item 1A. Risk Factors Â 38 Â Â Â Â Item 2. Unregistered Sales of Equity Securities and Use of Proceeds Â 38 Â Â Â Â Item 3. Defaults Upon Senior Securities Â 38 Â Â Â Â Item 4. Mine Safety Disclosures Â 38 Â Â Â Â Item 5. Other Information Â 38 Â Â Â Â Item 6. Exhibits Â 38 Â Â Â SIGNATURES Â 39 Â Use of Certain Defined Terms Â Except as otherwise indicated by the context, references in this report to â€œwe,â€ â€œus,â€ â€œour,â€ â€œour Companyâ€, â€œthe Companyâ€, â€œAmpliTechâ€, â€œSpecialtyâ€ or â€œSMWâ€ â€œSpectrumâ€ or â€œSSMâ€, â€œAmpliTech Group MMIC Design Centerâ€ or â€œAGMDCâ€, â€œAmpliTech Group True G Speed Servicesâ€ or â€œAGTGSSâ€ are the combined business of AmpliTech Group, Inc., and its consolidated subsidiary, AmpliTech, Inc., and AMPGâ€™s divisions Specialty Microwave, Spectrum Semiconductor Materials, AmpliTech Group MMIC Design Center and AmpliTech Group True G Speed Services. Â 2 Â Â CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION Â This Quarterly Report on Form 10-Q contains â€œforward-looking statementsâ€ within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended (the â€œExchange Actâ€). Forward-looking statements discuss matters that are not historical facts. Because they discuss future events or conditions, forward-looking statements may include words such as â€œanticipate,â€ â€œbelieve,â€ â€œestimate,â€ â€œintend,â€ â€œcould,â€ â€œshould,â€ â€œwould,â€ â€œmay,â€ â€œseek,â€ â€œplan,â€ â€œmight,â€ â€œwill,â€ â€œexpect,â€ â€œanticipate,â€ â€œpredict,â€ â€œproject,â€ â€œforecast,â€ â€œpotential,â€ â€œcontinueâ€ negatives thereof or similar expressions. Forward-looking statements speak only as of the date they are made, are based on various underlying assumptions and current expectations about the future and are not guarantees. Such statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, level of activity, performance or achievement to be materially different from the results of operations or plans expressed or implied by such forward-looking statements. Â We cannot predict all the risks and uncertainties. Accordingly, such information should not be regarded as representations that the results or conditions described in such statements or that our objectives and plans will be achieved, and we do not assume any responsibility for the accuracy or completeness of any of these forward-looking statements. These forward-looking statements are found at various places throughout this Quarterly Report on Form 10-Q and include information concerning possible or assumed future results of our operations, including statements about potential acquisition or merger targets; business strategies; future cash flows; financing plans; plans and objectives of management; any other statements regarding future acquisitions, future cash needs, future operations, business plans and future financial results, and any other statements that are not historical facts. Â These forward-looking statements represent our intentions, plans, expectations, assumptions and beliefs about future events and are subject to risks, uncertainties and other factors. Many of those factors are outside of our control and could cause actual results to differ materially from the results expressed or implied by those forward-looking statements. Considering these risks, uncertainties and assumptions, the events described in the forward-looking statements might not occur or might occur to a different extent or at a different time than we have described. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of the Quarterly Report on Form 10-Q. All subsequent written and oral forward-looking statements concerning other matters addressed in this Quarterly Report on Form 10-Q and attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this Quarterly Report on Form 10-Q. Â Except to the extent required by law, we undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, a change in events, conditions, circumstances or assumptions underlying such statements, or otherwise. Â 3 Â Â PART I â€“ FINANCIAL INFORMATION Â Item 1. Financial Statements Â AmpliTech Group, Inc. Condensed Consolidated Balance Sheets

Â Â Â September 30,Â Â December 31,Â Â Â 2024Â Â 2023Â Â Â (Unaudited)Â Â Â Â AssetsÂ Â Â Â Â Current AssetsÂ Â Â Â Â Â Â Cash and cash equivalentsÂ $1,076,537Â Â $6,726,013Â Accounts receivableÂ Â 1,275,931Â Â Â 2,542,710Â Inventories, netÂ Â 7,548,159Â Â Â 6,537,578Â Prepaid expensesÂ Â 2,747,309Â Â Â 1,342,335Â Total Current AssetsÂ Â 12,647,936Â Â Â 17,148,636Â Â Â Â Â Â Â Â Property and equipment, netÂ Â 2,349,796Â Â Â 2,599,448Â Operating lease right of use assetsÂ Â 4,517,685Â Â Â 3,538,798Â Intangible assets, netÂ Â 2,871,625Â Â Â 2,984,133Â GoodwillÂ Â 4,696,883Â Â Â 4,696,883Â Cost method investmentÂ Â 348,250Â Â Â 348,250Â Security depositsÂ Â 114,174Â Â Â 91,481Â Â Â Â Â Â Â Â Â Total AssetsÂ $27,546,349Â Â $31,407,629Â Â Â Â Â Â Â Â Liabilities and StockholdersÂ€™ EquityÂ Â Â Â Â Â Â Current LiabilitiesÂ Â Â Â Â Â Â Accounts payable and accrued expensesÂ $1,111,298Â Â $846,179Â Customer depositsÂ Â 145,428Â Â Â 14,239Â Current portion of financing lease obligationsÂ Â 17,379Â Â Â 16,799Â Current portion of operating lease obligationsÂ Â 447,556Â Â Â 541,324Â Current portion of notes payableÂ Â 854,214Â Â Â 80,841Â Total Current LiabilitiesÂ Â 2,575,875Â Â Â 1,499,382Â Â Â Â Â Â Â Â Â Long-term LiabilitiesÂ Â Â Â Â Â Â Financing lease obligations, net of current portionÂ Â 20,321Â Â Â 32,537Â Operating lease obligations, net of current portionÂ Â 4,255,140Â Â Â 3,171,979Â Notes payable, net of current portionÂ Â 294,381Â Â Â -Â Deferred tax liabilityÂ Â 24,000Â Â Â 24,000Â Total LiabilitiesÂ Â 7,169,717Â Â Â 4,727,898Â Â Â Â Â Â Â Â Â Â Commitments and ContingenciesÂ Â -Â Â Â -Â Â Â Â Â Â Â Â Â Â

Machinery/shop equipment Â 7 to 15 years Â Straight-line Computer equipment/software Â 1 to 7 years Â Straight-line Vehicles Â 5 years Â Straight-line Leasehold improvements Â 7 years Â Straight-line Â Intangible Assets Â Definite-lived intangible assets including customer relationships and intellectual property are subject to amortization. Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization. Â Intangible assets are amortized as follows: Â Schedule of Amortization of Intangible Assets Description Â Useful Life Â Method Trade names Â Indefinite Â N/A Customer relationships Â 15 to 20 years Â Straight-line Intellectual property Â 15 years Â Straight-line Â 11 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Long-Lived Assets Â The Company reviews the carrying value of long-lived assets such property and equipment, right-of-use (â€œROUâ€) assets, and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Circumstances which could trigger a review include, but are not limited to; significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. Â The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of long-lived assets. Â Goodwill and Indefinite-Lived Intangible Assets Â We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired. Â Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on managementâ€™s judgment. Â If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets exceed their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference. Â 12 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets. Â During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of indefinite-lived intangible assets. Â Investment Policy-Cost Method Â Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Companyâ€™s share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held $348,250 of investments without readily determinable fair values at September 30, 2024 and December 31, 2023, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the nine months ended September 30, 2024 and the year ended December 31, 2023. Â Investment in Digital Assets Â We account for all digital assets as indefinite-lived intangible assets in accordance with ASC 350, Intangiblesâ€”Goodwill and Other. The Company presents digital assets separately from other intangible assets, recorded as digital assets on the condensed consolidated balance sheets. The digital assets are initially recorded at cost and are subsequently remeasured at cost, net of any impairment losses incurred since acquisition. Â We performed an analysis this quarter to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. When the then current carrying value of a digital asset exceeds the fair value determined each quarter, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the prices determined. Gains are not recorded until realized upon sale(s), at which point they are presented net of any impairment losses for the same digital assets. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale. Â 13 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Leases Â We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks. Â Revenue Recognition Â We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Â Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each partyâ€™s rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customerâ€™s intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Â Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period. Â Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. Â We do not have significant returns. We do not typically offer extended warranty or service plans. Â 14 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of September 30, 2024 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues. Â Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customerâ€™s control at contractually stated pricing. Â Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. Â Cost of Sales Â We include product costs such material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales. Â Shipping and Handling Â Shipping and handling charges are generally incurred at the customerâ€™s expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales. Â Research and Development Â Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies. Â Research and development costs for the nine months ended September 30, 2024 and 2023, were $1,309,299 and $1,643,458, respectively. Â 15 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Income Taxes Â The Companyâ€™s deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At September 30, 2024 and December 31, 2023, the Company had no material unrecognized tax benefits. Â Earnings Per Share Â Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted average number of shares of common stock outstanding during each period. Diluted earnings (loss) per share is calculated by adjusting the weighted average number of shares of common stock outstanding for the dilutive effect, if any, of common stock equivalents. Common stock equivalents whose effect would be anti-dilutive are not included in diluted earnings (loss) per share. The Company uses the treasury stock method to determine the dilutive effect, which assumes that all common stock equivalents have been exercised at the beginning of the period and that the funds obtained from those exercises were used to repurchase shares of common stock of the Company at the average closing market price during the period. As of September 30, 2024 and 2023, there were 4,586,800 and 4,247,942, respectively, potential common share equivalents from stock options excluded from the diluted loss per share calculations as their effect is anti-dilutive. Â Fair Value Measurements Â The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Â Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date. Â Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly. Â Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. Â 16 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest. Â Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets. Â Stock-Based Compensation Â The Company records stock-based compensation in accordance with ASC 718, Compensation-Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period. Â Concentration of Credit Risk Â Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. Â The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. Â Recent Accounting Pronouncements Â In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring; (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. Â 17 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segmentâ€™s profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company has adopted this pronouncement and does not expect the adoption to have a material impact on our results of operation, financial position or cash flow. Â In August 2023, the FASB issued ASU 2023-05, Business Combinationsâ€”Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. Â (4) Revenues Â The following table presents sales disaggregated based on geographic regions and for the three and nine months ended: Â Schedule of Disaggregated Revenue Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â Â Â Three months endedÂ Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â AmpliTech Inc. and Specialty MicrowaveÂ Â Â Â Â Â Â Â Domestic salesÂ $522,919Â Â $1,120,578Â International salesÂ Â 238,970Â Â Â Â 460,435Â Total salesÂ $761,889Â Â $1,581,013Â Â Â Â Â Â Â Â Â Â Â SpectrumÂ Â Â Â Â Â Â Â Â Â Domestic salesÂ $1,607,677Â Â $1,201,856Â International salesÂ Â 464,946Â Â Â Â 604,300Â Total salesÂ $2,072,623Â Â $1,806,156Â Â Â Â Â Â Â Â Â Â Â Total salesÂ $2,834,512Â Â $3,387,169Â Â 18 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â

Â Â Nine months endedÂ Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â AmpliTech Inc. and Specialty MicrowaveÂ Â Â Â Â Â Â Â Domestic salesÂ $1,918,295Â Â $3,588,637Â International salesÂ Â 646,725Â Â Â 977,152Â Total salesÂ $2,565,020Â Â $4,565,789Â Â Â Â Â Â Â Â Â Â Â SpectrumÂ Â Â Â Â Â Â Â Â Domestic salesÂ $3,789,111Â Â $4,577,466Â International salesÂ Â 1,301,154Â Â Â 2,429,444Â Total salesÂ $5,090,265Â Â $7,006,910Â Â Â Â Â Â Â Â Â Â Â Total salesÂ $7,655,285Â Â $11,572,699Â Â (5) Segment Reporting Â ASC 280, â€œSegment Reportingâ€, establishes standards for reporting information about operating segments on a basis consistent with the Companyâ€™s internal organizational structure as well as information about geographical areas, business segments and major customers in financial statements for details on the Companyâ€™s business segments. The Company has two reportable segments, the manufacturing and engineering segment, which is operated by AmpliTech Inc. and Specialty Microwave: and the distribution segment, which is operated by Spectrum. The manufacturing and engineering segment assembles microwave components, and the distribution segment is a global distributor of integrated circuits packages and lids. The Company provides general corporate services to its segments; however, these services are not considered when making operating decisions and assessing segment performance. These services are reported under â€œCorporateâ€ below and include costs associated with executive management, financing activities and public company compliance. Â The following table presents summary information by segment for the three months ended September 30, 2024: Â Schedule of Segment Reporting Â Â Manufacturing and EngineeringÂ Â DistributionÂ Â CorporateÂ Â TotalÂ RevenueÂ $761,889Â Â $2,072,623Â Â $-Â Â $2,834,512Â Cost of Goods SoldÂ Â 730,027Â Â Â 756,556Â Â Â -Â Â Â 1,486,583Â Net LossÂ Â (1,401,246)Â Â 579,172Â Â Â (367,609)Â Â (1,189,683) Total AssetsÂ Â 11,883,507Â Â Â 15,580,896Â Â Â 81,946Â Â Â 27,546,349Â Depreciation and AmortizationÂ Â 100,641Â Â Â 29,504Â Â Â -Â Â Â 130,145Â Interest Expense, netÂ Â 9,941Â Â Â -Â Â Â 91,004Â Â Â 100,945Â Â 19 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â The following table presents summary information by segment for the nine months ended September 30, 2024: Â Â Â Manufacturing and EngineeringÂ Â DistributionÂ Â CorporateÂ Â TotalÂ RevenueÂ $2,565,020Â Â $5,090,265Â Â $-Â Â $7,655,285Â Cost of Goods SoldÂ Â 2,129,328Â Â Â 2,238,311Â Â Â -Â Â Â 4,367,639Â Net Income (Loss)Â Â (3,721,055)Â Â 783,306Â Â Â (4,483,369)Â Â (7,421,118) Total AssetsÂ Â 11,883,507Â Â Â 15,580,896Â Â Â 81,946Â Â Â 27,546,349Â Depreciation and AmortizationÂ Â 301,242Â Â Â 87,348Â Â Â -Â Â Â 388,590Â Interest Expense, netÂ Â 17,468Â Â Â -Â Â Â 96,004Â Â Â 113,472Â Â (6) Inventories Â The inventory consists of the following at September 30, 2024 and December 31, 2023: Â Schedule of Inventory Â Â September 30, 2024Â Â December 31, 2023Â Â Â Â Â Â Â Â Raw MaterialsÂ $1,320,434Â Â $959,645Â Work-in ProgressÂ Â 100,522Â Â Â 51,140Â Finished GoodsÂ Â 7,291,203Â Â Â 6,672,793Â SubtotalÂ $8,712,159Â Â $7,683,578Â Less: Reserve for ObsolescenceÂ Â (1,164,000)Â Â (1,146,000) Â Â Â Â Â Â Â Â Â TotalÂ $7,548,159Â Â $6,537,578Â Â Â (7) Property and Equipment Â Property and Equipment consisted of the following at September 30, 2024 and December 31, 2023: Â Schedule of Property and Equipment Â Â September 30, 2024Â Â December 31, 2023Â Â Â Â Â Â Â Lab EquipmentÂ $3,412,958Â Â $3,400,207Â Manufacturing EquipmentÂ Â 129,745Â Â Â 129,745Â AutomobilesÂ Â 7,335Â Â Â 7,335Â Computer Equipment and SoftwareÂ Â 146,785Â Â Â 194,238Â Leasehold ImprovementsÂ Â 84,172Â Â Â 84,172Â Furniture and FixturesÂ Â 170,643Â Â Â 170,643Â Â Â Â Â Â Â Â Â Â Â Â Â Â SubtotalÂ Â 3,951,638Â Â Â 3,986,340Â Property plant and equipment, grossÂ Â 3,951,638Â Â Â 3,986,340Â Â Â Â Â Â Â Â Â Â Â Â Less: Accumulated DepreciationÂ Â (1,601,842)Â Â (1,386,892) Â Â Â Â Â Â Â Â Â Â TotalÂ $2,349,796Â Â $2,599,448Â Property plant and equipment, netÂ $2,349,796Â Â $2,599,448Â Â Depreciation expense for the three months ended September 30, 2024 and 2023 was $92,567 and $91,715 respectively, of which $71,144 and $68,819 respectively were included in cost of goods sold. Â 20 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Depreciation expense for the nine months ended September 30, 2024 and 2023 was $276,082 and $247,019 respectively, of which $213,391 and $185,239, respectively were included in cost of goods sold. Â Property and equipment purchased in the amount of $234,036 under financing leases is included in the totals above. As of September 30, 2024 and 2023, the outstanding balance of the financing leases were $37,700 and $49,336, respectively. Â Disposal of property and equipment as of September 30, 2024 was $61,133. Â (8) Goodwill and Intangible Assets Â Goodwill Â Goodwill is related to the acquisition of Spectrum Semiconductor Materials Inc. on December 15, 2021. Goodwill is primarily related to expected improvements and technology performance and functionality, as well as sales growth from future product and service offerings and new customers, together with certain intangible assets that do not qualify for separate recognition. Goodwill is generally not amortizable for tax and financial statement purposes. As of September 30, 2024 and December 31, 2023, goodwill was $4,696,883, respectively. Â Other Intangible Assets Â Intangible assets consisted of the following at September 30, 2024: Â Schedule of Intangible Assets Â Â Gross Carrying AmountÂ Â Accumulated AmortizationÂ Â NetÂ Â Weighted Average LifeÂ Trade nameÂ $584,517Â Â $-Â Â $584,517Â Â Â Â IndefiniteÂ Customer relationshipsÂ Â 2,591,491Â Â Â 438,691Â Â Â 2,152,800Â Â Â 16.06Â Â Intellectual PropertyÂ Â 202,771Â Â Â 68,463Â Â Â 134,308Â Â Â 9.96Â Â Â Â Â Â Â Â Â Â Â Â Â Â

September 9, 2024, the Company entered into a placement agency agreement with Maxim Group LLC (the â€œPlacement Agentâ€) pursuant to which the Company agreed to pay the Placement Agent an aggregate fee equal to 6.5% of the aggregate gross proceeds received by the Company from the sale of the Shares in the offering. The Company also agreed to reimburse the Placement Agent for up to $25,000 in accountable expenses, including the Placement Agentâ€™s legal counselâ€™s fees. Â 2020 Equity Incentive Plan: Â In October 2020, the Board of Directors and shareholders adopted the Companyâ€™s 2020 Equity Incentive Plan (the â€œ2020 Planâ€), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Companyâ€™s common stock to employees and individuals who perform services for the Company. The purpose of the 2020 Plan is to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for the Company, and to promote the success of the Companyâ€™s business. The 2020 Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, and other stock or cash awards as the Board of Directors may determine. Â In 2023, the Board and the shareholders adopted the Companyâ€™s Amended and Restated 2020 Equity Incentive Plan (the â€œAmended and Restated Planâ€), effective as of December 11, 2023. The Amended and Restated Plan is substantially similar to the 2020 Plan except that it increases the shares of our common stock available for issuance thereunder to 2,250,000 shares of common stock. Â As of September 30, 2024, all outstanding stock options were issued according to the Companyâ€™s 2020 Plan, and there remains 820,142 shares of common stock available for future issuance under the 2020 Plan. Â Stock Options: Â On January 9, 2024, the Company granted a consultant, ten-year stock options to purchase 2,500 shares of common stock according to the Companyâ€™s 2020 Plan. The stock options vested immediately, with an exercise price of $1.86 per share. The Company has calculated these options estimated fair market value at $3,800 using the Black-Scholes model, with the following assumptions: expected term of 5.00 years, stock price of $1.86, exercise price of $1.86, volatility of 116.1%, risk-free rate of 3.97%, and no forfeiture rate. Â On January 16, 2024, the Company granted an employee ten-year stock options to purchase 5,000 shares of common stock according to the Companyâ€™s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on April 16, 2024, with an exercise price of $1.93 per share. The Company has calculated these options estimated fair market value at $8,800 using the Black-Scholes model, with the following assumptions: expected term of 7.51 years, stock price of $1.93, exercise price of $1.93, volatility of 120.1%, risk-free rate of 4.01%, and no forfeiture rate. Â 29 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â On January 25, 2024, the Company granted an independent contractor ten-year stock options to purchase 50,000 shares of common stock according to the Companyâ€™s 2020 Plan. 20,000 stock options vested immediately and the balance of 30,000 shall vest in equal quarterly installments over three years commencing on June 30, 2024, with an exercise price of $2.19 per share. The Company has calculated these options estimated fair market value at $98,600 using the Black-Scholes model, with the following assumptions: expected term of 10.00 years, stock price of $2.19, exercise price of $2.19, volatility of 123.0%, risk-free rate of 4.07%, and no forfeiture rate. Â Below is a table summarizing the changes in stock options outstanding for the nine months ended September 30, 2024: Â Schedule of Stock Options OutstandingÂ Â Â Number ofÂ Â Weighted AverageÂ Â Â OptionsÂ Â Exercise Price ($)Â Outstanding at December 31, 2023Â Â 1,236,000Â Â $2.30Â GrantedÂ Â 57,500Â Â $2.15Â ExercisedÂ Â -Â Â Â -Â ExpiredÂ Â (8,642)Â $2.29Â Outstanding at September 30, 2024Â Â 1,284,858Â Â $2.30Â Exercisable at September 30, 2024Â Â 674,560Â Â $2.67Â Â Stock-based compensation expense related to stock options of $89,539 and $315,227 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested stock options is $1,033,048 and is expected to be recognized over 4.30 years. The outstanding stock options have a weighted average remaining contractual life of 4.31 years and a total intrinsic value of $0. Â 30 Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Warrants: Â Below is a table summarizing the changes in warrants outstanding for the nine months ended September 30, 2024: Â Schedule of Warrants OutstandingÂ Â Â Number ofÂ Â Weighted AverageÂ Â Â WarrantsÂ Â Exercise Price ($)Â Outstanding at December 31, 2023Â Â 3,296,942Â Â $7.83Â GrantedÂ Â -Â Â Â -Â ExercisedÂ Â -Â Â Â -Â ExpiredÂ Â -Â Â Â -Â Outstanding at September 30, 2024Â Â 3,296,942Â Â $7.83Â Exercisable at September 30, 2024Â Â 3,296,942Â Â $7.83Â Â Stock-based compensation expense related to warrants of $0 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested warrants is $0. The outstanding warrants have a weighted average remaining contractual life of 1.48 years and a total intrinsic value of $0. Â Restricted Stock Units: Â On May 20, 2022, 30,000 restricted stock units at an exercise price of $1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of September 30, 2024, 25,000 shares of common stock were issued. Â Below is a table summarizing the changes in restricted stock units outstanding for the nine months ended September 30, 2024: Â Schedule of Changes in Restricted Stock Units OutstandingÂ Â Â Number ofÂ Â Weighted AverageÂ Â Â RSUâ€™sÂ Â Exercise Price ($)Â Outstanding at December 31, 2023Â Â 12,500Â Â $1.96Â GrantedÂ Â -Â Â Â -Â ExercisedÂ Â (7,500)Â $1.96Â ExpiredÂ Â -Â Â Â -Â Outstanding at September 30, 2024Â Â 5,000Â Â $1.96Â Â Stock-based compensation expense related to restricted stock units of $4,924 and $14,666 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested restricted stock units is $12,579. The outstanding restricted stock units have a weighted average remaining contractual life of .39 years and a total intrinsic value of $0. Â (13) Commitments and Contingencies Â On July 26, 2024, the Companyâ€™s AGTGSS division entered into a licensing product agreement. Under the terms of the agreement, the licensor agreed to an exclusive United States distribution and global licensing rights for certain 5G telecom equipment for 18 months for the purpose of marketing, selling, renting, deployment and maintenance of the licensed products with the Company. For services, the Company will pay the Licensor certain software IP license fees in the amount of $1,250,000. In addition, the licensor may provide certain product certification support for certain fees. As of September 30, 2024, we have paid $710,000 towards the licensing agreement. Â 31 Â Â Item 2. Managementâ€™s Discussion and Analysis of Financial Condition and Results of Operations Â The following discussion provides information which management believes is relevant to an assessment and understanding of our results of operations and financial condition. The discussion should be read along with our financial statements and notes thereto contained elsewhere in this Quarterly Report on Form 10-Q. The following discussion and analysis contain forward-looking statements, which involve risks and uncertainties. Our actual results may differ significantly from the results, expectations and plans discussed in these forward-looking statements. Â Business Overview Â AmpliTech Group Inc. (â€œAMPG,â€ â€œAmpliTechâ€ or the â€œCompanyâ€), incorporated in 2010 in the state of Nevada, is the parent company of its subsidiary, AmpliTech, Inc., and the Companyâ€™s divisions Specialty Microwave, Spectrum Semiconductor Materials, AmpliTech Group MMIC Design Center (â€œAGMDCâ€) and AmpliTech Group True G Speed Services (â€˜AGTGSSâ€). Â AmpliTech, Inc. designs, engineers, and assembles microwave component-based low noise amplifiers (â€œLNAâ€) that meet individual customer specifications. Application of the Companyâ€™s proprietary technology results in maximum frequency gain with minimal background noise distortion as required by each customer. The Company has both domestic and international customers in such industries as aerospace, governmental, defense, and commercial satellite. Â Specialty designs and manufactures passive microwave components and related subsystems that meet individual customer specifications for both domestic and international customers for use in satellite communication ground networks. Â AGMDC designs, develops and manufactures state-of-the-art signal processing components for satellite and 5G communications networks, defense, space and other commercial applications, allowing the Company to market its products to wider base of customers requiring high technology in smaller packages. Â Spectrum Semiconductor Materials (â€œSSMâ€), located in Silicon Valley (San Jose, CA), is a global authorized distributor of integrated circuit (â€œICâ€) packaging and lids for semiconductor device assembly, prototyping, testing, and production requirements. Â In August 2022, we formed our AGTGSS division to enable â€œtrue G speedsâ€ to the industry. AGTGSSâ€™ main function will be to plan and configure 5G radio systems and make them O-RAN compliant. AGTGSS will implement AmpliTechâ€™ s low noise amplifier devices in these systems to promote greater coverage, longer range and faster speeds. Â Our mission is to patent our proprietary IP and trade secrets that were used in small volume niche markets and expand our capabilities through strategic partnerships, joint ventures, mergers/acquisitions with key industry leaders in the 5G/6G, quantum computing, and cybersecurity markets. We believe this will enable us to scale up our products and revenue by developing full systems and subsystems with our unique technology as a core component, which we expect will position us as a global leader in these rapidly emerging technology sectors and addresses large volume markets as well, such as cellphone handsets, laptops, server networks, and many other applications that improve everyday quality of life. Â The Companyâ€™s research and development initiative to expand its product line of low noise amplifiers to include its new 5G and wireless infrastructure products and MMIC designs is progressing significantly. Our combined engineering and manufacturing resources are expected to complement the development of new subsystems for satellite, wireless, and 5G infrastructure, as well as advanced military and commercial markets. Â 32 Â Â Loss on Investment of Digital Assets Â During the three months ended March 31, 2024, the Company made several transactions in digital currency in the total amount of approximately $3.25 million. The Company believes that it was fraudulently induced to hold its digital currency with a custodian whom the Company believed to be valid, but no longer exists. The Company is taking steps in an attempt to seek recovery of the funds including discussions with local, federal, and international law enforcement agencies and private consultants and is currently conducting a review of its processes and procedures related to this investment. At the present time, the Company is not aware of, and does not expect any additional losses arising out or relating to the above-described investment. In addition, the Company does not believe that the Companyâ€™s systems, records, or other assets were otherwise affected or compromised in connection with these investments. Â As a result of the fraudulent digital currency transactions noted above, the Company was a victim of a cyber phishing scam that defrauded the Company. During the nine months ended September 30, 2024, the Company recorded a complete loss from the investment in digital assets of $3,248,911. As of September 30, 2024, the remaining balance of digital assets was $0. Â Corporate Information Â Our principal executive offices are located at 155 Plant Avenue, Hauppauge, NY 11788. Our telephone number is (631) 521-7831. Our corporate website is www.amplitechinc.com. The information on our website is not a part of, or incorporated in, this prospectus. Â Results of Operations Â For the Three Months Ended September 30, 2024 and September 30, 2023 Â Revenues Â Sales decreased from $3,387,169 for the three months ended September 30, 2023, to $2,834,512 for the three months ended September 30, 2024, a decrease of $552,657 or approximately 16.32%. Sales in the amplifier and related passive microwave components and subsystems division decreased by $819,124, or 51.81%, while Spectrum sales increased by $266,467, or 14.75%. Overall, this decline is attributable to a decrease in sales from both domestic and international customers because of global economic uncertainty. The global recession and adverse market conditions are affecting our business in terms of lost revenue. Â Cost of Goods Sold and Gross Profit Â Cost of goods sold decreased from $1,904,388 for the three months ended September 30, 2023, to $1,486,583 for the three months ended September 30, 2024, a decrease of $417,805 or 21.94%. Overall, this decrease is directly related to the decline in sales. As a result, gross profit was $1,347,929 for the three months ended September 30, 2024, compared to $1,482,781 for the three months ended September 30, 2023, a decrease of $134,852, or 9.10%. Overall, the Company maintained a healthy gross profit margin as a percentage of sales of 47.55% as compared to 43.78% for the three months ended September 30, 2023, an increase of 3.78%, amid inflationary pressures. Â 33 Â Â Selling, General and Administrative Expenses Â Selling, general and administrative expenses decreased to $1,864,245 for the three months ended September 30, 2024, from $1,984,452 for the three months ended September 30, 2023, a decrease of $120,207 or approximately 6.06%, as a result in the decrease in salaries, office expense and IR/PR, offset against the increase in legal and accounting expenses. Â Research and Development Expenses Â Research and development expenditures are charged to operations as incurred. The major components of research and development costs include salaries and benefits, consultants, outside service, and supplies. Â Research and development costs for the three months ended September 30, 2024, and 2023, were $572,422 and $425,573 respectively, an increase of $146,849, or 34.51%, resulting from an increase in rent, moving expenses and software licensing. Â Loss From Operations Â As a result of the above, the Company reported a loss from operations of $1,088,738 and $927,244 for the three months ended September 30, 2024, and 2023, respectively, an increase of $161,494 or 17.42%. Â Other Income (Expenses) Â The Company recorded interest expense, net of $100,945 and $750 for the three months ended September 30, 2024, and 2023, respectively, an increase of $100,195 because of the debt financing obtained during the quarter. Â Due to market fluctuations, the Company recorded an unrealized gain on investments of $4,098 and a realized gain on investments of $36,187 for the three months ended September 30, 2023. Â Net Loss Â The Company reported a net loss of $1,189,683 and $887,709 for the three months ended September 30, 2024 and 2023, an increase of $301,974, or 34.02%. Â For the Nine Months Ended September 30, 2024 and September 30, 2023 Â Revenues Â Sales decreased from $11,572,699 for the nine months ended September 30, 2023, to $7,655,285 for the nine months ended September 30, 2024, a decrease of $3,917,414 or approximately 33.85%. Sales in the amplifier and related passive microwave components and subsystems division decreased by $2,000,769, or 43.82%. Spectrum sales decreased by $1,916,645, or 27.35%. This decrease in sales is attributable to the decrease in global demand and recessionary market dynamics affecting most of our customers across all divisions and product lines. Â Cost of Goods Sold and Gross Profit Â Cost of Goods Sold decreased from $6,305,928 for the nine months ended September 30, 2023, to $4,367,639 for the nine months ended September 30, 2024, a decrease of $1,938,289 or 30.74%. Overall, this decrease is directly related to the decline in sales. As a result, gross profit was $3,287,646 for the nine months ended September 30, 2024, compared to $5,266,771 for the nine months ended September 30, 2023, a decrease of $1,979,125 or 37.58%. Overall, gross profit as a percentage of sales decreased from 45.51% to 42.95%, or 2.56%. Â 34 Â Â Selling, General and Administrative Expenses Â Selling, general and administrative expenses increased to $6,063,047 for the nine months ended September 30, 2024, from $5,677,778 for the nine months ended September 30, 2023, an increase of $385,269 or approximately 6.79%. This increase represents primarily an increase in legal, consulting and accounting fees, offset against the decrease in trade show expenses, employee benefits and IR/PR. Â Research and Development Expenses Â Research and development expenditures are charged to operations as incurred. The major components of research and development costs include consultants, outside service, and supplies. Â Research and development costs for the nine months ended September 30, 2024, and 2023, were $1,309,299 and $1,643,458, respectively, a decrease of $344,159 or 20.33%, resulting from a decrease in consulting/foundry expenses as the major MMIC development efforts have been completed offset against an increase in rent, moving expenses and software licensing. Â Loss From Operations Â As a result of the above, the Company reported a loss from operations of $4,084,700 and $2,054,465 for the nine months ended September 30, 2024 and 2023, respectively, an increase of $2,030,235, or 98.82%. Â Other Income (Expenses) Â The Company recorded net interest expense of $113,472 and net interest income of $20,335 for the nine months ended September 30, 2024 and 2023, an increase of $133,807, or 658.01%. Interest expense increased as a result of the debt financing obtained during the quarter. Â Due to market fluctuations, the Company recorded a realized gain on investments of $25,965 and $49,994 for the nine months ended September 30, 2024 and 2023, respectively. In addition, the Company recorded an unrealized gain on investments of $41,700 for the nine months ended September 30, 2023. Â As a result of the fraudulent digital currency transactions noted above, during the nine months ended September 30, 2024, the Company recorded an impairment loss of $3,248,911 related to digital assets. Â Net Loss Â The Company reported a net loss of $7,421,118 and $1,942,436 for the nine months ended September 30, 2024 and 2023, respectively, an increase of $5,478,682, or 282.05%. Â Cash Flow Â Operating Activities Â The net cash used in operating activities for the nine months ended September 30, 2024, was $4,128,869 resulting primarily from the net loss and operating changes in accounts receivable, inventories, prepaid expenses, accounts payable and accrued expenses, customer deposits and operating lease obligations. Â The net cash used in operating activities for the nine months ended September 30, 2023 was $1,766,090 resulting primarily from the net loss and operating changes in accounts receivable, inventories, prepaid expenses, accounts payable and accrued expenses, operating lease liability and customer deposits Â 35 Â Â Investing Activities Â The net cash used in investing activities for the nine months ended September 30, 2024, was $3,275,342 of which $26,431 related to the purchase of equipment and $3,248,911 related to investment in marketable securities. Â The net cash used in investing activities for the nine months ended September 30, 2023, was $3,739,714 of which $931,692 related to the purchase of equipment and $2,808,022 for the net purchases of marketable securities. Â Financing Activities Â The net cash from financing activities for the nine months ended September 30, 2024, was $1,754,735, resulting primarily from the net proceeds received from the issuance of common stock and notes payable, offset with the repayments of notes payable and financing lease liabilities. Â The net cash used in financing activities for the nine months ended September 30, 2023, was $2,326,712, resulting primarily from the repayments of notes payable, financing lease liabilities, and the revenue earnout. Â As of September 30, 2024, we had cash and cash equivalents of $1,076,537 working capital of $10,072,061 and an accumulated deficit of $17,190,841. Â As of December 31, 2023, we had cash and cash equivalents of $6,726,013, working capital of $15,649,254, and an accumulated deficit of $9,769,723. Â Operating Capital and Capital Expenditure Requirements Â As of September 30, 2024, we had an accumulated deficit of $17.2 million. We expect to generate operating losses and negative operating cash flows for the remainder of the year and into early next quarter of 2025, although we anticipate that our operating losses to be reduced by revenue from new products that were developed earlier this year. As of September 30, 2024, we maintain cash and cash equivalents of $1.1

million. Based on our existing cash and cash equivalents, our working capital, our current and forecasted level of operations, and our forecasted cash flows, we believe that we will be able to meet our obligations and repay our liabilities arising from normal business operations when they come due and to provide for our capital requirements for the next 12 months. We are actively seeking dilutive or non-dilutive capital to support our growth. Â Critical Accounting Policies, Estimates and Assumptions Â The SEC defines critical accounting policies as those that are, in managementâ€™s view, most important to the portrayal of our financial condition and results of operations and those that require significant judgment and estimates. Â The discussion and analysis of our financial condition and results of operations is based upon financial statements which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities. On an on-going basis, we evaluate our estimates, including the allowance for doubtful accounts, the salability and recoverability of inventory, income taxes and contingencies. We base our estimates on historical experience and on other assumptions that we believe to be reasonable under the circumstances, the results of which form our basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. The Company believes there have been no significant changes during the nine-month period ended September 30, 2024, to the items disclosed as critical accounting policies in managementâ€™s discussion and analysis in the Companyâ€™s Annual Report on Form 10-K for the year ended December 31, 2023. Â 36 Â Â We cannot predict what future laws and regulations might be passed that could have a material effect on our results of operations. We assess the impact of significant changes in laws and regulations on a regular basis and update the assumptions and estimates used to prepare our financial statements when we deem it necessary. Â Off Balance Sheet Transactions Â None. Â Item 3. Quantitative and Qualitative Disclosures About Market Risk. Â Smaller reporting companies are not required to provide the information required by this item. Â Item 4. Controls and Procedures. Â Evaluation of Disclosure Controls and Procedures Â Our management, including our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) under the Exchange Act as of the end of the period covered by this report. Our management does not expect that our disclosure controls and procedures will prevent all error and all fraud. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Â Based on that evaluation, as of September 30, 2024, our chief executive officer and chief financial officer concluded that our disclosure controls and procedures were not effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SECâ€™s rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure. Â Changes in Internal Control over Financial Reporting Â There were no changes that have affected, or are reasonably likely to materially affect, our internal control over financial reporting (as defined in Rules 13a-15(f) or 15d-15(f) under the Exchange Act) during the period covered by this report. Please refer to the Form 10-Q for the quarter ended March 31, 2024 filed with the SEC on May 28, 2024 and our Form 10-Q for the quarter ended June 30, 2024 filed with the SEC on August 14, 2024. Â We will continue to enhance corporate oversight over process-level controls and structures to ensure that there is appropriate assignment of authority, responsibility, and accountability to enable remediation of our material weaknesses. We believe that our remediation plan will be sufficient to rectify the identified material weaknesses and strengthen our internal control over financial reporting. As we continue to evaluate, and work to improve, our internal control over financial reporting, management may determine that additional measures to address control deficiencies or modifications to the remediation plan are necessary. Â 37 Â Â PART II â€” OTHER INFORMATION Â Item 1. Legal Proceedings. Â To the best of our knowledge, there are no pending legal proceedings to which we are a party or of which any of our property is the subject. Â Item 1A. Risk Factors. Â In addition to risk factors set forth below, you should carefully consider the risks set forth in the section captioned â€œRisk Factorsâ€ in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023 and Form 10-Q for the quarter ended March 31, 2024 and the quarter ended June 30, 2024, before making an investment decision. You should read the section captioned â€œCautionary Statement Regarding Forward Looking Statementsâ€ above for a discussion of what types of statements are forward-looking statements, as well as the significance of such statements in the context of this report. Â As of September 30, 2024, we had an accumulated deficit of $17.2 million. We expect to generate operating losses and negative operating cash flows for the remainder of the year and into early next quarter of 2025, although we anticipate that our operating losses to be reduced by revenue from new products that were developed earlier this year. As of September 30, 2024, we maintain cash and cash equivalents of $1.1 million. Based on our existing cash and cash equivalents, our working capital, our current and forecasted level of operations, and our forecasted cash flows, we believe that we will be able to meet our obligations and repay our liabilities arising from normal business operations when they come due and to provide for our capital requirements for the next 12 months. We are actively seeking dilutive or non-dilutive capital to support our growth. Â The listing of our common stock on the Nasdaq Capital Market is contingent on our compliance with the Nasdaq Capital Marketâ€™s conditions for continued listing. On September 27, 2024, the Company received a notice (the â€œNoticeâ€) from The NASDAQ Stock Market LLC indicating that the Company is not in compliance with the minimum bid price requirement of $1.00 per share under the Nasdaq Listing Rules (the â€œListing Rulesâ€). Based on the closing bid price of the Companyâ€™s listed securities for the last 30 consecutive business days from August 15, 2024 to September 26, 2024, the Company no longer meets the minimum bid price requirement set forth in Listing Rules 5550(a)(2). The Notice is only a notification of deficiency and has no current effect on the listing or trading of the Companyâ€™s securities on The Nasdaq Capital Market. The Notice states that under the Listing Rules 5810(c)(3)(A), the Company is provided with a compliance period of 180 calendar days, or until March 26, 2025, to regain compliance under the Listing Rules. To regain compliance under the Listing Rules, the Companyâ€™s common stock must be at least $1.00 for a minimum of ten consecutive business days. In the event the Company does not regain compliance by March 26, 2025, the Company may be eligible for additional time to regain compliance or may face delisting. Â On July 23, 2024, the Company entered into a business loan and security agreement with Altbanq, in the amount of $1,300,000, with an origination fee of $26,000 and an original issue discount of $403,000. The loan is payable within 76 weeks through 38 bi-weekly payments of $44,816 and bears an annual interest rate of 21.2% with prepayment options. The loan is secured by the Companyâ€™s assets through an UCC filing. The balance as of September 30, 2024 was $1,139,429, net of the debt discount. Principal payments of $224,080 and $89,509 of interest expense were paid for the nine-month ended September 30, 2024. In the event the Company is unable to repay or defaults, Albanq will have a right to exercise its rights to the collateral as a secured party. Â Item 2. Unregistered Sales of Equity Securities and Use of Proceeds. Â None. Â Item 3. Defaults Upon Senior Securities. Â None. Â Item 4. Mine Safety Disclosures. Â Not applicable Â Item 5. Other Information. Â None. Â Item 6. Exhibits. Â (a) Exhibits Â Exhibit No. Â Description 10.1 Â License Product Agreement (Incorporated by reference from the Registrantâ€™s Current Report on Form 8-K filed on August 1, 2024) 10.2 Â Loan and Security Agreement with Altbanq Lending II LLC (Incorporated by reference from the Registrantâ€™s Current Report on Form 8-K filed on July 29, 2024) 10.3 Â Form of Securities Purchase Agreement (Incorporated by reference from the Registrantâ€™s Current Report on Form 8-K filed on September 11, 2024) 10.4 Â Form of Placement Agency Agreement (Incorporated by reference from the Registrantâ€™s Current Report on Form 8-K filed on September 11, 2024) 10.5 Â Form of Lock-Up Agreement (Incorporated by reference from the Registrantâ€™s Current Report on Form 8-K filed on September 11, 2024) 31.1 Â Rule 13a-14(a)/ 15d-14(a) Certification of Principal Executive Officer 31.2 Â Rule 13a-14(a)/ 15d-14(a) Certification of Principal Financial Officer 32.1 Â Section 1350 Certification of Principal Executive Officer 32.2 Â Section 1350 Certification of Principal Financial Officer 101. INS Â Inline XBRL Instance Document 101. SCH Â Inline XBRL Taxonomy Extension Schema Document 101. CAL Â Inline XBRL Taxonomy Extension Calculation Link base Document 101. DEF Â Inline XBRL Taxonomy Extension Definition Link base Document 101. LAB Â Inline XBRL Taxonomy Extension Label Link base Document 101. PRE Â Inline XBRL Taxonomy Extension Presentation Link base Document 104 Â Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) Â 38 Â Â SIGNATURES Â Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized. Â Â AmpliTech Group, Inc. Â Â Â Â Date: November 14, 2024 By: /s/ Fawad Maqbool Â Â Fawad Maqbool Â Â President and Chief Executive Officer (Principal Executive Officer) Â Date: November 14, 2024 By: /s/ Louisa Sanfratello Â Â Louisa Sanfratello Chief Financial Officer (Principal Financial and Accounting Officer) Â 39 Â EX-31.1 2 ex31-1.htm Â EXHIBIT 31.1 Â CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002 Â I, Fawad Maqbool, certify that: Â 1. I have reviewed the quarterly report on Form 10-Q of AmpliTech Group, Inc.(the â€œregistrantâ€) for the quarter ended September 30, 2024; Â Â 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; Â Â 3. Based on my knowledge, the financial statements, and other financial information included in this report, present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; Â Â 4. The registrantâ€™s other certifying officer(s), and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have: Â Â a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; Â Â Â Â b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; Â Â Â Â c. Evaluated the effectiveness of the registrantâ€™s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and Â Â Â Â d. Disclosed in this report any change in the registrantâ€™s internal control over financial reporting that occurred during the registrantâ€™s most recent fiscal quarter (the registrantâ€™s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrantâ€™s internal control over financial reporting; and Â 5. The registrantâ€™s other certifying officer(s), and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrantâ€™s auditors and the audit committee of the registrantâ€™s board of directors (or persons performing the equivalent functions): Â Â a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrantâ€™s ability to record, process, summarize and report financial information; and Â Â Â Â b. Any fraud, whether material, that involves management or other employees who have a significant role in the registrantâ€™s internal control over financial reporting. Â Dated: November 14, 2024 By: /s/ Fawad Maqbool Â Â Fawad Maqbool Â Â President and Chief Executive Officer (Principal Executive Officer) Â Â Â EX-31.2 3 ex31-2.htm Â EXHIBIT 31.2 Â CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002 Â I, Louisa Sanfratello, certify that: Â 1. I have reviewed the quarterly report on Form 10-Q of AmpliTech Group, Inc. (the â€œregistrantâ€) for the quarter ended September 30, 2024; Â Â 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report; Â Â 3. Based on my knowledge, the financial statements, and other financial information included in this report, present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report; Â Â 4. The registrantâ€™s other certifying officer(s), and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have: Â Â a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared; Â Â Â Â b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles; Â Â Â Â c. Evaluated the effectiveness of the registrantâ€™s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and Â Â Â Â d. Disclosed in this report any change in the registrantâ€™s internal control over financial reporting that occurred during the registrantâ€™s most recent fiscal quarter (the registrantâ€™s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrantâ€™s internal control over financial reporting; and Â 5. The registrantâ€™s other certifying officer, and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrantâ€™s auditors and the audit committee of the registrantâ€™s board of directors (or persons performing the equivalent functions): Â Â a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrantâ€™s ability to record, process, summarize and report financial information; and Â Â Â Â b. Any fraud, whether material, that involves management or other employees who have a significant role in the registrantâ€™s internal control over financial reporting. Â Dated: November 14, 2024 By: /s/ Louisa Sanfratello Â Â Louisa Sanfratello Chief Financial Officer (Principal Financial and Accounting Officer) Â Â Â EX-32.1 4 ex32-1.htm Â EXHIBIT 32.1 Â CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 Â Fawad Maqbool, the President and Chief Executive Officer of AmpliTech Group, Inc. (the â€œRegistrantâ€), certifies, under the standards set forth and solely for the purposes of 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge, the Quarterly Report on Form 10-Q of the Registrant for the quarter ended September 30, 2024 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in that Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Registrant. Â Date: November 14, 2024 By: /s/ Fawad Maqbool Â Â Fawad Maqbool Â Â President and Chief Executive Officer (Principal Executive Officer) Â Â EX-32.2 5 ex32-2.htm Â EXHIBIT 32.2 Â CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002 Â Louisa Sanfratello, Chief Financial Officer of AmpliTech Group, Inc. (the â€œRegistrantâ€), certifies, under the standards set forth and solely for the purposes of 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to her knowledge, the Quarterly Report on Form 10-Q of the Registrant for the quarter ended September 30, 2024 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and information contained in that Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of the Registrant. Â Dated: November 14, 2024 By: /s/ Louisa Sanfratello Â Â Louisa Sanfratello Chief Financial Officer (Principal Financial and Accounting Officer) Â Â Â EX-101.SCH 6 ampg-20240930.xsd XBRL SCHEMA FILE 00000001 - Document - Cover link:presentationLink link:calculationLink link:definitionLink 00000002 - Statement - Condensed Consolidated Balance Sheets link:presentationLink link:calculationLink link:definitionLink 00000003 - Statement - Condensed Consolidated Balance Sheets (Parenthetical) link:presentationLink link:calculationLink link:definitionLink 00000004 - Statement - Condensed Consolidated Statements of Operations (Unaudited) link:presentationLink link:calculationLink link:definitionLink 00000005 - Statement - Condensed Consolidated Statements of Stockholders' Equity (Unaudited) link:presentationLink link:calculationLink link:definitionLink 00000006 - Statement - Condensed Consolidated Statements of Cash Flows (Unaudited) link:presentationLink link:calculationLink link:definitionLink 00000007 - Disclosure - Organization and Business Description link:presentationLink link:calculationLink link:definitionLink 00000008 - Disclosure - Loss on Investment of Digital Assets link:presentationLink link:calculationLink link:definitionLink 00000009 - Disclosure - Summary of Significant Accounting Policies link:presentationLink link:calculationLink link:definitionLink 00000010 - Disclosure - Revenues link:presentationLink link:calculationLink link:definitionLink 00000011 - Disclosure - Segment Reporting link:presentationLink link:calculationLink link:definitionLink 00000012 - Disclosure - Inventories link:presentationLink link:calculationLink link:definitionLink 00000013 - Disclosure - Property and Equipment link:presentationLink link:calculationLink link:definitionLink 00000014 - Disclosure - Goodwill and Intangible Assets link:presentationLink link:calculationLink link:definitionLink 00000015 - Disclosure - Cost Method Investment link:presentationLink link:calculationLink link:definitionLink 00000016 - Disclosure - Leases link:presentationLink link:calculationLink link:definitionLink 00000017 - Disclosure - Notes Payable link:presentationLink link:calculationLink link:definitionLink 00000018 - Disclosure - Stockholdersâ€™ Equity link:presentationLink link:calculationLink link:definitionLink 00000019 -

Disclosure - Commitments and Contingencies link:presentationLink link:calculationLink link:definitionLink 00000020 - Disclosure - Summary of Significant Accounting Policies (Policies) link:presentationLink link:calculationLink link:definitionLink 00000021 - Disclosure - Summary of Significant Accounting Policies (Tables) link:presentationLink link:calculationLink link:definitionLink 00000022 - Disclosure - Revenues (Tables) link:presentationLink link:calculationLink link:definitionLink 00000023 - Disclosure - Segment Reporting (Tables) link:presentationLink link:calculationLink link:definitionLink 00000024 - Disclosure - Inventories (Tables) link:presentationLink link:calculationLink link:definitionLink 00000025 - Disclosure - Property and Equipment (Tables) link:presentationLink link:calculationLink link:definitionLink 00000026 - Disclosure - Goodwill and Intangible Assets (Tables) link:presentationLink link:calculationLink link:definitionLink 00000027 - Disclosure - Leases (Tables) link:presentationLink link:calculationLink link:definitionLink 00000028 - Disclosure - Notes Payable (Tables) link:presentationLink link:calculationLink link:definitionLink 00000029 - Disclosure - Stockholdersâ€™ Equity (Tables) link:presentationLink link:calculationLink link:definitionLink 00000030 - Disclosure - Organization and Business Description (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000031 - Disclosure - Loss on Investment of Digital Assets (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000032 - Disclosure - Schedule of Property and Equipment Depreciated (Details) link:presentationLink link:calculationLink link:definitionLink 00000033 - Disclosure - Schedule of Amortization of Intangible Assets (Details) link:presentationLink link:calculationLink link:definitionLink 00000034 - Disclosure - Summary of Significant Accounting Policies (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000035 - Disclosure - Schedule of Disaggregated Revenue (Details) link:presentationLink link:calculationLink link:definitionLink 00000036 - Disclosure - Schedule of Segment Reporting (Details) link:presentationLink link:calculationLink link:definitionLink 00000037 - Disclosure - Schedule of Inventory (Details) link:presentationLink link:calculationLink link:definitionLink 00000038 - Disclosure - Schedule of Property and Equipment (Details) link:presentationLink link:calculationLink link:definitionLink 00000039 - Disclosure - Property and Equipment (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000040 - Disclosure - Schedule of Intangible Assets (Details) link:presentationLink link:calculationLink link:definitionLink 00000041 - Disclosure - Schedule of Amortization of Assets (Details) link:presentationLink link:calculationLink link:definitionLink 00000042 - Disclosure - Goodwill and Intangible Assets (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000043 - Disclosure - Cost Method Investment (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000044 - Disclosure - Schedule of Lease Assets and Liabilities (Details) link:presentationLink link:calculationLink link:definitionLink 00000045 - Disclosure - Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate (Details) link:presentationLink link:calculationLink link:definitionLink 00000046 - Disclosure - Schedule of Future Minimum Operating Lease Payments (Details) link:presentationLink link:calculationLink link:definitionLink 00000047 - Disclosure - Schedule of Future Minimum Lease Payments for Finance Lease (Details) link:presentationLink link:calculationLink link:definitionLink 00000048 - Disclosure - Leases (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000049 - Disclosure - Schedule of Future Principal and Interest Payments (Details) link:presentationLink link:calculationLink link:definitionLink 00000050 - Disclosure - Notes Payable (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000051 - Disclosure - Schedule of Stock Options Outstanding (Details) link:presentationLink link:calculationLink link:definitionLink 00000052 - Disclosure - Schedule of Warrants Outstanding (Details) link:presentationLink link:calculationLink link:definitionLink 00000053 - Disclosure - Schedule of Changes in Restricted Stock Units Outstanding (Details) link:presentationLink link:calculationLink link:definitionLink 00000054 - Disclosure - Stockholdersâ€™ Equity (Details Narrative) link:presentationLink link:calculationLink link:definitionLink 00000055 - Disclosure - Commitments and Contingencies (Details Narrative) link:presentationLink link:calculationLink link:definitionLink EX-101.CAL 7 ampg-20240930_cal.xml XBRL CALCULATION FILE EX-101.DEF 8 ampg-20240930_def.xml XBRL DEFINITION FILE EX-101.LAB 9 ampg-20240930_lab.xml XBRL LABEL FILE Class of Stock [Axis] Common Stock, par value $0.001 per share Warrants to Purchase Common Stock Equity Components [Axis] Common Stock [Member] Additional Paid-in Capital [Member] Retained Earnings [Member] Business Acquisition [Axis] Amplitech Inc [Member] Sale of Stock [Axis] IPO [Member] Statistical Measurement [Axis] Maximum [Member] Long-Lived Tangible Asset [Axis] Office Equipment [Member] Minimum [Member] Machinery and Equipment [Member] Computer Equipment Software [Member] Vehicles [Member] Leasehold Improvements [Member] Finite-Lived Intangible Assets by Major Class [Axis] Customer Relationships [Member] Intellectual Property [Member] Legal Entity [Axis] Amplitech Inc and Specialty Microwave [Member] Geographical [Axis] Domestic Sales [Member] International Sales [Member] Spectrum [Member] Segments [Axis] Manufacturing And Engineering [Member] Distribution [Member] Corporate [Member] Lab Equipment [Member] Manufacturing Equipment [Member] Automobiles [Member] Computer Equipment [Member] Furniture and Fixtures [Member] Trade Names [Member] Related and Nonrelated Parties [Axis] SN2NLLC [Member] Collaborative Arrangement and Arrangement Other than Collaborative [Axis] Spectrum Semiconductor Materials Lease Agreement [Member] Debt Instrument [Axis] Promissory Note [Member] Award Date [Axis] May 14, 2020 [Member] Long-Term Debt, Type [Axis] Loans Payable [Member] June 10, 2020 [Member] January 2022 [Member] Business Loan and Security Agreement [Member] Series A Convertible Preferred Stock [Member] Securities Purchase Agreement [Member] Title and Position [Axis] Investor [Member] Placement Agency Agreement [Member] Placement Agent [Member] Plan Name [Axis] 2020 Equity Incentive Plan [Member] Award Type [Axis] Stock Options [Member] Consultant [Member] Share-Based Payment Arrangement, Option [Member] Contractor [Member] Warrant [Member] Restricted Stock Units (RSUs) [Member] Board Advisor [Member] Licensing Agreement [Member] Statement [Table] Statement [Line Items] Document Type Amendment Flag Amendment Description Document Registration Statement Document Annual Report Document Quarterly Report Document Transition Report Document Shell Company Report Document Shell Company Event Date Document Period Start Date Document Period End Date Document Fiscal Period Focus Document Fiscal Year Focus Current Fiscal Year End Date Entity File Number Entity Registrant Name Entity Central Index Key Entity Primary SIC Number Entity Tax Identification Number Entity Incorporation, State or Country Code Entity Address, Address Line One Entity Address, Address Line Two Entity Address, Address Line Three Entity Address, City or Town Entity Address, State or Province Entity Address, Country Entity Address, Postal Zip Code Country Region City Area Code Local Phone Number Extension Written Communications Soliciting Material Pre-commencement Tender Offer Pre-commencement Issuer Tender Offer Title of 12(b) Security No Trading Symbol Flag Trading Symbol Security Exchange Name Title of 12(g) Security Security Reporting Obligation Annual Information Form Audited Annual Financial Statements Entity Well-known Seasoned Issuer Entity Voluntary Filers Entity Current Reporting Status Entity Interactive Data Current Entity Filer Category Entity Small Business Entity Emerging Growth Company Elected Not To Use the Extended Transition Period Document Accounting Standard Other Reporting Standard Item Number Entity Shell Company Entity Public Float Entity Bankruptcy Proceedings, Reporting Current Entity Common Stock, Shares Outstanding Documents Incorporated by Reference [Text Block] Entity Listing, Par Value Per Share Statement of Financial Position [Abstract] Assets Current Assets Cash and cash equivalents Accounts receivable Inventories, net Prepaid expenses Total Current Assets Property and equipment, net Operating lease right of use assets Intangible assets, net Goodwill Cost method investment Security deposits Total Assets Liabilities and Stockholdersâ€™ Equity Current Liabilities Accounts payable and accrued expenses Customer deposits Current portion of financing lease obligations Current portion of operating lease obligations Current portion of notes payable Total Current Liabilities Long-term Liabilities Financing lease obligations, net of current portion Operating lease obligations, net of current portion Notes payable, net of current portion Deferred tax liability Total Liabilities Commitments and Contingencies Stockholdersâ€™ Equity Common stock, par value $0.001, 500,000,000 shares authorized, 11,091,601 and 9,714,613 shares issued and outstanding, respectively Additional paid-in capital Accumulated deficit Total Stockholdersâ€™ Equity Total Liabilities and Stockholdersâ€™ Equity Common stock, par value Common stock, shares authorized Common stock, shares issued Common stock, shares outstanding Income Statement [Abstract] Revenues Cost of Goods Sold Gross Profit Operating Expenses Selling, general and administrative Research and development Total Operating Expenses Loss From Operations Other Income (Expenses) Loss on investment in digital assets Unrealized gain on investments Realized gain on investments Interest Income (expense), net Total Other Income (Expenses) Net Loss Before Income Taxes Provision For Income Taxes Net Loss Net Loss Per Share - Basic Net Loss Per Share - Diluted Weighted Average Common Shares Outstanding - Basic Weighted Average Common Shares Outstanding - Diluted Balance Balance, shares Stock based compensation Common stock issued for vesting of RSUâ€™s Common stock issued for vesting of RSU's, shares Common stock issued in offering Common stock issued in offering, shares Net loss Balance Balance, shares Statement of Cash Flows [Abstract] Cash Flows from Operating Activities: Adjustments to reconcile net loss to net cash used in operating activities: Depreciation and amortization Operating lease costs Stock based compensation Amortization of debt discount Gain on termination of right-of-use operating lease Inventory reserve Change in fair value of marketable securities Loss on investment of digital assets Changes in Operating Assets and Liabilities: Accounts receivable Inventories Prepaid expenses Security deposits Accounts payable and accrued expenses Operating lease obligations Customer deposits Net cash used in operating activities Cash Flows from Investing Activities: Purchase of property and equipment Net investment in marketable securities Net cash used in investing activities Cash Flows from Financing Activities: Net proceeds from issuance of common shares in a private equity offering Net proceeds from notes payable Repayment on financing lease liabilities Repayment of notes payable Payment of revenue earnout Net cash from (used in) financing activities Net change in cash and cash equivalents Cash and Cash Equivalents, Beginning of the Period Cash and Cash Equivalents, End of the Period Supplemental disclosures: Cash paid for interest expense Cash paid for income taxes Non-Cash Investing and Financing Activities: Common Stock issued on vesting of RSUs Gain on termination of right-of-use operating lease Disposal of property and equipment Debt Discount on notes payable Operating lease right-of-use asset and liability measurement Accounting Policies [Abstract] Organization and Business Description Loss On Investment Of Digital Assets Loss on Investment of Digital Assets Summary of Significant Accounting Policies Revenue from Contract with Customer [Abstract] Revenues Segment Reporting [Abstract] Segment Reporting Inventory Disclosure [Abstract] Inventories Property, Plant and Equipment [Abstract] Property and Equipment Goodwill and Intangible Assets Disclosure [Abstract] Goodwill and Intangible Assets Investments, All Other Investments [Abstract] Cost Method Investment Leases Leases Debt Disclosure [Abstract] Notes Payable Equity [Abstract] Stockholdersâ€™ Equity Commitments and Contingencies Disclosure [Abstract] Commitments and Contingencies Basis of Accounting Principles of Consolidation Use of Estimates Cash and Cash Equivalents Accounts Receivable Inventories Property and Equipment Intangible Assets Long-Lived Assets Goodwill and Indefinite-Lived Intangible Assets Investment Policy-Cost Method Investment in Digital Assets Leases Revenue Recognition Cost of Sales Shipping and Handling Research and Development Income Taxes Earnings Per Share Fair Value Measurements Stock-Based Compensation Concentration of Credit Risk Recent Accounting Pronouncements Schedule of Property and Equipment Depreciated Schedule of Amortization of Intangible Assets Schedule of Disaggregated Revenue Schedule of Segment Reporting Schedule of Inventory Schedule of Property and Equipment Schedule of Intangible Assets Schedule of Amortization of Assets Schedule of Lease Assets and Liabilities Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate Schedule of Future Minimum Operating Lease Payments Schedule of Future Minimum Lease Payments for Finance Lease Schedule of Future Principal and Interest Payments Schedule of Stock Options Outstanding Schedule of Warrants Outstanding Schedule of Changes in Restricted Stock Units Outstanding Restructuring Cost [Table] Restructuring Cost and Reserve [Line Items] Acquisition of entity by issuing of common stock Percentage of voting interest acquired Equity interests owned by selling share holders Common stock, outstanding Reverse stock split Public offering shares Public offering per share Transactions in digital currency Loss from the investment in digital assets Remaining balance on investment of digital assets Property, Plant and Equipment [Table] Property, Plant and Equipment [Line Items] Estimated useful life Depreciation Method Useful Life Depreciation Method FDIC maximum amount Allowance for doubtful accounts receivable Inventory obsolescence reserve Impairments of long lived assets Goodwill impairment Cost method investment Potentially dilutive shares Disaggregation of Revenue [Table] Disaggregation of Revenue [Line Items] Total sales Schedule of Segment Reporting Information, by Segment [Table] Segment Reporting Information [Line Items] Revenue Net Income (Loss) Total Assets Depreciation and Amortization Interest Income, net Raw Materials Work-in Progress Finished Goods Subtotal Less: Reserve for Obsolescence Total Property plant and equipment, gross Less: Accumulated Depreciation Property plant and equipment, net Depreciation expense Cost of goods sold Amount paid to purchase Property and equipment under finance lease Financing leases outstanding balance Intangible Asset, Finite-Lived [Table] Finite-Lived Intangible Assets [Line Items] Gross Carrying Amount Accumulated Amortization Net Net Weighted Average Life Gross Carrying Amount Net 2024 remaining 2025 2026 2027 2028 Thereafter Amortization expenses Defined Benefit Plan [Table] Defined Benefit Plan Disclosure [Line Items] Aggregate purchase price for membership interest Equity method investment additional information Cost method investment membership interest percentage Overpaid for the membership interest Investments Cost method investment membership interest percentage Schedule Of Lease Assets And Liabilities ROU operating lease assets Current portion of operating lease Operating lease, net of current portion Total operating lease liabilities Property and equipment, gross Accumulated depreciation Property and equipment, net Current portion of financing lease Financing lease, net of current portion Total financing lease liabilities Schedule Of Weighted Average Remaining Lease Term And Weighted Average Discount Rate Weighted average remaining lease term (years) operating leases Weighted average remaining lease term (years) financing leases Weighted average discount rate operating leases Weighted average discount rate financing leases 2024 remaining 2025 2026 2027 2028 Thereafter Total lease payments Less imputed interest Less current obligations Long-term lease obligations 2024 remaining 2025 2026 2027 Total lease payments Less imputed interest Total lease obligations Less current obligations Long-term lease obligations Collaborative Arrangement and Arrangement Other than Collaborative [Table] Collaborative Arrangement and Arrangement Other than Collaborative [Line Items] Operating lease agreement description Annual rent Operating lease payments increase percentage Purchase option description Gain loss on termination of lease right of use operating Payments for rent Lease term New lease for facility Lessee operating lease term of contract Security deposit Lessee operating lease description Triple lease for facility Finance lease agreement description 2024 remaining 2025 2026 Discount Total remaining payments Short-Term Debt [Table] Short-Term Debt [Line Items] Total consideration paid Cash paid in acquisition, net of cash acquired Considration paid in promissory note Annual interest rate Debt instrument, description Notes payable Principal payment Interest expense Line of credit facility, periodic payment Line of credit facility, maximum borrowing capacity Proceeds from loans Debt instrument periodic payments interest Repayments of debt Line of credit, clousure of equipment Line of credit equipments Payments of stock issuance costs Payments for deposits Machinery financed, balance Number of payments Business loan Origination fee Net of the debt discount Payments of loan Schedule of Share-Based Compensation Arrangements by Share-Based Payment Award [Table] Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Number of Options, Outstanding Weighted Average Exercise Price, Outstanding Number of Options, Granted Weighted Average Exercise Price, Granted Number of Options, Exercised Weighted Average Exercise Price, Exercised Number of Options, Expired Weighted Average Exercise Price, Expired Number of Options, Outstanding Weighted Average Exercise Price, Outstanding Number of Options, Exercisable Weighted Average Exercise Price, Exercisable Number of Warrants, Outstanding shares Weighted Average Exercise Price, Outstanding shares Number of Warrants, Granted shares Weighted Average Exercise Price Outstanding, Granted shares Number of Warrants, Exercised shares Weighted Average Exercise Price Outstanding, Exercised shares Number of Warrants,Expired shares Weighted Average Exercise Price Outstanding, Expirations shares Number of Warrants, Outstanding shares Weighted Average Exercise Price, Outstanding shares Number of Warrants, Exercisable shares Weighted Average Exercise Price, Exercisable shares Number of RSU's, Outstanding Weighted Average Exercise Price, Outstanding Number of RSU's, Granted Weighted Average Exercise Price, Granted Number of RSU's, Exercised Weighted Average Exercise Price, Exercised Number of RSU's, Expired Weighted Average Exercise Price, Expired Number of RSU's, Outstanding Weighted Average Exercise Price, Outstanding Accumulated Other Comprehensive Income (Loss) [Table] Accumulated Other Comprehensive Income (Loss) [Line Items] Corporation authorised shares Common stock shares, authorized Preferred stock, shares authorized Preferred stock, shares par value Preferred stock designated as convertible preferred stock, shares Common stock shares, authorized Sale of stock Price per share Gross proceeds Stock issuance expense Percentage of gross proceeds from sale of stock Reimburse of accountable expenses Equity incentive plan, description Shares issued Common stock shares issuable upon exercise of warrants Purchase shares of common stock Exercise price per share Estimated fair value market Share based compensation, expected term Share based compensation, stock price Share based compensation, exercise price Share based compensation, volatility Share based compensation, risk-free rate Stock option vested Stock option expected to vest Stock based compensation Unrecognized compensation cost Unrecognized compensation cost recognition Weighted average remaining contractual life Intrinsic value Unrecognized non-vetsed share based compensation Weighted average remaining contractual life Number of restricted stock, granted Exercise Price Equal quarterly installments, shares License fees Warrants To Purchase Common Stock [Member]. Common Stock Par Value 0.001 Per Share [Member] Deferred tax liability. Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate [TableText Block] Finance lease agreement description. Operating lease agreement description Operating lease payments increase percentage. Purchase option description. Gain loss on termination of lease right of use operating. Spectrum Semiconductor Materials Lease Agreement [Member] Loss on investment in digital assets. Realized gain on investment. New lease for facility Triple lease for facility. Lessee operating lease liability payments due after year four. Promissory Note [Member] May Fourteen

Two Thousand And Twenty [Member] Common stock issued in private placement. Common stock issued in private placement, shares. June Ten Twenty Twenty [Member] Line of credit clousure of equipment. Line of credit equipments. January Two Thousand Twenty Two [Member] Number of payments. Business Loan And Security Agreement [Member] Increase decrease in customer deposit. Payments for proceeds from marketable securities. Payment of revenue earnout. Schedule Of Future Principal And Interest Payments [Table Text Block] Debt discount on notes payable. Amplitech Inc [Member] Business acquisition equity interests owned by selling share holders. Corporation authorised shares issued. Preferred stock designated as convertible preferred stock shares. Series A Convertible Preferred Stock [Member] Originally common stock shares authorized. Description equity incentive plan. Two Thousand And Twenty Equity Incentive Plan [Member] Stock Options [Member] Consultant [Member] Contractor [Member] Property Plant and Equipment Deprecated [Table Text Block] Computer Equipment Software [Member] Property plant and equipments depreciation methods. Share based compensation arrangement by share based payment award non option equity instruments exercisable number. Share based compensation arrangement by share based payment award non option outstanding weighted average exercise price. Share based compensation arrangements by share based payment award non option grants in period weighted average exercise price. Share based compensation arrangement by share based payment award non option exercisable weighted average exercise price. Share based compensation arrangement by share based payment award non options outstanding weighted average remaining contractual term2. Share based compensation arrangement by share based payment award equity instruments other than options exercised in period. Share based compensation arrangement by share based payment award equity instruments other than options exercisable number. Share based compensation arrangement by share based payment award equity instruments other than options vested in period weighted average excercised fair value. Share based compensation arrangement by share based payment award equity instruments other than options exercisable weighted average grant date fair value. Investment in digital assets [Policy] Shipping And Handling [Policy Text Block] Manufacturing And Engineering [Member] Distribution [Member] Corporates [Member] Finite lived intangible assets amortization expense after year four. Aggregate purchase price for membership interest SN2NLLC [Member] Aggregate purchase price for membership interest percentage. Overpaid for the membership interest Cost method investment membership interest percentage. Amplitech Inc and Specialty Microwave [Member] Domestic Sales [Member] International Sales [Member] Spectrum [Member] Lab Equipment [Member] Manufacturing Equipment [Member] Loss on Investment of Digital Assets [Text Block] Share based compensation arrangements by share based payment award non option exercised weighted average exercise price. Share based compensation arrangements by share based payment award non option expirations weighted average exercise price. Equal quarterly installments. Board Advisor [Member] Securities Purchase Agreement [Member] Placement Agency Agreement [Member] Placement Agent [Member] Percentage of gross proceeds from sale of stock. Reimburse of accountable expenses. Assets, Current Liabilities, Current Liabilities Equity, Attributable to Parent Liabilities and Equity Gross Profit Operating Expenses [Default Label] Operating Income (Loss) Other Noncash Income (Expense) Shares, Outstanding Share-Based Payment Arrangement, Noncash Expense Gain (Loss) on Termination of Lease Marketable Security, Unrealized Gain (Loss) Increase (Decrease) in Accounts Receivable Increase (Decrease) in Inventories Increase (Decrease) in Prepaid Expense Increase (Decrease) in Security Deposits Increase (Decrease) in Accounts Payable and Accrued Liabilities IncreaseDecreaseInCustomerDeposit Net Cash Provided by (Used in) Operating Activities Payments to Acquire Property, Plant, and Equipment PaymentsForProceedsFromMarketableSecurities Net Cash Provided by (Used in) Investing Activities Finance Lease, Principal Payments Repayments of Notes Payable PaymentOfRevenueEarnout Net Cash Provided by (Used in) Financing Activities Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents, Period Increase (Decrease), Excluding Exchange Rate Effect Cash, Cash Equivalents, Restricted Cash, and Restricted Cash Equivalents Revenue from Contract with Customer [Text Block] Lessee, Operating Leases [Text Block] Equity [Text Block] Commitments and Contingencies Disclosure [Text Block] Inventory, Policy [Policy Text Block] Property, Plant and Equipment, Policy [Policy Text Block] Lessee, Leases [Policy Text Block] Gain (Loss) on Investments Finite-Lived Intangible Assets, Amortization Method Equity Securities without Readily Determinable Fair Value, Amount Inventory, Gross Inventory Adjustments Accumulated Depreciation, Depletion and Amortization, Property, Plant, and Equipment Indefinite-Lived Intangible Assets (Excluding Goodwill) Finite-Lived Intangible Assets, Net Intangible Assets, Gross (Excluding Goodwill) CostMethodInvestmentMembershipInterestPercentage Operating Lease, Liability Property, Plant, and Equipment and Finance Lease Right-of-Use Asset, Accumulated Depreciation and Amortization Property, Plant, and Equipment and Finance Lease Right-of-Use Asset, after Accumulated Depreciation and Amortization Lessee, Operating Lease, Liability, to be Paid, Remainder of Fiscal Year Lessee, Operating Lease, Liability, to be Paid, Year One Lessee, Operating Lease, Liability, to be Paid, Year Two Lessee, Operating Lease, Liability, to be Paid, Year Three Lessee, Operating Lease, Liability, to be Paid, Year Four LesseeOperatingLeaseLiabilityPaymentsDueAfterYearFour Lessee, Operating Lease, Liability, to be Paid Lessee, Operating Lease, Liability, Undiscounted Excess Amount Finance Lease, Liability, to be Paid, Remainder of Fiscal Year Finance Lease, Liability, to be Paid, Year One Finance Lease, Liability, to be Paid, Year Two Finance Lease, Liability, to be Paid, Year Three Finance Lease, Liability, to be Paid Finance Lease, Liability, Undiscounted Excess Amount Long-Term Debt, Maturity, Remainder of Fiscal Year Long-Term Debt, Maturity, Year One Long-Term Debt, Maturity, Year Two Debt Instrument, Unamortized Discount Long-Term Debt Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Outstanding, Number Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Outstanding, Weighted Average Exercise Price Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Expirations in Period Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Exercisable, Number Share-Based Compensation Arrangement by Share-Based Payment Award, Options, Exercisable, Weighted Average Exercise Price Share-Based Compensation Arrangement by Share-Based Payment Award, Non-Option Equity Instruments, Outstanding, Number ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionOutstandingWeightedAverageExercisePrice ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercisableNumber ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionExercisableWeightedAverageExercisePrice Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Number Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Nonvested, Weighted Average Grant Date Fair Value Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Grants in Period, Weighted Average Grant Date Fair Value ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisedInPeriod Share-Based Compensation Arrangement by Share-Based Payment Award, Equity Instruments Other than Options, Forfeitures, Weighted Average Grant Date Fair Value Share-Based Payment Arrangement, Expense SharebasedCompensationArrangementByShareBasedPaymentAwardNonOptionsOutstandingWeightedAverageRemainingContractualTerm2 EX-101.PRE 10 ampg-20240930_pre.xml XBRL PRESENTATION FILE XML 12 R1.htm IDEA: XBRL DOCUMENT v3.24.3 Cover - $ / shares 9 Months Ended Sep. 30, 2024 Nov. 08, 2024 Document Type 10-Q Â Amendment Flag false Â Document Quarterly Report true Â Document Transition Report false Â Document Period End Date Sep. 30, 2024 Â Document Fiscal Period Focus Q3 Â Document Fiscal Year Focus 2024 Â Current Fiscal Year End Date --12-31 Â Entity File Number 001-40069 Â Entity Registrant Name AmpliTech Group, Inc. Â Entity Central Index Key 0001518461 Â Entity Tax Identification Number 27-4566352 Â Entity Incorporation, State or Country Code NV Â Entity Address, Address Line One 155 Plant Avenue Â Entity Address, City or Town Hauppauge Â Entity Address, State or Province NY Â Entity Address, Postal Zip Code 11788 Â City Area Code (631) Â Local Phone Number 521-7831 Â Entity Current Reporting Status Yes Â Entity Interactive Data Current Yes Â Entity Filer Category Non-accelerated Filer Â Entity Small Business true Â Entity Emerging Growth Company false Â Entity Shell Company false Â Entity Common Stock, Shares Outstanding Â 11,091,601 Entity Listing, Par Value Per Share $ 0.001 Â Common Stock, par value $0.001 per share Â Â Title of 12(b) Security Common Stock, par value $0.001 per share Â Trading Symbol AMPG Â Security Exchange Name NASDAQ Â Warrants to Purchase Common Stock Â Â Title of 12(b) Security Warrants to Purchase Common Stock Â Trading Symbol AMPGW Â Security Exchange Name NASDAQ Â X - DefinitionBoolean flag that is true when the XBRL content amends previously-filed or accepted submission. + ReferencesNo definition available. + Details Name: dei_AmendmentFlag Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionArea code of city + ReferencesNo definition available. + Details Name: dei_CityAreaCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionEnd date of current fiscal year in the format --MM-DD. + ReferencesNo definition available. + Details Name: dei_CurrentFiscalYearEndDate Namespace Prefix: dei_ Data Type: xbrli:gMonthDayItemType Balance Type: na Period Type: duration X - DefinitionFiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT or other fiscal year statements having FY. + ReferencesNo definition available. + Details Name: dei_DocumentFiscalPeriodFocus Namespace Prefix: dei_ Data Type: dei:fiscalPeriodItemType Balance Type: na Period Type: duration X - DefinitionThis is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006. + ReferencesNo definition available. + Details Name: dei_DocumentFiscalYearFocus Namespace Prefix: dei_ Data Type: xbrli:gYearItemType Balance Type: na Period Type: duration X - DefinitionFor the EDGAR submission types of Form 8-K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N-1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY-MM-DD. + ReferencesNo definition available. + Details Name: dei_DocumentPeriodEndDate Namespace Prefix: dei_ Data Type: xbrli:dateItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true only for a form used as an quarterly report. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Form 10-Q -Number 240 -Section 308 -Subsection a + Details Name: dei_DocumentQuarterlyReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true only for a form used as a transition report. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Forms 10-K, 10-Q, 20-F -Number 240 -Section 13 -Subsection a-1 + Details Name: dei_DocumentTransitionReport Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionThe type of document being provided (such as 10-K, 10-Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC submission type, or the word 'Other'. + ReferencesNo definition available. + Details Name: dei_DocumentType Namespace Prefix: dei_ Data Type: dei:submissionTypeItemType Balance Type: na Period Type: duration X - DefinitionAddress Line 1 such as Attn, Building Name, Street Name + ReferencesNo definition available. + Details Name: dei_EntityAddressAddressLine1 Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionName of the City or Town + ReferencesNo definition available. + Details Name: dei_EntityAddressCityOrTown Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionCode for the postal or zip code + ReferencesNo definition available. + Details Name: dei_EntityAddressPostalZipCode Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionName of the state or province. + ReferencesNo definition available. + Details Name: dei_EntityAddressStateOrProvince Namespace Prefix: dei_ Data Type: dei:stateOrProvinceItemType Balance Type: na Period Type: duration X - DefinitionA unique 10-digit SEC-issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityCentralIndexKey Namespace Prefix: dei_ Data Type: dei:centralIndexKeyItemType Balance Type: na Period Type: duration X - DefinitionIndicate number of shares or other units outstanding of each of registrant's classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class/interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument. + ReferencesNo definition available. + Details Name: dei_EntityCommonStockSharesOutstanding Namespace Prefix: dei_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionIndicate 'Yes' or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's current or most recent filing containing the related disclosure. + ReferencesNo definition available. + Details Name: dei_EntityCurrentReportingStatus Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: duration X - DefinitionIndicate if registrant meets the emerging growth company criteria. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityEmergingGrowthCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionCommission file number. The field allows up to 17 characters. The prefix may contain 1-3 digits, the sequence number may contain 1-8 digits, the optional suffix may contain 1-4 characters, and the fields are separated with a hyphen. + ReferencesNo definition available. + Details Name: dei_EntityFileNumber Namespace Prefix: dei_ Data Type: dei:fileNumberItemType Balance Type: na Period Type: duration X - DefinitionIndicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non-accelerated Filer. Definitions of these categories are stated in Rule 12b-2 of the Exchange Act. This information should be based on the registrant's current or most recent filing containing the related disclosure. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityFilerCategory Namespace Prefix: dei_ Data Type: dei:filerCategoryItemType Balance Type: na Period Type: duration X - DefinitionTwo-character EDGAR code representing the state or country of incorporation. + ReferencesNo definition available. + Details Name: dei_EntityIncorporationStateCountryCode Namespace Prefix: dei_ Data Type: dei:edgarStateCountryItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Regulation S-T -Number 232 -Section 405 + Details Name: dei_EntityInteractiveDataCurrent Namespace Prefix: dei_ Data Type: dei:yesNoItemType Balance Type: na Period Type: duration X - DefinitionThe par value per share of security quoted in same currency as Trading currency. Example: '0.01'. + ReferencesNo definition available. + Details Name: dei_EntityListingParValuePerShare Namespace Prefix: dei_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityRegistrantName Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionBoolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityShellCompany Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionIndicates that the company is a Smaller Reporting Company (SRC). + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntitySmallBusiness Namespace Prefix: dei_ Data Type: xbrli:booleanItemType Balance Type: na Period Type: duration X - DefinitionThe Tax Identification Number (TIN), also known as an Employer Identification Number (EIN), is a unique 9-digit value assigned by the IRS. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b-2 + Details Name: dei_EntityTaxIdentificationNumber Namespace Prefix: dei_ Data Type: dei:employerIdItemType Balance Type: na Period Type: duration X - DefinitionLocal phone number for entity. + ReferencesNo definition available. + Details Name: dei_LocalPhoneNumber Namespace Prefix: dei_ Data Type: xbrli:normalizedStringItemType Balance Type: na Period Type: duration X - DefinitionTitle of a 12(b) registered security. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection b + Details Name: dei_Security12bTitle Namespace Prefix: dei_ Data Type: dei:securityTitleItemType Balance Type: na Period Type: duration X - DefinitionName of the Exchange on which a security is registered. + ReferencesReference 1: http://www.xbrl.org/2003/role/presentationRef -Publisher SEC -Name Exchange Act -Number 240 -Section 12 -Subsection d1-1 + Details Name: dei_SecurityExchangeName Namespace Prefix: dei_ Data Type: dei:edgarExchangeCodeItemType Balance Type: na Period Type: duration X - DefinitionTrading symbol of an instrument as listed on an exchange. + ReferencesNo definition available. + Details Name: dei_TradingSymbol Namespace Prefix: dei_ Data Type: dei:tradingSymbolItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_StatementClassOfStockAxis=AMPG_CommonStockParValue0.001PerShareMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementClassOfStockAxis=AMPG_WarrantsToPurchaseCommonStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 13 R2.htm IDEA: XBRL

DOCUMENT v3.24.3 Condensed Consolidated Balance Sheets - USD ($) Sep. 30, 2024 Dec. 31, 2023 Current Assets Â Â Cash and cash equivalents $ 1,076,537 $ 6,726,013 Accounts receivable 1,275,931 2,542,710 Inventories, net 7,548,159 6,537,578 Prepaid expenses 2,747,309 1,342,335 Total Current Assets 12,647,936 17,148,636 Property and equipment, net 2,349,796 2,599,448 Operating lease right of use assets 4,517,685 3,538,798 Intangible assets, net 2,871,625 2,984,133 Goodwill 4,696,883 4,696,883 Cost method investment 348,250 348,250 Security deposits 114,174 91,481 Total Assets 27,546,349 31,407,629 Current Liabilities Â Â Accounts payable and accrued expenses 1,111,298 846,179 Customer deposits 145,428 14,239 Current portion of financing lease obligations 17,379 16,799 Current portion of operating lease obligations 447,556 541,324 Current portion of notes payable 854,214 80,841 Total Current Liabilities 2,575,875 1,499,382 Long-term Liabilities Â Â Financing lease obligations, net of current portion 20,321 32,537 Operating lease obligations, net of current portion 4,255,140 3,171,979 Notes payable, net of current portion 294,381 Deferred tax liability 24,000 24,000 Total Liabilities 7,169,717 4,727,898 Commitments and Contingencies Stockholdersâ€™ Equity Â Â Common stock, par value $0.001, 500,000,000 shares authorized, 11,091,601 and 9,714,613 shares issued and outstanding, respectively 11,092 9,715 Additional paid-in capital 37,556,381 36,439,739 Accumulated deficit (17,190,841) (9,769,723) Total Stockholdersâ€™ Equity 20,376,632 26,679,731 Total Liabilities and Stockholdersâ€™ Equity $ 27,546,349 $ 31,407,629 X - DefinitionDeferred tax liability. + ReferencesNo definition available. + Details Name: AMPG_DeferredTaxLiabilityNoncurrent Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionSum of the carrying values as of the balance sheet date of obligations incurred through that date and due within one year (or the operating cycle, if longer), including liabilities incurred (and for which invoices have typically been received) and payable to vendors for goods and services received, taxes, interest, rent and utilities, accrued salaries and bonuses, payroll taxes and fringe benefits. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_AccountsPayableAndAccruedLiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after allowance for credit loss, of right to consideration from customer for product sold and service rendered in normal course of business, classified as current. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481990/310-10-45-2 + Details Name: us-gaap_AccountsReceivableNetCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of excess of issue price over par or stated value of stock and from other transaction involving stock or stockholder. Includes, but is not limited to, additional paid-in capital (APIC) for common and preferred stock. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_AdditionalPaidInCapital Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of asset recognized for present right to economic benefit. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 12: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 13: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(12)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 19: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 30: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Assets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of asset recognized for present right to economic benefit, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 10: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7 + Details Name: us-gaap_AssetsCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_AssetsCurrentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of currency on hand as well as demand deposits with banks or financial institutions. Includes other kinds of accounts that have the general characteristics of demand deposits. Also includes short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. Excludes cash and cash equivalents within disposal group and discontinued operation. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashAndCashEquivalentsAtCarryingValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionRepresents the caption on the face of the balance sheet to indicate that the entity has entered into (1) purchase or supply arrangements that will require expending a portion of its resources to meet the terms thereof, and (2) is exposed to potential losses or, less frequently, gains, arising from (a) possible claims against a company's resources due to future performance under contract terms, and (b) possible losses or likely gains from uncertainties that will ultimately be resolved when one or more future events that are deemed likely to occur do occur or fail to occur. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_CommitmentsAndContingencies Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAggregate par or stated value of issued nonredeemable common stock (or common stock redeemable solely at the option of the issuer). This item includes treasury stock repurchased by the entity. Note: elements for number of nonredeemable common shares, par value and other disclosure concepts are in another section within

stockholders' equity. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_CommonStockValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe current portion, due within one year or one operating cycle, if longer, of deposits held other than customer deposits. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_DepositLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionSum of the carrying amounts of all intangible assets, excluding goodwill, as of the balance sheet date, net of accumulated amortization and impairment charges. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482686/350-30-45-1 + Details Name: us-gaap_IntangibleAssetsNetExcludingGoodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of liability recognized for present obligation requiring transfer or otherwise providing economic benefit to others. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(24)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(26)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 15: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(14)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 27: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 28: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 29: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap_Liabilities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of liabilities and equity items, including the portion of equity attributable to noncontrolling interests, if any. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(32)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LiabilitiesAndStockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionTotal obligations incurred as part of normal operations that are expected to be paid during the following twelve months or within one business cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(21)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-5Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards

Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7Reference 21: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481404/852-10-50-7 + Details Name: us-gaap_LiabilitiesCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_LiabilitiesCurrentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_LiabilitiesNoncurrentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe total amount of investments that are intended to be held for an extended period of time (longer than one operating cycle). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(12)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LongTermInvestments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionCarrying value as of the balance sheet date of notes payable (with maturities initially due after one year or beyond the operating cycle if longer), excluding current portion. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LongTermNotesPayable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionSum of the carrying values as of the balance sheet date of the portions of long-term notes payable due within one year or the operating cycle if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_NotesPayableCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's right to use underlying asset under operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseRightOfUseAsset Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of asset related to consideration paid in advance for costs that provide economic benefits within a future period of one year or the normal operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 340 -SubTopic 10 -Name Accounting Standards Codification -Section 05 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482955/340-10-05-5Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 340 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483032/340-10-45-1 + Details Name: us-gaap_PrepaidExpenseCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 360 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478451/942-360-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of accumulated undistributed earnings (deficit). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (h)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480016/944-40-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480990/946-20-50-11Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(23)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_RetainedEarningsAccumulatedDeficit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe amount of an asset, typically cash, provided to a counterparty to provide certain assurance of performance by the entity pursuant to the terms of a written or oral agreement, such as a lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_SecurityDeposit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_StockholdersEquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 14 R3.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Balance Sheets (Parenthetical) - $ / shares Sep. 30, 2024 Dec. 31, 2023 Statement of Financial Position [Abstract] Â Â Common stock, par value $ 0.001 $ 0.001 Common stock, shares authorized 500,000,000 500,000,000 Common stock, shares issued 11,091,601 9,714,613 Common stock, shares outstanding 11,091,601 9,714,613 X - DefinitionFace amount or stated value per share of common stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockParOrStatedValuePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe maximum number of common shares permitted to be issued by an entity's charter and bylaws. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_CommonStockSharesAuthorized Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionTotal number of common shares of an entity that have been sold or granted to shareholders (includes common shares that were issued, repurchased and remain in the treasury). These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockSharesIssued Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares of common stock outstanding. Common stock represent the ownership interest in a corporation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3 + Details Name: us-gaap_CommonStockSharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_StatementOfFinancialPositionAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 15 R4.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Operations (Unaudited) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Income Statement [Abstract] Â Â Â Â Revenues $ 2,834,512 $ 3,387,169 $ 7,655,285 $ 11,572,699 Cost of Goods Sold 1,486,583 1,904,388 4,367,639 6,305,928 Gross Profit 1,347,929 1,482,781 3,287,646 5,266,771 Operating Expenses Â Â Â Â Selling, general and administrative 1,864,245 1,984,452 6,063,047 5,677,778 Research and development 572,422 425,573 1,309,299 1,643,458 Total Operating Expenses 2,436,667 2,410,025 7,372,346 7,321,236 Loss From Operations (1,088,738) (927,244) (4,084,700) (2,054,465) Other Income (Expenses) Â Â Â Â Loss on investment in digital assets (3,248,911) Unrealized gain on investments 4,098 41,700 Realized gain on investments 36,187 25,965 49,994 Interest Income (expense), net (100,945) (750) (113,472) 20,335 Total Other Income (Expenses) (100,945) 39,535 (3,336,418) 112,029 Net Loss Before Income Taxes (1,189,683) (887,709) (7,421,118) (1,942,436) Provision For Income Taxes Net Loss $ (1,189,683) $ (887,709) $ (7,421,118) $ (1,942,436) Net Loss Per Share - Basic $ (0.12) $ (0.09) $ (0.76) $ (0.20) Net Loss Per Share - Diluted $ (0.12) $ (0.09) $ (0.76) $ (0.20) Weighted Average Common Shares Outstanding - Basic 10,003,556 9,662,003 9,813,200 9,645,367 Weighted Average Common Shares Outstanding - Diluted 10,003,556 9,662,003 9,813,200 9,645,367 X - DefinitionLoss on investment in digital assets. + ReferencesNo definition available. + Details Name: AMPG_LossOnInvestmentInDigitalAssets Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionRealized gain on investment. + ReferencesNo definition available. + Details Name: AMPG_RealizedGainOnInvestment Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe aggregate cost of goods produced and sold and services rendered during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic

10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1B + Details Name: us-gaap_CostOfRevenue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-15Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (e)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareBasic Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 52 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482635/260-10-55-52Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI 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http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-7Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(25)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(27)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(23)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-7 + Details Name: us-gaap_EarningsPerShareDiluted Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionAggregate revenue less cost of goods and services sold or operating expenses directly attributable to the revenue generation activity. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 8: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 9: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 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210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards 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-Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 23: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 + Details Name: us-gaap_GrossProfit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of income (loss) from continuing operations, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss) attributable to noncontrolling interest. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 6: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards

Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 9: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477314/942-235-S99-1Reference 11: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 12: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_IncomeStatementAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of current income tax expense (benefit) and deferred income tax expense (benefit) pertaining to continuing operations. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-12Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 231 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482663/740-10-55-231Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 6.I.7) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479360/740-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-10Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Subparagraph (a) -SubTopic 20 -Topic 740 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482659/740-20-45-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(h)) -SubTopic 10 -Topic 235 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1 + Details Name: us-gaap_IncomeTaxExpenseBenefit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of interest income (expense) classified as operating. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_InterestIncomeExpenseNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting 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https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionGenerally recurring costs associated with normal operations except for the portion of these expenses which can be clearly related to production and included in cost of sales or services. Includes selling, general and administrative expense. + ReferencesNo definition available. + Details Name: us-gaap_OperatingExpenses Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OperatingExpensesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe net result for the period of deducting operating expenses from operating revenues. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 5: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31 + Details Name: us-gaap_OperatingIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_OtherIncomeAndExpensesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of income (expense) included in net income that results in no cash inflow (outflow), classified as other. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_OtherNoncashIncomeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of expense for research and development. Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 730 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482916/730-10-50-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 912 -SubTopic 730 -Name Accounting Standards Codification -Section 25 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479532/912-730-25-1 + Details Name: us-gaap_ResearchAndDevelopmentExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of revenue recognized from goods sold, services rendered, insurance premiums, or other activities that constitute an earning process. Includes, but is not limited to, investment and interest income before deduction of interest expense when recognized as a component of revenue, and sales and trading gain (loss). + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5:

http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477314/942-235-S99-1Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_Revenues Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe aggregate total costs related to selling a firm's product and services, as well as all other general and administrative expenses. Direct selling expenses (for example, credit, warranty, and advertising) are expenses that can be directly linked to the sale of specific products. Indirect selling expenses are expenses that cannot be directly linked to the sale of specific products, for example telephone expenses, Internet, and postal charges. General and administrative expenses include salaries of non-sales personnel, rent, utilities, communication, etc. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_SellingGeneralAndAdministrativeExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of unrealized gain (loss) on investment. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_UnrealizedGainLossOnInvestments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe average number of shares or units issued and outstanding that are used in calculating diluted EPS or earnings per unit (EPU), determined based on the timing of issuance of shares or units in the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 16 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-16 + Details Name: us-gaap_WeightedAverageNumberOfDilutedSharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of [basic] shares or units, after adjustment for contingently issuable shares or units and other shares or units not deemed outstanding, determined by relating the portion of time within a reporting period that common shares or units have been outstanding to the total time in that period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-10 + Details Name: us-gaap_WeightedAverageNumberOfSharesOutstandingBasic Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration XML 16 R5.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Stockholders' Equity (Unaudited) - USD ($) Common Stock [Member] Additional Paid-in Capital [Member] Retained Earnings [Member] Total Balance at Dec. 31, 2022 $ 9,635 $ 36,050,161 $ (7,304,284) $ 28,755,512 Balance, shares at Dec. 31, 2022 9,634,613 Â Â Â Stock based compensation 280,599 280,599 Common stock issued for vesting of RSUâ€™s $ 52 (52) Common stock issued for vesting of RSU's, shares 52,500 Â Â Â Net loss (1,942,436) (1,942,436) Balance at Sep. 30, 2023 $ 9,687 36,330,708 (9,246,720) 27,093,675 Balance, shares at Sep. 30, 2023 9,687,113 Â Â Â Balance at Jun. 30, 2023 $ 9,640 36,181,131 (8,359,011) 27,831,760 Balance, shares at Jun. 30, 2023 9,639,613 Â Â Â Stock based compensation 149,624 149,624 Common stock issued for vesting of RSUâ€™s $ 47 (47) Common stock issued for vesting of RSU's, shares 47,500 Â Â Â Net loss (887,709) (887,709) Balance at Sep. 30, 2023 $ 9,687 36,330,708 (9,246,720) 27,093,675 Balance, shares at Sep. 30, 2023 9,687,113 Â Â Â Balance at Dec. 31, 2023 $ 9,715 36,439,739 (9,769,723) 26,679,731 Balance, shares at Dec. 31, 2023 9,714,613 Â Â Â Stock based compensation 329,893 329,893 Common stock issued for vesting of RSUâ€™s $ 8 (8) Common stock issued for vesting of RSU's, shares 7,500 Â Â Â Common stock issued in offering $ 1,369 786,757 788,126 Common stock issued in offering, shares 1,369,488 Â Â Â Net loss (7,421,118) (7,421,118) Balance at Sep. 30, 2024 $ 11,092 37,556,381 (17,190,841) 20,376,632 Balance, shares at Sep. 30, 2024 11,091,601 Â Â Â Balance at Jun. 30, 2024 $ 9,720 36,675,164 (16,001,158) 20,683,726 Balance, shares at Jun. 30, 2024 9,719,613 Â Â Â Stock based compensation 94,463 94,463 Common stock issued for vesting of RSUâ€™s $ 3 (3) Common stock issued for vesting of RSU's, shares 2,500 Â Â Â Common stock issued in offering $ 1,369 786,757 788,126 Common stock issued in offering, shares 1,369,488 Â Â Â Net loss (1,189,683) (1,189,683) Balance at Sep. 30, 2024 $ 11,092 $ 37,556,381 $ (17,190,841) $ 20,376,632 Balance, shares at Sep. 30, 2024 11,091,601 Â Â Â X - DefinitionCommon stock issued in private placement, shares. + ReferencesNo definition available. + Details Name: AMPG_StockIssuedDuringPeriodSharesIssuedInPrivatePlacement Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionCommon stock issued in private placement. + ReferencesNo definition available. + Details Name: AMPG_StockIssuedDuringPeriodValueIssuedInPrivatePlacement Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of increase to additional paid-in capital (APIC) for recognition of cost for award under share-based payment arrangement. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 718 -SubTopic 20 -Section 55 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481089/718-20-55-13Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 718 -SubTopic 20 -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481089/718-20-55-12 + Details Name: us-gaap_AdjustmentsToAdditionalPaidInCapitalSharebasedCompensationRequisiteServicePeriodRecognitionValue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic

10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionNumber of shares issued which are neither cancelled nor held in the treasury. + ReferencesNo definition available. + Details Name: us-gaap_SharesOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionNumber of shares issued during the period related to Restricted Stock Awards, net of any shares forfeited. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesRestrictedStockAwardNetOfForfeitures Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionValue of stock related to Restricted Stock Awards issued during the period, net of the stock value of such awards forfeited. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodValueRestrictedStockAwardNetOfForfeitures Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of equity (deficit) attributable to parent. Excludes temporary equity and equity attributable to noncontrolling interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(30)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(31)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.6-05(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-2Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(7)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 12: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 13: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 14: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 4.E) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480418/310-10-S99-2 + Details Name: us-gaap_StockholdersEquity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 17 R6.htm IDEA: XBRL DOCUMENT v3.24.3 Condensed Consolidated Statements of Cash Flows (Unaudited) - USD ($) 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Cash Flows from Operating Activities: Â Â Net loss $ (7,421,118) $ (1,942,436) Adjustments to reconcile net loss to net cash used in operating activities: Â Â Depreciation and amortization 388,590 359,416 Operating lease costs 414,356 411,475 Stock based compensation 329,893 280,599 Amortization of debt discount 89,509 Â Gain on termination of right-of-use operating lease (8,461) Inventory reserve 17,000 Change in fair value of marketable securities (41,700) Loss on investment of digital assets 3,248,911 Changes in Operating Assets and Liabilities: Â Â Accounts receivable 1,266,779 (37,879) Inventories (1,027,581) 24,279 Prepaid expenses (1,409,447) (883,614) Security deposits (22,693) 21,704 Accounts payable and accrued expenses 265,119 586,033 Operating lease obligations (399,376) (392,188) Customer deposits 131,189 (143,318) Net cash used in operating activities (4,128,869) (1,766,090) Cash Flows from Investing Activities: Â Â Purchase of property and equipment (26,431) (931,692) Net investment in marketable securities (3,248,911) (2,808,022) Net cash used in investing activities (3,275,342) (3,739,714) Cash Flows from Financing Activities: Â Â Net proceeds from issuance of common shares in a private equity offering 788,126 Net proceeds from notes payable 1,274,000 Repayment on financing lease liabilities (11,636) (29,404) Repayment of notes payable (295,755) (116,482) Payment of revenue earnout (2,180,826) Net cash from (used in) financing activities 1,754,735 (2,326,712) Net change in cash and cash equivalents (5,649,476) (7,832,516) Cash and Cash Equivalents, Beginning of the Period 6,726,013 13,290,222 Cash and Cash Equivalents, End of the Period 1,076,537 5,457,706 Supplemental disclosures: Â Â Cash paid for interest expense 116,673 23,359 Cash paid for income taxes 10,200 Non-Cash Investing and Financing Activities: Â Â Common Stock issued on vesting of RSUs 8 52 Gain on termination of right-of-use operating lease 8,461 Disposal of property and equipment 61,133 Debt Discount on notes payable 429,000 Operating lease right-of-use asset and liability measurement $ 13,932,242 X - DefinitionDebt discount on notes payable. + ReferencesNo definition available. + Details Name: AMPG_DebtDiscountOnNotesPayable Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionIncrease decrease in customer deposit. + ReferencesNo definition available. + Details Name: AMPG_IncreaseDecreaseInCustomerDeposit Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLoss on investment in digital assets. + ReferencesNo definition available. + Details Name: AMPG_LossOnInvestmentInDigitalAssets Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionPayment of revenue earnout. + ReferencesNo definition available. + Details Name: AMPG_PaymentOfRevenueEarnout Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionPayments for proceeds from marketable securities. + ReferencesNo definition available. + Details Name: AMPG_PaymentsForProceedsFromMarketableSecurities Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_AdjustmentsToReconcileNetIncomeLossToCashProvidedByUsedInOperatingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of noncash expense included in interest expense to amortize debt discount and premium associated with the related debt instruments. Excludes amortization of financing costs. Alternate captions include noncash interest expense. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-3 + Details Name: us-gaap_AmortizationOfDebtDiscountPremium Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of increase in lease obligation from new lease. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-4Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-3 + Details Name: us-gaap_CapitalLeaseObligationsIncurred Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage. Excludes amount for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-8Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-4 + Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalents Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of increase (decrease) in cash and cash equivalents, and cash and cash equivalents restricted to withdrawal or usage; excluding effect from exchange rate change. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. Cash equivalents include, but are not limited to, short-term, highly liquid investments that are both readily convertible to known amounts of cash and so near their maturity that they present insignificant risk of changes in value because of changes in interest rates. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 1 -SubTopic 230 -Topic 830 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477401/830-230-45-1 + Details Name: us-gaap_CashCashEquivalentsRestrictedCashAndRestrictedCashEquivalentsPeriodIncreaseDecreaseExcludingExchangeRateEffect Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_CashFlowOperatingActivitiesLesseeAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe current period expense charged against earnings on long-lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 360 -SubTopic 10 -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_DepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash outflow for principal payment on finance lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-5 + Details Name: us-gaap_FinanceLeasePrincipalPayments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of gain (loss) on termination of lease before expiration of lease term. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 40 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479092/842-20-40-1 + Details Name: us-gaap_GainLossOnTerminationOfLease Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount, after refund, of cash paid to foreign, federal, state, and local jurisdictions as income tax. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-2AReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 23 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-23Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-22Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-2 + Details Name: us-gaap_IncomeTaxesPaidNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in the amounts payable to vendors for goods and services received and the amount of obligations and expenses incurred but not paid. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInAccountsPayableAndAccruedLiabilities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in amount due within one year (or one business cycle) from customers for the credit sale of goods and services. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInAccountsReceivable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in the aggregate value of all inventory held by the reporting entity, associated with underlying transactions that are classified as operating activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInInventories Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_IncreaseDecreaseInOperatingCapitalAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of increase (decrease) in obligation for operating lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(1) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 +

Details Name: us-gaap_IncreaseDecreaseInOperatingLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in the amount of outstanding money paid in advance for goods or services that bring economic benefits for future periods. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInPrepaidExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe increase (decrease) during the reporting period in security deposits. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_IncreaseDecreaseInSecurityDeposits Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash paid for interest, excluding capitalized interest, classified as operating activity. Includes, but is not limited to, payment to settle zero-coupon bond for accreted interest of debt discount and debt instrument with insignificant coupon interest rate in relation to effective interest rate of borrowing attributable to accreted interest of debt discount. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-17Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-2 + Details Name: us-gaap_InterestPaidNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe difference between the change in the inventory reserve representing the cumulative difference in cost between the first in, first out and the last in, first out inventory valuation methods and any LIFO decrement which have been reflected in the statement of income during the period. + ReferencesNo definition available. + Details Name: us-gaap_InventoryLIFOReserveEffectOnIncomeNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of unrealized gain (loss) on investment in marketable security. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(7)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_MarketableSecuritiesUnrealizedGainLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of cash inflow (outflow) from financing activities, including discontinued operations. Financing activity cash flows include obtaining resources from owners and providing them with a return on, and a return of, their investment; borrowing money and repaying amounts borrowed, or settling the obligation; and obtaining and paying for other resources obtained from creditors on long-term credit. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24 + Details Name: us-gaap_NetCashProvidedByUsedInFinancingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInFinancingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash inflow (outflow) from investing activities, including discontinued operations. Investing activity cash flows include making and collecting loans and acquiring and disposing of debt or equity instruments and property, plant, and equipment and other productive assets. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24 + Details Name: us-gaap_NetCashProvidedByUsedInInvestingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NetCashProvidedByUsedInInvestingActivitiesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of cash inflow (outflow) from operating activities, including discontinued operations. Operating activity cash flows include transactions, adjustments, and changes in value not defined as investing or financing activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-24Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_NetCashProvidedByUsedInOperatingActivities Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: na Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 65 -Paragraph 2 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478666/740-323-65-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(20)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-6Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-1Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-10Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section 45 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479105/946-220-45-7Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(9)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(1)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 23: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 29: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 30: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 31: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 32: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 60B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_NoncashInvestingAndFinancingItemsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of loss from impairment of right-of-use asset from operating lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 25 -Paragraph 6 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479365/842-20-25-6 + Details Name: us-gaap_OperatingLeaseImpairmentLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of periodic reduction over lease term of carrying amount of right-of-use asset from operating lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_OperatingLeaseRightOfUseAssetAmortizationExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe cash outflow associated with the acquisition of long-lived, physical assets that are used in the normal conduct of business to produce goods and services and not intended for resale; includes cash outflows to pay for construction of self-constructed assets. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 13 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-13 + Details Name: us-gaap_PaymentsToAcquirePropertyPlantAndEquipment Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash inflow associated with the amount received from entity's raising of capital via private rather than public placement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromIssuanceOfPrivatePlacement Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe cash inflow from a borrowing supported by a written promise to pay an obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 14 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromNotesPayable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of divestiture of long-lived, physical assets used in the normal conduct of business and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, furniture and fixtures, and computer equipment. + ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentDisposals Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow for a borrowing supported by a written promise to pay an obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 15 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15 + Details Name: us-gaap_RepaymentsOfNotesPayable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of noncash expense for share-based payment arrangement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_ShareBasedCompensation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe fair value of stock issued in noncash financing activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-4Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-3Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-5 + Details Name: us-gaap_StockIssued1 Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SupplementalCashFlowInformationAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type:

na Period Type: duration XML 18 R7.htm IDEA: XBRL DOCUMENT v3.24.3 Organization and Business Description 9 Months Ended Sep. 30, 2024 Accounting Policies [Abstract] Â Organization and Business Description (1) Organization and Business Description Â AmpliTech Group, Inc. (â€œAmpliTechâ€ or the â€œCompanyâ€) was incorporated under the laws of the State of Nevada on December 30, 2010. On August 13, 2012, the Company acquired AmpliTech, Inc., by issuing 833,750 shares of the Companyâ€™s common stock to the shareholders of AmpliTech, Inc. in exchange for 100% of the outstanding shares of AmpliTech Inc. (the â€œShare Exchangeâ€). After the Share Exchange, the selling shareholders owned 60,000 shares of the outstanding 893,750 shares of Company common stock, resulting in a change in control. Accordingly, the transaction was accounted for as a reverse acquisition in which AmpliTech, Inc. was deemed to be the accounting acquirer, and the operations of the Company were consolidated for accounting purposes. The capital balances have been retroactively adjusted to reflect the reverse acquisition. Â AmpliTech designs, engineers and assembles microwave component based low noise amplifiers (â€œLNAâ€) that meet individual customer specifications. Application of the Companyâ€™s proprietary technology results in maximum frequency gain with minimal background noise distortion as required by each customer. The Company has both domestic and international customers in such industries as aerospace, governmental, defense and commercial satellite. Â On September 12, 2019, AmpliTech Group, Inc. acquired the assets of Specialty Microwave Corporation (â€œSpecialtyâ€), a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. Â Specialty designs and manufactures passive microwave components and related subsystems that meet individual customer specifications for both domestic and international customers for use in satellite communication ground networks. Â On February 17, 2021, AmpliTech Group, Inc., common stock and warrants under the symbols â€œAMPGâ€ and â€œAMPGWâ€, respectively, commenced trading on NASDAQ. A reverse split of the outstanding common stock at a 1-for-20 ratio became effective February 17, 2021 as of 12:01 a.m., Eastern Time. In connection with the public offering, 1,371,428 units at an offering price of $7.00 per unit were sold. Each unit issued in the offering consisted of one share of common stock and one warrant. Â In 2021, the Company opened AGMDC, a monolithic microwave integrated circuits (â€œMMICâ€) chip design center in Texas and has started to implement several of its proprietary amplifier designs into MMIC components. MMICs are semiconductor chips used in high-frequency communications applications. MMICs are widely desired for power amplification solutions to service emerging technologies, such as phased array antennas and quantum computing. MMICs carry a smaller footprint enabling them to be incorporated into a broader array of systems while reducing costs. AGMDC designs, develops and manufactures state-of-the-art signal processing components for satellite and 5G communications networks, defense, space and other commercial applications, allowing the Company to market its products to a wider base of customers requiring high technology in smaller packages. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â On November 19, 2021, AmpliTech Group, Inc. entered into an Asset Purchase Agreement (the â€œPurchase Agreementâ€) with Spectrum Semiconductor Materials Inc. (the â€œSellerâ€ or â€œSSMâ€), pursuant to which AmpliTech would acquire substantially all the assets of the Company (the â€œAcquisitionâ€). The Acquisition was completed on December 15, 2021. Â Spectrum Semiconductor Materials (â€œSSMâ€), located in Silicon Valley (San Jose, CA), is a global authorized distributor of integrated circuit (â€œICâ€) packaging and lids for semiconductor device assembly, prototyping, testing, and production requirements. Â In August 2022, AmpliTech Groupâ€™s True G Speed Services (AGTGSS) division was founded to serve and provide complete system integration and ORAN compliant O-RUâ€™s (Radio Units) for telcos, enabling the industry to access â€˜True 5G Speedsâ€™. AGTGSS provides Managed Services, Cyber Security, Cloud Services, Data Sciences and Telco Cloud Services. AGTGSS will also be providing full installation of Private 5G Networks (P5G) which includes the deployment of AmpliTech Groupâ€™s developed radio units. AGTGSS will implement AmpliTechâ€™s low noise amplifier devices in these systems to promote greater coverage, longer range and faster speeds. Â X - ReferencesNo definition available. + Details Name: us-gaap_AccountingPoliciesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for the business description and basis of presentation concepts. Business description describes the nature and type of organization including but not limited to organizational structure as may be applicable to holding companies, parent and subsidiary relationships, business divisions, business units, business segments, affiliates and information about significant ownership of the reporting entity. Basis of presentation describes the underlying basis used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS). + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 235 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/235/tableOfContentReference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 275 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/275/tableOfContentReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 205 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/205/tableOfContent + Details Name: us-gaap_BusinessDescriptionAndBasisOfPresentationTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 19 R8.htm IDEA: XBRL DOCUMENT v3.24.3 Loss on Investment of Digital Assets 9 Months Ended Sep. 30, 2024 Loss On Investment Of Digital Assets Â Loss on Investment of Digital Assets (2) Loss on Investment of Digital Assets Â During the three months ended March 31, 2024, the Company made several transactions in digital currency in the total amount of approximately $3.25 million. The Company believes that it was fraudulently induced to hold its digital currency with a custodian whom the Company believed to be valid, but no longer exists. The Company is taking steps in an attempt to seek recovery of the funds including discussions with local, federal, and international law enforcement agencies and private consultants and is currently conducting a review of its processes and procedures related to this investment. At the present time, the Company is not aware of, and does not expect any additional losses arising out or relating to the above-described investment. In addition, the Company does not believe that the Companyâ€™s systems, records, or other assets were otherwise affected or compromised in connection with these investments. Â As a result of the fraudulent digital currency transactions noted above, the Company was a victim of a cyber phishing scam that defrauded the Company. During the nine months ended September 30, 2024, the Company recorded a complete loss from the investment in digital assets of $3,248,911. As of September 30, 2024, the remaining balance of digital assets was $0. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLossOnInvestmentOfDigitalAssetsAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionLoss on Investment of Digital Assets [Text Block] + ReferencesNo definition available. + Details Name: AMPG_LossOnInvestmentOfDigitalAssetsTextBlock Namespace Prefix: AMPG_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 20 R9.htm IDEA: XBRL DOCUMENT v3.24.3 Summary of Significant Accounting Policies 9 Months Ended Sep. 30, 2024 Accounting Policies [Abstract] Â Summary of Significant Accounting Policies (3) Summary of Significant Accounting Policies Â Basis of Accounting Â The accompanying condensed consolidated financial statements have been prepared using the accrual basis of accounting. Â Principles of Consolidation Â The accompanying condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. Â Use of Estimates Â The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. Actual results could differ from those estimates. Â Cash and Cash Equivalents Â The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of September 30, 2024 the Companyâ€™s cash and cash equivalents were deposited in four financial institutions. Â The Companyâ€™s policy is to place its cash and cash equivalents with high-quality, major financial and investment institutions to limit the amount of credit exposure. Accounts at each financial institution are insured by the Federal Deposit Insurance Corporation (â€œFDICâ€) up to $250,000. At September 30, 2024 and December 31, 2023, the Company had $466,399 and $3,170,500 in excess of FDIC insured limits, respectively. The Company has not experienced any losses in such accounts. Â Accounts Receivable Â Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with ASC Topic 326, â€œFinancial Instruments â€“ Credit Losses,â€ the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of our customers, prevailing economic conditions, and reasonable and supportable forward-looking information. Â An allowance of $0 has been recorded at September 30, 2024 and December 31, 2023, respectively. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Inventories Â Inventories, which consist primarily of raw materials, work in progress and finished goods, are stated at the lower of cost (first-in, first-out basis) or market (net realizable value). Â Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold. Â As of September 30, 2024 and December 31, 2023 the reserve for inventory obsolescence was $1,164,000 and $1,146,000, respectively. Â Property and Equipment Â Property and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements. Â Property and equipment are depreciated as follows: Â Schedule of Property and Equipment Depreciated Description Â Useful Life Â Method Office equipment Â 3 to 7 years Â Straight-line Machinery/shop equipment Â 7 to 15 years Â Straight-line Computer equipment/software Â 1 to 7 years Â Straight-line Vehicles Â 5 years Â Straight-line Leasehold improvements Â 7 years Â Straight-line Â Intangible Assets Â Definite-lived intangible assets including customer relationships and intellectual property are subject to amortization. Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization. Â Intangible assets are amortized as follows: Â Schedule of Amortization of Intangible Assets Description Â Useful Life Â Method Trade names Â Indefinite Â N/A Customer relationships Â 15 to 20 years Â Straight-line Intellectual property Â 15 years Â Straight-line Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Long-Lived Assets Â The Company reviews the carrying value of long-lived assets such property and equipment, right-of-use (â€œROUâ€) assets, and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Circumstances which could trigger a review include, but are not limited to; significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. Â The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of long-lived assets. Â Goodwill and Indefinite-Lived Intangible Assets Â We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired. Â Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on managementâ€™s judgment. Â If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets exceed their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets. Â During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of indefinite-lived intangible assets. Â Investment Policy-Cost Method Â Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Companyâ€™s share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held $348,250 of investments without readily determinable fair values at September 30, 2024 and December 31, 2023, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the nine months ended September 30, 2024 and the year ended December 31, 2023. Â Investment in Digital Assets Â We account for all digital assets as indefinite-lived intangible assets in accordance with ASC 350, Intangiblesâ€”Goodwill and Other. The Company presents digital assets separately from other intangible assets, recorded as digital assets on the condensed consolidated balance sheets. The digital assets are initially recorded at cost and are subsequently remeasured at cost, net of any impairment losses incurred since acquisition. Â We performed an analysis this quarter to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. When the then current carrying value of a digital asset exceeds the fair value determined each quarter, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the prices determined. Gains are not recorded until realized upon sale(s), at which point they are presented net of any impairment losses for the same digital assets. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Leases Â We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks. Â Revenue Recognition Â We sell our products through a combination of a direct sales force in the United States and independent sales representatives

in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Â Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each partyâ€™s rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customerâ€™s intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Â Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period. Â Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. Â We do not have significant returns. We do not typically offer extended warranty or service plans. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of September 30, 2024 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues. Â Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customerâ€™s control at contractually stated pricing. Â Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. Â Cost of Sales Â We include product costs such material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales. Â Shipping and Handling Â Shipping and handling charges are generally incurred at the customerâ€™s expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales. Â Research and Development Â Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies. Â Research and development costs for the nine months ended September 30, 2024 and 2023, were $1,309,299 and $1,643,458, respectively. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Income Taxes Â The Companyâ€™s deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At September 30, 2024 and December 31, 2023, the Company had no material unrecognized tax benefits. Â Earnings Per Share Â Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted average number of shares of common stock outstanding during each period. Diluted earnings (loss) per share is calculated by adjusting the weighted average number of shares of common stock outstanding for the dilutive effect, if any, of common stock equivalents. Common stock equivalents whose effect would be anti-dilutive are not included in diluted earnings (loss) per share. The Company uses the treasury stock method to determine the dilutive effect, which assumes that all common stock equivalents have been exercised at the beginning of the period and that the funds obtained from those exercises were used to repurchase shares of common stock of the Company at the average closing market price during the period. As of September 30, 2024 and 2023, there were 4,586,800 and 4,247,942, respectively, potential common share equivalents from stock options excluded from the diluted loss per share calculations as their effect is anti-dilutive. Â Fair Value Measurements Â The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Â Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date. Â Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly. Â Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest. Â Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets. Â Stock-Based Compensation Â The Company records stock-based compensation in accordance with ASC 718, Compensation-Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period. Â Concentration of Credit Risk Â Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. Â The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. Â Recent Accounting Pronouncements Â In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring; (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segmentâ€™s profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company has adopted this pronouncement and does not expect the adoption to have a material impact on our results of operation, financial position or cash flow. Â In August 2023, the FASB issued ASU 2023-05, Business Combinationsâ€”Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. Â X - ReferencesNo definition available. + Details Name: us-gaap_AccountingPoliciesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for all significant accounting policies of the reporting entity. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 235 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/235/tableOfContent + Details Name: us-gaap_SignificantAccountingPoliciesTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 21 R10.htm IDEA: XBRL DOCUMENT v3.24.3 Revenues 9 Months Ended Sep. 30, 2024 Revenue from Contract with Customer [Abstract] Â Revenues (4) Revenues Â The following table presents sales disaggregated based on geographic regions and for the three and nine months ended: Â Schedule of Disaggregated Revenue Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â Â Â Three months endedÂ Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â AmpliTech Inc. and Specialty MicrowaveÂ Â Â Â Â Â Â Â Domestic salesÂ $522,919Â Â $1,120,578Â International salesÂ Â 238,970Â Â Â 460,435Â Total salesÂ $761,889Â Â $1,581,013Â Â Â Â Â Â Â Â Â Â SpectrumÂ Â Â Â Â Â Â Â Domestic salesÂ $1,607,677Â Â $1,201,856Â International salesÂ Â 464,946Â Â Â 604,300Â Total salesÂ $2,072,623Â Â $1,806,156Â Â Â Â Â Â Â Â Â Â Total salesÂ $2,834,512Â Â $3,387,169Â Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â Â Â Nine months endedÂ Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â AmpliTech Inc. and Specialty MicrowaveÂ Â Â Â Â Â Â Â Domestic salesÂ $1,918,295Â Â $3,588,637Â International salesÂ Â 646,725Â Â Â 977,152Â Total salesÂ $2,565,020Â Â $4,565,789Â Â Â Â Â Â Â Â Â Â Â SpectrumÂ Â Â Â Â Â Â Â Domestic salesÂ $3,789,111Â Â $4,577,466Â International salesÂ Â 1,301,154Â Â Â 2,429,444Â Total salesÂ $5,090,265Â Â $7,006,910Â Â Â Â Â Â Â Â Â Â Â Total salesÂ $7,655,285Â Â $11,572,699Â Â X - ReferencesNo definition available. + Details Name: us-gaap_RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure of revenue from contract with customer to transfer good or service and to transfer nonfinancial asset. Includes, but is not limited to, disaggregation of revenue, credit loss recognized from contract with customer, judgment and change in judgment related to contract with customer, and asset recognized from cost incurred to obtain or fulfill contract with customer. Excludes insurance and lease contracts. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-9Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-10Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-15Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 12 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-12Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-13Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Topic 606 -Publisher FASB -URI https://asc.fasb.org/606/tableOfContent + Details Name: us-gaap_RevenueFromContractWithCustomerTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 22 R11.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Reporting 9 Months Ended Sep. 30, 2024 Segment Reporting [Abstract] Â Segment Reporting (5) Segment Reporting Â ASC 280, â€œSegment Reportingâ€, establishes standards for reporting information about operating segments on a basis consistent with the Companyâ€™s internal organizational structure as well as information about geographical areas, business segments and major customers in financial statements for details on the Companyâ€™s business segments. The Company has two reportable segments, the manufacturing and engineering segment, which is operated by AmpliTech Inc. and Specialty Microwave: and the distribution segment, which is operated by Spectrum. The manufacturing and engineering segment assembles microwave components, and the distribution segment is a global distributor of integrated circuits packages and lids. The Company provides general corporate services to its segments; however, these services are not considered when making operating decisions and assessing segment performance. These services are reported under â€œCorporateâ€ below and include costs associated with executive management, financing activities and public company compliance. Â The following table presents summary information by segment for the three months ended September 30, 2024: Â Schedule of Segment Reporting Â Â Manufacturing and EngineeringÂ Â DistributionÂ Â CorporateÂ Â TotalÂ RevenueÂ $761,889Â Â $2,072,623Â Â $-Â Â $2,834,512Â Cost of Goods SoldÂ Â 730,027Â Â Â 756,556Â Â Â -Â Â Â 1,486,583Â Net LossÂ Â (1,401,246)Â Â 579,172Â Â Â (367,609)Â Â Â (1,189,683) Total AssetsÂ Â 11,883,507Â Â Â 15,580,896Â Â Â 81,946Â Â Â 27,546,349Â Depreciation and AmortizationÂ Â 100,641Â Â Â 29,504Â Â Â -Â Â Â 130,145Â Interest Expense, netÂ Â 9,941Â Â Â -Â Â Â 91,004Â Â Â 100,945Â Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â The following table presents summary information by segment for the nine months ended September 30, 2024: Â Â Â Manufacturing and EngineeringÂ Â DistributionÂ Â CorporateÂ Â TotalÂ RevenueÂ $2,565,020Â Â $5,090,265Â Â $-Â Â $7,655,285Â Cost of Goods SoldÂ Â 2,129,328Â Â Â 2,238,311Â Â Â -Â Â Â 4,367,639Â Net Income (Loss)Â Â (3,721,055)Â Â 783,306Â Â Â (4,483,369)Â Â (7,421,118) Total AssetsÂ Â 11,883,507Â Â Â 15,580,896Â Â Â 81,946Â Â Â 27,546,349Â Depreciation and AmortizationÂ Â 301,242Â Â Â 87,348Â Â Â -Â Â Â 388,590Â Interest Expense, netÂ Â 17,468Â Â Â -Â Â Â 96,004Â Â Â 113,472Â Â X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for reporting segments including data and tables. Reportable segments include those that meet any of the following quantitative thresholds a) it's reported revenue, including sales to external customers and intersegment sales or transfers is 10 percent or more of the combined revenue, internal and external, of all operating segments b) the absolute amount of its reported profit or loss is 10 percent or more of the greater, in absolute amount of 1) the combined reported profit of all operating segments that did not report a loss or 2) the combined reported loss of all operating segments that did report a loss c) its assets are 10 percent or more of the combined assets of all operating segments. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6:

http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 9: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 10: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 54 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-54Reference 11: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 47 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-47Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 31 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-31Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 34 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-34Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 26C -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-26CReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 26B -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-26BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-15Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/280/tableOfContentReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 26 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-26Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 21 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-21Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 21 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-21Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32 + Details Name: us-gaap_SegmentReportingDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 23 R12.htm IDEA: XBRL DOCUMENT v3.24.3 Inventories 9 Months Ended Sep. 30, 2024 Inventory Disclosure [Abstract] Â Inventories (6) Inventories Â The inventory consists of the following at September 30, 2024 and December 31, 2023: Â Schedule of Inventory Â Â September 30, 2024Â Â December 31, 2023Â Â Â Â Â Â Â Â Raw MaterialsÂ $1,320,434Â Â $959,645Â Work-in ProgressÂ Â 100,522Â Â Â 51,140Â Finished GoodsÂ Â 7,291,203Â Â Â 6,672,793Â SubtotalÂ $8,712,159Â Â $7,683,578Â Less: Reserve for ObsolescenceÂ Â (1,164,000)Â Â (1,146,000) Â Â Â Â Â Â Â Â TotalÂ $7,548,159Â Â $6,537,578Â Â X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for inventory. Includes, but is not limited to, the basis of stating inventory, the method of determining inventory cost, the classes of inventory, and the nature of the cost elements included in inventory. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 330 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/330/tableOfContent + Details Name: us-gaap_InventoryDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 24 R13.htm IDEA: XBRL DOCUMENT v3.24.3 Property and Equipment 9 Months Ended Sep. 30, 2024 Property, Plant and Equipment [Abstract] Â Property and Equipment (7) Property and Equipment Â Property and Equipment consisted of the following at September 30, 2024 and December 31, 2023: Â Schedule of Property and Equipment Â Â September 30, 2024Â Â December 31, 2023Â Â Â Â Â Â Â Â Lab EquipmentÂ $3,412,958Â Â $3,400,207Â Manufacturing EquipmentÂ Â 129,745Â Â Â 129,745Â AutomobilesÂ Â 7,335Â Â Â 7,335Â Computer Equipment and SoftwareÂ Â 146,785Â Â Â 194,238Â Leasehold ImprovementsÂ Â 84,172Â Â Â 84,172Â Furniture and FixturesÂ Â 170,643Â Â Â 170,643Â Â Â Â Â Â Â Â Â Â SubtotalÂ Â 3,951,638Â Â Â 3,986,340Â Property plant and equipment, grossÂ Â 3,951,638Â Â Â 3,986,340Â Â Â Â Â Â Â Â Â Â Less: Accumulated DepreciationÂ Â (1,601,842)Â Â (1,386,892) Â Â Â Â Â Â Â Â Â Â TotalÂ $2,349,796Â Â $2,599,448Â Property plant and equipment, netÂ $2,349,796Â Â $2,599,448Â Â Depreciation expense for the three months ended September 30, 2024 and 2023 was $92,567 and $91,715 respectively, of which $71,144 and $68,819 respectively were included in cost of goods sold. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Depreciation expense for the nine months ended September 30, 2024 and 2023 was $276,082 and $247,019 respectively, of which $213,391 and $185,239, respectively were included in cost of goods sold. Â Property and equipment purchased in the amount of $234,036 under financing leases is included in the totals above. As of September 30, 2024 and 2023, the outstanding balance of the financing leases were $37,700 and $49,336, respectively. Â Disposal of property and equipment as of September 30, 2024 was $61,133. Â X - ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for long-lived, physical asset used in normal conduct of business and not intended for resale. Includes, but is not limited to, work of art, historical treasure, and similar asset classified as collections. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 360 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/360/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 6 -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 7 -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-7 + Details Name: us-gaap_PropertyPlantAndEquipmentDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 25 R14.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets 9 Months Ended Sep. 30, 2024 Goodwill and Intangible Assets Disclosure [Abstract] Â Goodwill and Intangible Assets (8) Goodwill and Intangible Assets Â Goodwill Â Goodwill is related to the acquisition of Spectrum Semiconductor Materials Inc. on December 15, 2021. Goodwill is primarily related to expected improvements and technology performance and functionality, as well as sales growth from future product and service offerings and new customers, together with certain intangible assets that do not qualify for separate recognition. Goodwill is generally not amortizable for tax and financial statement purposes. As of September 30, 2024 and December 31, 2023, goodwill was $4,696,883, respectively. Â Other Intangible Assets Â Intangible assets consisted of the following at September 30, 2024: Â Schedule of Intangible Assets Â Â Gross Carrying AmountÂ Â Accumulated AmortizationÂ Â NetÂ Â Weighted Average LifeÂ Â Trade nameÂ $584,517Â Â $-Â Â $584,517Â Â Â IndefiniteÂ Customer relationshipsÂ Â 2,591,491Â Â Â 438,691Â Â Â 2,152,800Â Â Â 16.06Â Intellectual PropertyÂ Â 202,771Â Â Â 68,463Â Â Â 134,308Â Â Â 9.96Â TotalÂ $3,378,779Â Â $507,154Â Â $2,871,625Â Â Â Â Â Â Â Â Amortization expense for the three months ended September 30, 2024 and 2023 was $37,578, respectively. Â Amortization expense for the nine months ended September 30, 2024 and 2023 was $112,508 and $112,397, respectively. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Annual amortization of intangible assets are as follows: Â Schedule of Amortization of Assets Â Â Â Â Â 2024 remainingÂ Â 37,465Â 2025Â Â 149,974Â 2026Â Â 149,974Â 2027Â Â 149,974Â 2028Â Â 149,974Â ThereafterÂ Â 1,649,747Â TotalÂ $2,287,108Â Â X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for goodwill and intangible assets. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-30/tableOfContentReference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-20/tableOfContent + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 26 R15.htm IDEA: XBRL DOCUMENT v3.24.3 Cost Method Investment 9 Months Ended Sep. 30, 2024 Investments, All Other Investments [Abstract] Â Cost Method Investment (9) Cost Method Investment Â On June 10, 2021, the Company entered into a membership interest purchase agreement with SN2N, LLC for an aggregate purchase price of $350,000, to be paid in four tranches. Each tranche represented a 5% membership interest, and in aggregate a 20% membership interest. On June 15, 2022, an amendment to the membership interest purchase agreement was made to reflect a 19.9% membership interest. Considering this amendment, the Company overpaid $1,750 for the membership interest and was subsequently reimbursed. As of September 30, 2024, the Company has made an investment of $348,250 for a 19.9% membership interest. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â X - DefinitionThe entire disclosure for investment. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 320 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/320/tableOfContentReference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Topic 321 -Publisher FASB -URI https://asc.fasb.org/321/tableOfContentReference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Topic 325 -Publisher FASB -URI https://asc.fasb.org/325/tableOfContent + Details Name: us-gaap_InvestmentTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_InvestmentsAllOtherInvestmentsAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 27 R16.htm IDEA: XBRL DOCUMENT v3.24.3 Leases 9 Months Ended Sep. 30, 2024 Leases Â Leases (10) Leases Â The following was included in our balance sheet as of September 30, 2024: Â Schedule of Lease Assets and LiabilitiesÂ Â Â September 30, 2024Â Operating leasesÂ Â Â Â AssetsÂ Â Â Â ROU operating lease assetsÂ $4,517,685Â Â Â Â Â Â Â LiabilitiesÂ Â Â Â Current portion of operating leaseÂ $447,556Â Operating lease, net of current portionÂ $4,255,140Â Total operating lease liabilitiesÂ $4,702,696Â Â Â Â Â Â Financing leasesÂ Â Â Â AssetsÂ Â Â Â Property and equipment, grossÂ $234,036Â Accumulated depreciationÂ Â (180,643) Property and equipment, netÂ $53,393Â Â Â Â Â Â LiabilitiesÂ Â Â Â Current portion of financing leaseÂ $17,379Â Financing lease, net of current portionÂ $20,321Â Total financing lease liabilitiesÂ $37,700Â Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â The weighted average remaining lease term and weighted average discount rate at September 30, 2024 are as follows: Â Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount RateÂ Weighted average remaining lease term (years)Â September 30, 2024Â Operating leasesÂ Â 8.18Â Financing leasesÂ Â 2.29Â Weighted average discount rateÂ Â Â Â Operating leasesÂ Â 6.42% Financing leasesÂ Â 4.68% Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Operating Leases Â On September 12, 2019, the Company entered into a new operating lease agreement to rent office space in Ronkonkoma, NY. This five- year agreement commenced on September 12, 2019 with an annual rent of $90,000 and 3% increase in each successive lease year beginning in 2021. The Company has an option to buy the property during the first two years of the lease for $1,200,000 and then at fair market value for the remainder of the lease term. This option has expired and was not exercised as of December 31, 2022. On April 13, 2023, this lease was terminated subject to the terms of a Surrender Agreement between the Company and landlord. As a result, a gain on termination of right-of-use operating lease was recognized of $8,461. Â On November 27, 2019, the Company entered a 39-month agreement to lease an automobile with a monthly payment of $420. This lease was paid in full as of March 31, 2023. Â On December 15, 2021, the Company assumed the SSM lease agreement for office and warehouse space in San Jose, CA, with the same terms and conditions. Effective February 1, 2020, the lease term will expire on January 31, 2025, with a base rent of $24,234 for the first 12 months and increases by approximately 3% every year. On September 6, 2024, the lease was amended extending the lease term to March 31, 2030 while maintaining the base rent of $24,234 and 3% increases for each year thereafter. Â On October 15, 2021, the Company entered a new lease for a 20,000 square foot facility at 155 Plant Avenue, Hauppauge, New York, for a term of seven years and two months. The yearly base rent of $346,242 shall increase at a rate of 2.75% per year to begin on the first anniversary lease commencement date and each year thereafter. The first two months of basic rent shall be abated following the commencement lease date. In the event the landlord decides to sell the property, the Company shall have the right of first offer to purchase subject property. Upon lease execution, the Company paid two months of base rent as a security deposit and one monthâ€™s rent totaling $86,560. The Company moved into the new manufacturing and headquarters facility April 1, 2022. Â On August 9, 2023, the Company entered a 39-month agreement for $20,880 to lease an automobile with a monthly payment of $605. Â On January 15, 2024, the Company entered a triple net lease agreement for a 1,900 square foot facility in Allen, Texas for a term of five years and one month. The yearly base rent of $53,675 shall increase at a rate of 2.5% per year to begin on the first anniversary lease commencement date and each year thereafter. The first monthâ€™s rent shall be abated following the commencement lease date. Upon lease execution, the Company paid two months of rent as a security deposit and one monthâ€™s rent totaling $17,999. The Company moved into the new facility on August 1, 2024. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â The following table reconciles future minimum operating lease payments to the discounted lease liability as of September 30, 2024: Â Schedule of Future Minimum Operating Lease PaymentsÂ Â Â Â Â 2024 remainingÂ Â 188,322Â 2025Â Â 728,280Â 2026Â Â 743,301Â 2027Â Â 757,493Â 2028Â Â 779,311Â ThereafterÂ Â 2,762,279Â Total lease paymentsÂ Â 5,958,986Â Less imputed interestÂ Â (1,256,290) Total lease obligationsÂ Â 4,702,696Â Less current obligationsÂ Â (447,556) Long-term lease obligationsÂ $4,255,140Â Â Financing Lease Â The Company entered into several 60-month lease agreements to finance certain laboratory and office equipment. As such, the Company has accounted for these transactions as a financing lease. Â The following table reconciles future minimum financing lease payments to the discounted lease liability as of September 30, 2024: Â Schedule of Future Minimum Lease Payments for Finance LeaseÂ Â Â Â Â Â 2024 remainingÂ Â 5,687Â 2025Â Â 18,195Â 2026Â Â 11,982Â 2027Â Â 3,994Â Total lease paymentsÂ Â 39,858Â Less imputed interestÂ Â (2,158) Total lease obligationsÂ Â 37,700Â Less current obligationsÂ Â (17,379) Long-term lease obligationsÂ $20,321Â Â X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLeasesAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for operating leases of lessee. Includes, but is not limited to, description of operating lease and maturity analysis of operating lease liability. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/842-20/tableOfContent + Details Name: us-gaap_LesseeOperatingLeasesTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 28 R17.htm IDEA: XBRL DOCUMENT v3.24.3 Notes Payable 9 Months Ended Sep. 30, 2024 Debt Disclosure [Abstract] Â Notes Payable (11) Notes Payable Â Promissory Note: Â On September 12, 2019, AmpliTech Group, Inc. acquired Specialty, a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. The total consideration paid was $1,143,633, consisting of $668,633 in cash and a $475,000 promissory note with an interest rate of 6%. Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty-nine (59) monthly payments of $9,213 with a final payment due October 1, 2024 of $9,203. As of September 30, 2024, the balance of this promissory note was $9,166. Principal payments of $64,473 along with interest expense of $2,035 were paid during the nine months

ended September 30, 2024. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Loan Payable: Â On September 12, 2019, the Company was approved for a $250,000 equipment leasing facility which was subsequently increased to $500,000. The Company has borrowed against the leasing facility as follows: Â â—On May 14, 2020, the Company borrowed $27,494 to be paid over a three-year term with monthly payments of $815 at an interest rate of 4.27%. The balance as of September 30, 2024 was $0. Principal payments of $3,230 and interest expense of $30 were paid for the nine months ended September 30, 2023. This loan was paid in full in April 2023. Â â— On June 10, 2020, the Company borrowed $41,015 to be paid over a three-year term with monthly payments of $1,216 at an interest rate of 4.28%. The balance as of September 30, 2024 was $0. Principal payments of $6,012 and interest expense of $68 were paid for the nine months ended September 30, 2023. This loan was paid in full in May 2023. Â As of March 14, 2023, the Company closed the equipment line of credit of $500,000, which had $0 balance. All UCC filings on the Company assets have been released as well as the Presidentâ€™s personal guarantee. Â In January 2022, the Company purchased machinery for $91,795, applying a deposit of $9,180 and financing the balance of $82,616 over 24 payments at an interest rate of 1.90%. The balance as of September 30, 2024 and 2023 was $0 and $10,499, respectively. Principal payments of $0 and $31,201 and interest expense of $0 and $397 were paid for the nine months ended September 30, 2024 and 2023, respectively. Â On July 23, 2024, the Company entered into a business loan and security agreement with Altbanq Lending II LLC in the amount of $1,300,000, with an origination fee of $26,000 and an original issue discount of $403,000. The loan is payable within 76 weeks through 38 bi-weekly payments of $44,816 and bears an annual interest rate of 21.2% with prepayment options. The loan is secured by the Companyâ€™s assets through an UCC filing. Proceeds from the business loan will be used for working capital and 5G licensing and certification fees. The balance as of September 30, 2024 was $1,139,429, net of the debt discount. Principal payments of $224,080 and $89,509 of interest expense were paid for the nine month ended September 30, 2024. Â Future principal payments over the term of the loans as of September 30, 2024 are as follows: Â Schedule of Future Principal and Interest PaymentsÂ Â Â PaymentsÂ 2024 remainingÂ $278,062Â 2025Â Â 1,165,216Â 2026Â Â 44,808Â DiscountÂ Â (339,491) Total remaining paymentsÂ $1,148,595Â Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â X - ReferencesNo definition available. + Details Name: us-gaap_DebtDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for information about short-term and long-term debt arrangements, which includes amounts of borrowings under each line of credit, note payable, commercial paper issue, bonds indenture, debenture issue, own-share lending arrangements and any other contractual agreement to repay funds, and about the underlying arrangements, rationale for a classification as long-term, including repayment terms, interest rates, collateral provided, restrictions on use of assets and activities, whether or not in compliance with debt covenants, and other matters important to users of the financial statements, such as the effects of refinancing and noncompliance with debt covenants. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-6Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 405 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477092/405-40-50-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 470 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/470/tableOfContentReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1C -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1CReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1C -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1CReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1C -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1CReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1IReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1IReference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1I -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1I + Details Name: us-gaap_DebtDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 29 R18.htm IDEA: XBRL DOCUMENT v3.24.3 Stockholdersâ€™ Equity 9 Months Ended Sep. 30, 2024 Equity [Abstract] Â Stockholdersâ€™ Equity (12) Stockholdersâ€™ Equity Â The total number of shares of stock this Corporation is authorized to issue shall be five hundred one million (501,000,000) shares, par value $0.001 per share. Our authorized capital stock consists of 500,000,000 shares of common stock and 1,000,000 shares of blank check preferred stock. Â Preferred Stock Â On July 10, 2013, the Board of Directors of the Company approved a certificate of amendment to the articles of incorporation and changed the authorized capital stock of the Company to include and authorize 500,000 shares of Preferred Stock, par value $0.001 per share. On October 7, 2020, the Board of Directors of the Company approved a certificate of amendment to the articles of incorporation and changed the total number of authorized shares of Preferred Stock to 1,000,000 shares, $0.001 per share. Â On October 7, 2020, our Board of Directors and our stockholders approved a resolution to amend and restate the certificate of designation of preferences, rights and limitations of Series A Convertible Preferred Stock to restate that there are 401,000 shares of the Companyâ€™s blank check Preferred Stock designated as Series A Convertible Preferred Stock. The amended and restated certificate clarifies that the Series A Convertible Preferred Stock convert at a rate of five shares of the Companyâ€™s common stock for every share of Series A Convertible Preferred Stock, and also restates that the Series A Convertible Preferred Stock shall be entitled to vote on all matters submitted to shareholders of the Company for each share of Series A Convertible Preferred Stock owned on the record date for the determination of shareholders entitled to vote on such matter or, if no such record date is established, on the date such vote is taken, or any written consent of shareholders is solicited. The number of votes entitled to be cast by the holders of the Series A Convertible Preferred Stock equals that number of votes that, together with votes otherwise entitled to be cast by the holders of the Series A Convertible Preferred Stock at a meeting, whether by virtue of stock ownership, proxies, voting trust agreements or otherwise, entitle the holders to exercise 51% of all votes entitled to be cast to approve any action which Nevada law provides may or must be approved by vote or consent of the holders of common stock entitled to vote. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Common Stock: Â The Company originally authorized 50,000,000 shares of common stock with a par value of $0.001. Effective May 20, 2014, the Company increased its authorized shares of common stock from 50,000,000 to 500,000,000. Â On February 17, 2021, AmpliTech Group Inc., common stock and warrants under the symbols â€œAMPGâ€ and â€œAMPGWâ€, respectively, commenced trading on NASDAQ. Â On September 9, 2024, the Company entered into a Securities Purchase Agreement (the â€œPurchase Agreementâ€) with a single institutional investor for the sale by the Company of 1,369,488 shares (the â€œSharesâ€) of the Companyâ€™s common stock, par value $0.001 per share at a per share price of $0.7302. The closing of the offering occurred on September 11, 2024, subject to satisfaction of customary closing conditions (the â€œClosing Dateâ€). The gross proceeds to the Company from the offering was approximately $1.0 million, before deducting the placement agentâ€™s fees and other estimated offering expenses payable by the Company in the amount of $211,875. Pursuant to the Purchase Agreement, the Company agreed not to issue, enter into any agreement to issue or announce the issuance or proposed issuance of, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock or file any registration statement or prospectus, or any amendment or supplement thereto for 30 days after the Closing Date, subject to certain exceptions. In addition, the Company agreed not to effect or enter into an agreement to affect any issuance of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock involving a Variable Rate Transaction (as defined in the Purchase Agreement) until 30 days after the Closing Date, subject to certain exceptions. The offering of the Shares was made pursuant to a shelf registration statement on Form S-3 (File No. 333-278657) (the â€œRegistration Statementâ€), which was originally filed by the Company with the Securities and Exchange Commission on April 12, 2024, and declared effective on April 24, 2024. The Company filed a prospectus supplement dated September 9, 2024 with the U.S. Securities and Exchange Commission in connection with the offer and sale of the Shares on September 11, 2024 (â€œProspectus Supplementâ€). Â In connection with the offering of the Shares, on September 9, 2024, the Company entered into a placement agency agreement with Maxim Group LLC (the â€œPlacement Agentâ€) pursuant to which the Company agreed to pay the Placement Agent an aggregate fee equal to 6.5% of the aggregate gross proceeds received by the Company from the sale of the Shares in the offering. The Company also agreed to reimburse the Placement Agent for up to $25,000 in accountable expenses, including the Placement Agentâ€™s legal counselâ€™s fees. Â 2020 Equity Incentive Plan: Â In October 2020, the Board of Directors and shareholders adopted the Companyâ€™s 2020 Equity Incentive Plan (the â€œ2020 Planâ€), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Companyâ€™s common stock to employees and individuals who perform services for the Company. The purpose of the 2020 Plan is to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for the Company, and to promote the success of the Companyâ€™s business. The 2020 Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, and other stock or cash awards as the Board of Directors may determine. Â In 2023, the Board and the shareholders adopted the Companyâ€™s Amended and Restated 2020 Equity Incentive Plan (the â€œAmended and Restated Planâ€), effective as of December 11, 2023. The Amended and Restated Plan is substantially similar to the 2020 Plan except that it increases the shares of our common stock available for issuance thereunder to 2,250,000 shares of common stock. Â As of September 30, 2024, all outstanding stock options were issued according to the Companyâ€™s 2020 Plan, and there remains 820,142 shares of common stock available for future issuance under the 2020 Plan. Â Stock Options: Â On January 9, 2024, the Company granted a consultant, ten-year stock options to purchase 2,500 shares of common stock according to the Companyâ€™s 2020 Plan. The stock options vested immediately, with an exercise price of $1.86 per share. The Company has calculated these options estimated fair market value at $3,800 using the Black-Scholes model, with the following assumptions: expected term of 5.00 years, stock price of $1.86, exercise price of $1.86, volatility of 116.1%, risk-free rate of 3.97%, and no forfeiture rate. Â On January 16, 2024, the Company granted an employee ten-year stock options to purchase 5,000 shares of common stock according to the Companyâ€™s 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on April 16, 2024, with an exercise price of $1.93 per share. The Company has calculated these options estimated fair market value at $8,800 using the Black-Scholes model, with the following assumptions: expected term of 7.51 years, stock price of $1.93, exercise price of $1.93, volatility of 120.1%, risk-free rate of 4.01%, and no forfeiture rate. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â On January 25, 2024, the Company granted an independent contractor ten-year stock options to purchase 50,000 shares of common stock according to the Companyâ€™s 2020 Plan. 20,000 stock options vested immediately and the balance of 30,000 shall vest in equal quarterly installments over three years commencing on June 30, 2024, with an exercise price of $2.19 per share. The Company has calculated these options estimated fair market value at $98,600 using the Black-Scholes model, with the following assumptions: expected term of 10.00 years, stock price of $2.19, exercise price of $2.19, volatility of 123.0%, risk-free rate of 4.07%, and no forfeiture rate. Â Below is a table summarizing the changes in stock options outstanding for the nine months ended September 30, 2024: Â Schedule of Stock Options OutstandingÂ Â Â Number ofÂ Â Weighted AverageÂ Â Â OptionsÂ Â Exercise Price ($)Â Outstanding at December 31, 2023Â Â 1,236,000Â Â $2.30Â GrantedÂ Â 57,500Â Â $2.15Â ExercisedÂ Â -Â Â Â -Â ExpiredÂ Â (8,642)Â $2.29Â Outstanding at September 30, 2024Â Â 1,284,858Â Â $2.30Â Exercisable at September 30, 2024Â Â 674,560Â Â $2.67Â Â Stock-based compensation expense related to stock options of $89,539 and $315,227 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested stock options is $1,033,048 and is expected to be recognized over 4.30 years. The outstanding stock options have a weighted average remaining contractual life of 4.31 years and a total intrinsic value of $0. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Warrants: Â Below is a table summarizing the changes in warrants outstanding for the nine months ended September 30, 2024: Â Schedule of Warrants OutstandingÂ Â Â Number ofÂ Â Weighted AverageÂ Â Â WarrantsÂ Â Exercise Price ($)Â Outstanding at December 31, 2023Â Â 3,296,942Â Â $7.83Â GrantedÂ Â -Â Â Â -Â ExercisedÂ Â -Â Â Â -Â ExpiredÂ Â -Â Â Â -Â Outstanding at September 30, 2024Â Â 3,296,942Â Â $7.83Â Exercisable at September 30, 2024Â Â 3,296,942Â Â $7.83Â Â Stock-based compensation expense related to warrants of $0 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested warrants is $0. The outstanding warrants have a weighted average remaining contractual life of 1.48 years and a total intrinsic value of $0. Â Restricted Stock Units: Â On May 20, 2022, 30,000 restricted stock units at an exercise price of $1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of September 30, 2024, 25,000 shares of common stock were issued. Â Below is a table summarizing the changes in restricted stock units outstanding for the nine months ended September 30, 2024: Â Schedule of Changes in Restricted Stock Units OutstandingÂ Â Â Number ofÂ Â Weighted AverageÂ Â Â RSUâ€™sÂ Â Exercise Price ($)Â Outstanding at December 31, 2023Â Â 12,500Â Â $1.96Â GrantedÂ Â -Â Â Â -Â ExercisedÂ Â (7,500)Â $1.96Â ExpiredÂ Â -Â Â Â -Â Outstanding at September 30, 2024Â Â 5,000Â Â $1.96Â Â Stock-based compensation expense related to restricted stock units of $4,924 and $14,666 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested restricted stock units is $12,579. The outstanding restricted stock units have a weighted average remaining contractual life of .39 years and a total intrinsic value of $0. Â X - ReferencesNo definition available. + Details Name: us-gaap_EquityAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for equity. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 4:

http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 235 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477968/946-235-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-6Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 815 -SubTopic 40 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480237/815-40-50-6Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(e)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/505/tableOfContentReference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 14 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-14Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 16 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-16Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18Reference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18Reference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 18 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-18 + Details Name: us-gaap_StockholdersEquityNoteDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 30 R19.htm IDEA: XBRL DOCUMENT v3.24.3 Commitments and Contingencies 9 Months Ended Sep. 30, 2024 Commitments and Contingencies Disclosure [Abstract] Â Commitments and Contingencies (13) Commitments and Contingencies Â On July 26, 2024, the Companyâ€™s AGTGSS division entered into a licensing product agreement. Under the terms of the agreement, the licensor agreed to an exclusive United States distribution and global licensing rights for certain 5G telecom equipment for 18 months for the purpose of marketing, selling, renting, deployment and maintenance of the licensed products with the Company. For services, the Company will pay the Licensor certain software IP license fees in the amount of $1,250,000. In addition, the licensor may provide certain product certification support for certain fees. As of September 30, 2024, we have paid $710,000 towards the licensing agreement. X - ReferencesNo definition available. + Details Name: us-gaap_CommitmentsAndContingenciesDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe entire disclosure for commitments and contingencies. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 405 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/405-30/tableOfContentReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 440 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482648/440-10-50-4Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 450 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/450/tableOfContentReference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 954 -SubTopic 440 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478522/954-440-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 440 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482648/440-10-50-4Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 440 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/440/tableOfContent + Details Name: us-gaap_CommitmentsAndContingenciesDisclosureTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 31 R20.htm IDEA: XBRL DOCUMENT v3.24.3 Summary of Significant Accounting Policies (Policies) 9 Months Ended Sep. 30, 2024 Accounting Policies [Abstract] Â Basis of Accounting Basis of Accounting Â The accompanying condensed consolidated financial statements have been prepared using the accrual basis of accounting. Â Principles of Consolidation Principles of Consolidation Â The accompanying condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. Â Use of Estimates Use of Estimates Â The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. Actual results could differ from those estimates. Â Cash and Cash Equivalents Cash and Cash Equivalents Â The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of September 30, 2024 the Companyâ€™s cash and cash equivalents were deposited in four financial institutions. Â The Companyâ€™s policy is to place its cash and cash equivalents with high-quality, major financial and investment institutions to limit the amount of credit exposure. Accounts at each financial institution are insured by the Federal Deposit Insurance Corporation (â€œFDICâ€) up to $250,000. At September 30, 2024 and December 31, 2023, the Company had $466,399 and $3,170,500 in excess of FDIC insured limits, respectively. The Company has not experienced any losses in such accounts. Â Accounts Receivable Accounts Receivable Â Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with ASC Topic 326, â€œFinancial Instruments â€“ Credit Losses,â€ the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of our customers, prevailing economic conditions, and reasonable and supportable forward-looking information. Â An allowance of $0 has been recorded at September 30, 2024 and December 31, 2023, respectively. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Inventories Inventories Â Inventories, which consist primarily of raw materials, work in progress and finished goods, are stated at the lower of cost (first-in, first-out basis) or market (net realizable value). Â Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold. Â As of September 30, 2024 and December 31, 2023 the reserve for inventory obsolescence was $1,164,000 and $1,146,000, respectively. Â Property and Equipment Property and Equipment Â Property and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements. Â Property and equipment are depreciated as follows: Â Schedule of Property and Equipment Depreciated Description Â Useful Life Â Method Office equipment Â 3 to 7 years Â Straight-line Machinery/shop equipment Â 7 to 15 years Â Straight-line Computer equipment/software Â 1 to 7 years Â Straight-line Vehicles Â 5 years Â Straight-line Leasehold improvements Â 7 years Â Straight-line Â Intangible Assets Intangible Assets Â Definite-lived intangible assets including customer relationships and intellectual property are subject to amortization. Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization. Â Intangible assets are amortized as follows: Â Schedule of Amortization of Intangible Assets Description Â Useful Life Â Method Trade names Â Indefinite Â N/A Customer relationships Â 15 to 20 years Â Straight-line Intellectual property Â 15 years Â Straight-line Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Long-Lived Assets Long-Lived Assets Â The Company reviews the carrying value of long-lived assets such property and equipment, right-of-use (â€œROUâ€) assets, and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Circumstances which could trigger a review include, but are not limited to; significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life. Â The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of long-lived assets. Â Goodwill and Indefinite-Lived Intangible Assets Goodwill and Indefinite-Lived Intangible Assets Â We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired. Â Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on managementâ€™s judgment. Â If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets exceed their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets. Â During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of indefinite-lived intangible assets. Â Investment Policy-Cost Method Investment Policy-Cost Method Â Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Companyâ€™s share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held $348,250 of investments without readily determinable fair values at September 30, 2024 and December 31, 2023, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the nine months ended September 30, 2024 and the year ended December 31, 2023. Â Investment in Digital Assets Investment in Digital Assets Â We account for all digital assets as indefinite-lived intangible assets in accordance with ASC 350, Intangiblesâ€”Goodwill and Other. The Company presents digital assets separately from other intangible assets, recorded as digital assets on the condensed consolidated balance sheets. The digital assets are initially recorded at cost and are subsequently remeasured at cost, net of any impairment losses incurred since acquisition. Â We performed an analysis this quarter to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. When the then current carrying value of a digital asset exceeds the fair value determined each quarter, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the prices determined. Gains are not recorded until realized upon sale(s), at which point they are presented net of any impairment losses for the same digital assets. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Leases Leases Â We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks. Â Revenue Recognition Revenue Recognition Â We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Â Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each partyâ€™s rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customerâ€™s intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred. Â Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period. Â Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds. Â We do not have significant returns. We do not typically offer extended warranty or service plans. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we

evaluate if collectability is reasonably assured. None of our contracts as of September 30, 2024 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues. Â Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customerâ€™s control at contractually stated pricing. Â Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue. Â Cost of Sales Cost of Sales Â We include product costs such material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales. Â Shipping and Handling Shipping and Handling Â Shipping and handling charges are generally incurred at the customerâ€™s expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales. Â Research and Development Research and Development Â Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies. Â Research and development costs for the nine months ended September 30, 2024 and 2023, were $1,309,299 and $1,643,458, respectively. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Income Taxes Income Taxes Â The Companyâ€™s deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At September 30, 2024 and December 31, 2023, the Company had no material unrecognized tax benefits. Â Earnings Per Share Earnings Per Share Â Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted average number of shares of common stock outstanding during each period. Diluted earnings (loss) per share is calculated by adjusting the weighted average number of shares of common stock outstanding for the dilutive effect, if any, of common stock equivalents. Common stock equivalents whose effect would be anti-dilutive are not included in diluted earnings (loss) per share. The Company uses the treasury stock method to determine the dilutive effect, which assumes that all common stock equivalents have been exercised at the beginning of the period and that the funds obtained from those exercises were used to repurchase shares of common stock of the Company at the average closing market price during the period. As of September 30, 2024 and 2023, there were 4,586,800 and 4,247,942, respectively, potential common share equivalents from stock options excluded from the diluted loss per share calculations as their effect is anti-dilutive. Â Fair Value Measurements Fair Value Measurements Â The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Â Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date. Â Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly. Â Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest. Â Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets. Â Stock-Based Compensation Stock-Based Compensation Â The Company records stock-based compensation in accordance with ASC 718, Compensation-Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period. Â Concentration of Credit Risk Concentration of Credit Risk Â Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable. Â The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses. Â Recent Accounting Pronouncements Recent Accounting Pronouncements Â In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring; (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segmentâ€™s profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company has adopted this pronouncement and does not expect the adoption to have a material impact on our results of operation, financial position or cash flow. Â In August 2023, the FASB issued ASU 2023-05, Business Combinationsâ€”Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. X - DefinitionInvestment in digital assets [Policy] + ReferencesNo definition available. + Details Name: AMPG_InvestmentInDigitalAssetsPolicy Namespace Prefix: AMPG_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionShipping And Handling [Policy Text Block] + ReferencesNo definition available. + Details Name: AMPG_ShippingAndHandlingPolicyTextBlock Namespace Prefix: AMPG_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_AccountingPoliciesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for basis of accounting, or basis of presentation, used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS). + ReferencesNo definition available. + Details Name: us-gaap_BasisOfAccountingPolicyPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for cash and cash equivalents, including the policy for determining which items are treated as cash equivalents. Other information that may be disclosed includes (1) the nature of any restrictions on the entity's use of its cash and cash equivalents, (2) whether the entity's cash and cash equivalents are insured or expose the entity to credit risk, (3) the classification of any negative balance accounts (overdrafts), and (4) the carrying basis of cash equivalents (for example, at cost) and whether the carrying amount of cash equivalents approximates fair value. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482913/230-10-50-1 + Details Name: us-gaap_CashAndCashEquivalentsPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for salaries, bonuses, incentive awards, postretirement and postemployment benefits granted to employees, including equity-based arrangements; discloses methodologies for measurement, and the bases for recognizing related assets and liabilities and recognizing and reporting compensation expense. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_CompensationRelatedCostsPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for credit risk. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 942 -SubTopic 825 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478898/942-825-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -SubTopic 10 -Topic 275 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-1 + Details Name: us-gaap_ConcentrationRiskCreditRisk Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy regarding (1) the principles it follows in consolidating or combining the separate financial statements, including the principles followed in determining the inclusion or exclusion of subsidiaries or other entities in the consolidated or combined financial statements and (2) its treatment of interests (for example, common stock, a partnership interest or other means of exerting influence) in other entities, for example consolidation or use of the equity or cost methods of accounting. The accounting policy may also address the accounting treatment for intercompany accounts and transactions, noncontrolling interest, and the income statement treatment in consolidation for issuances of stock by a subsidiary. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 810 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-1 + Details Name: us-gaap_ConsolidationPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for cost of product sold and service rendered. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Topic 705 -Publisher FASB -URI https://asc.fasb.org/705/tableOfContent + Details Name: us-gaap_CostOfSalesPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for computing basic and diluted earnings or loss per share for each class of common stock and participating security. Addresses all significant policy factors, including any antidilutive items that have been excluded from the computation and takes into account stock dividends, splits and reverse splits that occur after the balance sheet date of the latest reporting period but before the issuance of the financial statements. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 260 -SubTopic 10 -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 260 -SubTopic 10 -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-2 + Details Name: us-gaap_EarningsPerSharePolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for fair value measurements of financial and non-financial assets, liabilities and instruments classified in shareholders' equity. Disclosures include, but are not limited to, how an entity that manages a group of financial assets and liabilities on the basis of its net exposure measures the fair value of those assets and liabilities. + ReferencesNo definition available. + Details Name: us-gaap_FairValueMeasurementPolicyPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for indefinite-lived intangible assets (that is, those intangible assets not subject to amortization). This accounting policy also may address how the entity assesses whether events and circumstances continue to support an indefinite useful life and how the entity assesses and measures impairment of such assets. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-30/tableOfContent + Details Name: us-gaap_GoodwillAndIntangibleAssetsIntangibleAssetsIndefiniteLivedPolicy Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for recognizing and measuring the impairment of long-lived assets. An entity also may disclose its accounting policy for long-lived assets to be sold. This policy excludes goodwill and intangible assets. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.CC) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480091/360-10-S99-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 05 -Paragraph 4 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482338/360-10-05-4 + Details Name: us-gaap_ImpairmentOrDisposalOfLongLivedAssetsPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for income taxes, which may include its accounting policies for recognizing and measuring deferred tax assets and liabilities and related valuation allowances, recognizing investment tax credits, operating loss carryforwards, tax credit carryforwards, and other carryforwards, methodologies for determining its effective income tax rate and the characterization of interest and penalties in the financial statements. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 20 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-20Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 19 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-19Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-25Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(h)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 17 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-17Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482685/740-10-50-9Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482525/740-10-45-28Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-1 + Details Name: us-gaap_IncomeTaxPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for finite-lived intangible assets. This accounting

policy also might address: (1) the amortization method used; (2) the useful lives of such assets; and (3) how the entity assesses and measures impairment of such assets. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-30/tableOfContentReference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 926 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483154/926-20-50-5Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 920 -SubTopic 350 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478609/920-350-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 920 -SubTopic 350 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478609/920-350-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 920 -SubTopic 350 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478609/920-350-50-4 + Details Name: us-gaap_IntangibleAssetsFiniteLivedPolicy Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of inventory accounting policy for inventory classes, including, but not limited to, basis for determining inventory amounts, methods by which amounts are added and removed from inventory classes, loss recognition on impairment of inventories, and situations in which inventories are stated above cost. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483080/330-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483489/210-10-50-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 912 -SubTopic 330 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478411/912-330-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 330 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/330/tableOfContentReference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483080/330-10-50-4Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 45 -Paragraph 6 -Subparagraph (a) -SubTopic 10 -Topic 270 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482989/270-10-45-6 + Details Name: us-gaap_InventoryPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for investment in financial asset. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-04(3)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477250/944-220-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(f)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(f)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(f)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 12 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-12Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 320 -Name Accounting Standards Codification -Section S99 -Paragraph 19 -Subparagraph (2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477271/946-320-S99-19 + Details Name: us-gaap_InvestmentPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for leasing arrangement entered into by lessee. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-1 + Details Name: us-gaap_LesseeLeasesPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy pertaining to new accounting pronouncements that may impact the entity's financial reporting. Includes, but is not limited to, quantification of the expected or actual impact. + ReferencesNo definition available. + Details Name: us-gaap_NewAccountingPronouncementsPolicyPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for long-lived, physical asset used in normal conduct of business and not intended for resale. Includes, but is not limited to, work of art, historical treasure, and similar asset classified as collections. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 6 -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-6Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -SubTopic 360 -Topic 958 -Publisher FASB -URI https://asc.fasb.org/1943274/2147477798/958-360-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for receivable. Includes, but is not limited to, accounts receivable and financing receivable. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481569/310-20-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-2 + Details Name: us-gaap_ReceivablesPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for costs it has incurred (1) in a planned search or critical investigation aimed at discovery of new knowledge with the hope that such knowledge will be useful in developing a new product or service, a new process or technique, or in bringing about a significant improvement to an existing product or process; or (2) to translate research findings or other knowledge into a plan or design for a new product or process or for a significant improvement to an existing product or process. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 730 -SubTopic 10 -Name Accounting Standards Codification -Section 05 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483044/730-10-05-1 + Details Name: us-gaap_ResearchAndDevelopmentExpensePolicy Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for revenue. Includes revenue from contract with customer and from other sources. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-07(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4Reference 3: http://www.xbrl.org/2003/role/exampleRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (e) -SubTopic 10 -Topic 235 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4 + Details Name: us-gaap_RevenueRecognitionPolicyTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - DefinitionDisclosure of accounting policy for the use of estimates in the preparation of financial statements in conformity with generally accepted accounting principles. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-9Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-4Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -SubTopic 10 -Topic 275 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -SubTopic 10 -Topic 275 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 11 -SubTopic 10 -Topic 275 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-11Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Name Accounting Standards Codification -Section 50 -Paragraph 12 -SubTopic 10 -Topic 275 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-12Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 275 -SubTopic 10 -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482861/275-10-50-8 + Details Name: us-gaap_UseOfEstimates Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 32 R21.htm IDEA: XBRL DOCUMENT v3.24.3 Summary of Significant Accounting Policies (Tables) 9 Months Ended Sep. 30, 2024 Accounting Policies [Abstract] Â Schedule of Property and Equipment Depreciated Property and equipment are depreciated as follows: Â Schedule of Property and Equipment Depreciated Description Â Useful Life Â Method Office equipment Â 3 to 7 years Â Straight-line Machinery/shop equipment Â 7 to 15 years Â Straight-line Computer equipment/software Â 1 to 7 years Â Straight-line Vehicles Â 5 years Â Straight-line Leasehold improvements Â 7 years Â Straight-line Schedule of Amortization of Intangible Assets Intangible assets are amortized as follows: Â Schedule of Amortization of Intangible Assets Description Â Useful Life Â Method Trade names Â Indefinite Â N/A Customer relationships Â 15 to 20 years Â Straight-line Intellectual property Â 15 years Â Straight-line X - DefinitionProperty Plant and Equipment Deprecated [Table Text Block] + ReferencesNo definition available. + Details Name: AMPG_PropertyPlantAndEquipmentDeprecatedTableTextBlock Namespace Prefix: AMPG_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_AccountingPoliciesAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of amortization expense of assets, excluding financial assets, that lack physical substance, having a limited useful life. + ReferencesNo definition available. + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 33 R22.htm IDEA: XBRL DOCUMENT v3.24.3 Revenues (Tables) 9 Months Ended Sep. 30, 2024 Revenue from Contract with Customer [Abstract] Â Schedule of Disaggregated Revenue The following table presents sales disaggregated based on geographic regions and for the three and nine months ended: Â Schedule of Disaggregated Revenue Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â Â Â Three months endedÂ Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â AmpliTech Inc. and Specialty MicrowaveÂ Â Â Â Â Â Â Â Domestic salesÂ $522,919Â Â $1,120,578Â International salesÂ Â 238,970Â Â Â Â 460,435Â Total salesÂ $761,889Â Â $1,581,013Â Â Â Â Â Â Â Â Â SpectrumÂ Â Â Â Â Â Â Â Domestic salesÂ $1,607,677Â Â $1,201,856Â International salesÂ Â 464,946Â Â Â Â 604,300Â Total salesÂ $2,072,623Â Â $1,806,156Â Â Â Â Â Â Â Â Â Total salesÂ $2,834,512Â Â $3,387,169Â Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â Â Â Nine months endedÂ Â Â Sept. 30, 2024Â Â Sept. 30, 2023Â AmpliTech Inc. and Specialty MicrowaveÂ Â Â Â Â Â Â Â Domestic salesÂ $1,918,295Â Â $3,588,637Â International salesÂ Â 646,725Â Â Â 977,152Â Total salesÂ $2,565,020Â Â $4,565,789Â Â Â Â Â Â Â Â Â SpectrumÂ Â Â Â Â Â Â Â Domestic salesÂ $3,789,111Â Â $4,577,466Â International salesÂ Â 1,301,154Â Â Â Â 2,429,444Â Total salesÂ $5,090,265Â Â $7,006,910Â Â Â Â Â Â Â Â Â Total salesÂ $7,655,285Â Â $11,572,699Â X - DefinitionTabular disclosure of disaggregation of revenue into categories depicting how nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factor. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5 + Details Name: us-gaap_DisaggregationOfRevenueTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_RevenueFromContractWithCustomerAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 34 R23.htm IDEA: XBRL DOCUMENT v3.24.3 Segment Reporting (Tables) 9 Months Ended Sep. 30, 2024 Segment Reporting [Abstract] Â Schedule of Segment Reporting The following table presents summary information by segment for the three months ended September 30, 2024: Â Schedule of Segment Reporting Â Â Manufacturing and EngineeringÂ Â DistributionÂ Â CorporateÂ Â TotalÂ RevenueÂ $761,889Â Â $2,072,623Â Â $-Â Â $2,834,512Â Cost of Goods SoldÂ Â 730,027Â Â Â 756,556Â Â Â -Â Â Â 1,486,583Â Net LossÂ Â (1,401,246)Â Â 579,172Â Â Â (367,609)Â Â (1,189,683) Total AssetsÂ Â 11,883,507Â Â Â 15,580,896Â Â Â 81,946Â Â Â 27,546,349Â Depreciation and AmortizationÂ Â 100,641Â Â Â 29,504Â Â Â -Â Â Â 130,145Â Interest Expense, netÂ Â 9,941Â Â Â -Â Â Â 91,004Â Â Â 100,945Â Â Â AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023 Â The following table presents summary information by segment for the nine months ended September 30, 2024: Â Â Â Manufacturing and EngineeringÂ Â DistributionÂ Â CorporateÂ Â TotalÂ RevenueÂ $2,565,020Â Â $5,090,265Â Â $-Â Â $7,655,285Â Cost of Goods SoldÂ Â 2,129,328Â Â Â 2,238,311Â Â Â -Â Â Â 4,367,639Â Net Income (Loss)Â Â (3,721,055)Â Â 783,306Â Â Â (4,483,369)Â Â (7,421,118) Total AssetsÂ Â 11,883,507Â Â Â 15,580,896Â Â Â 81,946Â Â Â 27,546,349Â Depreciation and AmortizationÂ Â 301,242Â Â Â 87,348Â Â Â -Â Â Â 388,590Â Interest Expense, netÂ Â 17,468Â Â Â -Â Â Â 96,004Â Â Â 113,472Â X - DefinitionTabular disclosure of the profit or loss and total assets for each reportable segment. An entity discloses certain information on each reportable segment if the amounts (a) are included in the measure of segment profit or loss reviewed by the chief operating decision maker or (b) are otherwise regularly provided to the chief operating decision maker, even if not included in that measure of segment profit or loss. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 25 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-25Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 280 -SubTopic 10 -Section 50 -Paragraph 30 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30 + Details Name: us-gaap_ScheduleOfSegmentReportingInformationBySegmentTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration X - ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 35 R24.htm IDEA: XBRL DOCUMENT v3.24.3 Inventories (Tables) 9 Months Ended Sep. 30, 2024 Inventory Disclosure [Abstract] Â Schedule of Inventory The inventory consists of the following at September 30, 2024 and December 31, 2023: Â Schedule of Inventory Â Â September 30, 2024Â Â December 31, 2023Â Â Â Â Â Â Raw MaterialsÂ $1,320,434Â Â $959,645Â Work-in ProgressÂ Â 100,522Â Â Â 51,140Â Finished GoodsÂ Â 7,291,203Â Â Â 6,672,793Â SubtotalÂ $8,712,159Â Â $7,683,578Â Less: Reserve for ObsolescenceÂ Â (1,164,000)Â Â (1,146,000) Â Â Â Â Â Â Â Â TotalÂ $7,548,159Â Â $6,537,578Â X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace

Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTabular disclosure of the carrying amount as of the balance sheet date of merchandise, goods, commodities, or supplies held for future sale or to be used in manufacturing, servicing or production process. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 210 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483489/210-10-50-1 + Details Name: us-gaap_ScheduleOfInventoryCurrentTableTextBlock Namespace Prefix: us-gaap_ Data Type: dtr-types:textBlockItemType Balance Type: na Period Type: duration XML 36 R25.htm IDEA: XBRL DOCUMENT v3.24.3 Property and Equipment (Tables) 9 Months Ended Sep. 30, 2024 Property, Plant and Equipment [Abstract] Â Schedule of Property and Equipment Property and Equipment consisted of the following at September 30, 2024 and December 31, 2023: Â Schedule of Property and Equipment Â Â September 30, 2024Â Â Â December 31, 2023Â Â Â

Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.P.4.b.2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479823/420-10-S99-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 420 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482017/420-10-50-1 + Details Name: us-gaap_RestructuringCostAndReserveLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe number of shares issued or sold by the subsidiary or equity method investee per stock transaction. + ReferencesNo definition available. + Details Name: us-gaap_SaleOfStockNumberOfSharesIssuedInTransaction Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionPer share amount received by subsidiary or equity investee for each share of common stock issued or sold in the stock transaction. + ReferencesNo definition available. + Details Name: us-gaap_SaleOfStockPricePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionDescription of the reverse stock split arrangement. Also provide the retroactive effect given by the reverse split that occurs after the balance sheet date but before the release of financial statements. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 4 -Subparagraph (SAB Topic 4.C) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-4 + Details Name: us-gaap_StockholdersEquityReverseStockSplit Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_SubsidiarySaleOfStockAxis=us-gaap_IPOMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_BusinessAcquisitionAxis=AMPG_AmplitechIncMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 42 R31.htm IDEA: XBRL DOCUMENT v3.24.3 Loss on Investment of Digital Assets (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Loss On Investment Of Digital Assets Â Â Â Â Transactions in digital currency Â Â $ 3,250,000 Â Loss from the investment in digital assets 3,248,911 Remaining balance on investment of digital assets $ 0 Â $ 0 Â X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLossOnInvestmentOfDigitalAssetsAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionLoss on investment in digital assets. + ReferencesNo definition available. + Details Name: AMPG_LossOnInvestmentInDigitalAssets Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of realized and unrealized gain (loss) on investment. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(9)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(7)(c)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/recommendedDisclosureRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28 + Details Name: us-gaap_GainLossOnInvestments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of investments classified as other. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(12)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(3)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_OtherInvestments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant XML 43 R32.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Property and Equipment Depreciated (Details) 9 Months Ended Sep. 30, 2024 Office Equipment [Member] Â Property, Plant and Equipment [Line Items] Â Depreciation Method Straight-line Office Equipment [Member] | Minimum [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 3 years Office Equipment [Member] | Maximum [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 7 years Machinery and Equipment [Member] Â Property, Plant and Equipment [Line Items] Â Depreciation Method Straight-line Machinery and Equipment [Member] | Minimum [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 7 years Machinery and Equipment [Member] | Maximum [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 15 years Computer Equipment Software [Member] Â Property, Plant and Equipment [Line Items] Â Depreciation Method Straight-line Computer Equipment Software [Member] | Minimum [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 1 year Computer Equipment Software [Member] | Maximum [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 7 years Vehicles [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 5 years Depreciation Method Straight-line Leasehold Improvements [Member] Â Property, Plant and Equipment [Line Items] Â Estimated useful life 7 years Depreciation Method Straight-line X - DefinitionProperty plant and equipments depreciation methods. + ReferencesNo definition available. + Details Name: AMPG_PropertyPlantAndEquipmentsDepreciationMethods Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7A + Details Name: us-gaap_PropertyPlantAndEquipmentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionUseful life of long lived, physical assets used in the normal conduct of business and not intended for resale, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. Examples include, but not limited to, land, buildings, machinery and equipment, office equipment, furniture and fixtures, and computer equipment. + ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentUsefulLife Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_OfficeEquipmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_MachineryAndEquipmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=AMPG_ComputerEquipmentSoftwareMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_VehiclesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_LeaseholdImprovementsMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 44 R33.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Amortization of Intangible Assets (Details) 9 Months Ended Sep. 30, 2024 Customer Relationships [Member] Â Property, Plant and Equipment [Line Items] Â Depreciation Method Straight-line Customer Relationships [Member] | Minimum [Member] Â Property, Plant and Equipment [Line Items] Â Useful Life 15 years Customer Relationships [Member] | Maximum [Member] Â Property, Plant and Equipment [Line Items] Â Useful Life 20 years Intellectual Property [Member] Â Property, Plant and Equipment [Line Items] Â Useful Life 15 years Depreciation Method Straight-line X - DefinitionUseful life of finite-lived intangible assets, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. + ReferencesNo definition available. + Details Name: us-gaap_FiniteLivedIntangibleAssetUsefulLife Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant X - DefinitionThe amortization method of a major finite-lived intangible asset class. A major class is composed of intangible assets that can be grouped together because they are similar either by their nature or by their use in the operations of a company. The straight-line method is the preferred amortization method, unless another method better reflects the pattern in which the asset is consumed. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483426/235-10-50-4Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Publisher FASB -URI https://asc.fasb.org/350-30/tableOfContent + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationMethod Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7A + Details Name: us-gaap_PropertyPlantAndEquipmentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_FiniteLivedIntangibleAssetsByMajorClassAxis=us-gaap_CustomerRelationshipsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MinimumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_FiniteLivedIntangibleAssetsByMajorClassAxis=us-gaap_IntellectualPropertyMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 45 R34.htm IDEA: XBRL DOCUMENT v3.24.3 Summary of Significant Accounting Policies (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended 12 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Dec. 31, 2023 Property, Plant and Equipment [Line Items] Â Â Â Â Â FDIC maximum amount $ 466,399 Â $ 466,399 Â $ 3,170,500 Allowance for doubtful accounts receivable 0 Â 0 Â 0 Inventory obsolescence reserve 1,164,000 Â 1,164,000 Â 1,146,000 Impairments of long lived assets Â Â 0 Â 0 Goodwill impairment Â Â 0 Â 0 Cost method investment 348,250 Â 348,250 Â $ 348,250 Research and development 572,422 $ 425,573 $ 1,309,299 $ 1,643,458 Â Potentially dilutive shares Â Â 4,586,800 4,247,942 Â Maximum [Member] Â Â Â Â Â Property, Plant and Equipment [Line Items] Â Â Â Â Â FDIC maximum amount $ 250,000 Â $ 250,000 Â Â X - DefinitionAmount of allowance for credit loss on accounts receivable. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479344/326-20-45-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 310 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481962/310-10-50-4Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479319/326-20-50-13Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 326 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479319/326-20-50-13 + Details Name: us-gaap_AllowanceForDoubtfulAccountsReceivable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionSecurities (including those issuable pursuant to contingent stock agreements) that could potentially dilute basic earnings per share (EPS) or earnings per unit (EPU) in the future that were not included in the computation of diluted EPS or EPU because to do so would increase EPS or EPU amounts or decrease loss per share or unit amounts for the period presented. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 260 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482662/260-10-50-1 + Details Name: us-gaap_AntidilutiveSecuritiesExcludedFromComputationOfEarningsPerShareAmount Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe amount of cash deposited in financial institutions as of the balance sheet date that is insured by the Federal Deposit Insurance Corporation. + ReferencesNo definition available. + Details Name: us-gaap_CashFDICInsuredAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of investment in equity security without readily determinable fair value. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 321 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479536/321-10-50-3 + Details Name: us-gaap_EquitySecuritiesWithoutReadilyDeterminableFairValueAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of impairment loss from asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-2Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-2 + Details Name: us-gaap_GoodwillImpairmentLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe aggregate amount of write-downs for impairments recognized during the period for long-lived assets held for abandonment, exchange or sale. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482130/360-10-45-15 + Details Name: us-gaap_ImpairmentOfLongLivedAssetsToBeDisposedOf Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of valuation reserve for inventory. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 330 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SAB Topic 5.BB) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480581/330-10-S99-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryValuationReserves Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7A + Details Name: us-gaap_PropertyPlantAndEquipmentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of expense for research and development. Includes, but is not limited to, cost for computer software product to be sold, leased, or otherwise marketed and writeoff of research and development assets acquired in transaction other than business combination or joint venture formation or both. Excludes write-down of

intangible asset acquired in business combination or from joint venture formation or both, used in research and development activity. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 730 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482916/730-10-50-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 912 -SubTopic 730 -Name Accounting Standards Codification -Section 25 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479532/912-730-25-1 + Details Name: us-gaap_ResearchAndDevelopmentExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - Details Name: srt_RangeAxis=srt_MaximumMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 46 R35.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Disaggregated Revenue (Details) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Disaggregation of Revenue [Line Items] Â Â Â Â Total sales $ 2,834,512 $ 3,387,169 $ 7,655,285 $ 11,572,699 Amplitech Inc and Specialty Microwave [Member] Â Â Â Â Disaggregation of Revenue [Line Items] Â Â Â Â Total sales 761,889 1,581,013 2,565,020 4,565,789 Amplitech Inc and Specialty Microwave [Member] | Domestic Sales [Member] Â Â Â Â Disaggregation of Revenue [Line Items] Â Â Â Â Total sales 522,919 1,120,578 1,918,295 3,588,637 Amplitech Inc and Specialty Microwave [Member] | International Sales [Member] Â Â Â Â Disaggregation of Revenue [Line Items] Â Â Â Â Total sales 238,970 460,435 646,725 977,152 Spectrum [Member] Â Â Â Â Disaggregation of Revenue [Line Items] Â Â Â Â Total sales 2,072,623 1,806,156 5,090,265 7,006,910 Spectrum [Member] | Domestic Sales [Member] Â Â Â Â Disaggregation of Revenue [Line Items] Â Â Â Â Total sales 1,607,677 1,201,856 3,789,111 4,577,466 Spectrum [Member] | International Sales [Member] Â Â Â Â Disaggregation of Revenue [Line Items] Â Â Â Â Total sales $ 464,946 $ 604,300 $ 1,301,154 $ 2,429,444 X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91Reference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91Reference 6: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (e) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91Reference 7: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91Reference 8: http://www.xbrl.org/2003/role/exampleRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 91 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479777/606-10-55-91 + Details Name: us-gaap_DisaggregationOfRevenueLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount, excluding tax collected from customer, of revenue from satisfaction of performance obligation by transferring promised good or service to customer. Tax collected from customer is tax assessed by governmental authority that is both imposed on and concurrent with specific revenue-producing transaction, including, but not limited to, sales, use, value added and excise. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 4: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-5Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 606 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479806/606-10-50-4 + Details Name: us-gaap_RevenueFromContractWithCustomerExcludingAssessedTax Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - Details Name: dei_LegalEntityAxis=AMPG_AmplitechIncandSpecialtyMicrowaveMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_StatementGeographicalAxis=AMPG_DomesticSalesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_StatementGeographicalAxis=AMPG_InternationalSalesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: dei_LegalEntityAxis=AMPG_SpectrumMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 47 R36.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Segment Reporting (Details) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Dec. 31, 2023 Segment Reporting Information [Line Items] Â Â Â Â Â Revenue $ 2,834,512 $ 3,387,169 $ 7,655,285 $ 11,572,699 Â Cost of Goods Sold 1,486,583 1,904,388 4,367,639 6,305,928 Â Net Income (Loss) (1,189,683) (887,709) (7,421,118) (1,942,436) Â Total Assets 27,546,349 Â 27,546,349 Â $ 31,407,629 Depreciation and Amortization 130,145 Â 388,590 359,416 Â Interest Income, net (100,945) $ (750) (113,472) $ 20,335 Â Manufacturing And Engineering [Member] Â Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Â Revenue 761,889 Â 2,655,020 Â Â Cost of Goods Sold 730,027 Â 2,129,328 Â Â Net Income (Loss) (1,401,246) Â (3,721,055) Â Â Total Assets 11,883,507 Â 11,883,507 Â Â Depreciation and Amortization 100,641 Â 301,242 Â Â Interest Income, net 9,941 Â 17,468 Â Â Distribution [Member] Â Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Â Revenue 2,072,623 Â 5,090,265 Â Â Cost of Goods Sold 756,556 Â 2,238,311 Â Â Net Income (Loss) 579,172 Â 783,306 Â Â Total Assets 15,580,896 Â 15,580,896 Â Â Depreciation and Amortization 29,504 Â 87,348 Â Â Interest Income, net Â Â Â Corporate [Member] Â Â Â Â Â Segment Reporting Information [Line Items] Â Â Â Â Â Revenue Â Â Â Cost of Goods Sold Â Â Â Net Income (Loss) (367,609) Â (4,483,369) Â Â Total Assets 81,946 Â 81,946 Â Â Depreciation and Amortization Â Â Â Interest Income, net $ 91,004 Â $ 96,004 Â Â X - DefinitionAmount of asset recognized for present right to economic benefit. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (bb) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481203/810-10-50-3Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 810 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481231/810-10-45-25Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 12: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 13: http://www.xbrl.org/2003/role/exampleRef -Topic 946 -SubTopic 830 -Name Accounting Standards Codification -Section 55 -Paragraph 12 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479168/946-830-55-12Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(12)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 18: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph 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http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(11)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Assets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionThe aggregate cost of goods produced and sold and services rendered during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: 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-Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1B + Details Name: us-gaap_CostOfRevenue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe current period expense charged against earnings on long-lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 360 -SubTopic 10 -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_DepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of interest income (expense) classified as operating. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(10)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_InterestIncomeExpenseNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe portion of profit or loss for the period, net of income taxes, which is attributable to the parent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 805 -SubTopic 60 -Name Accounting Standards Codification -Section 65 -Paragraph 1 -Subparagraph (g) -Publisher FASB -URI https://asc.fasb.org/1943274/2147476176/805-60-65-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 740 -SubTopic 323 -Name Accounting Standards Codification -Section 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https://asc.fasb.org/1943274/2147480175/815-40-65-1Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-8Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 11 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-11Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 250 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483443/250-10-50-4Reference 17: 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-Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482689/260-10-45-60BReference 33: http://www.xbrl.org/2003/role/disclosureRef -Topic 205 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483499/205-20-50-7Reference 34: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 35: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1AReference 36: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482790/220-10-45-1BReference 37: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-04(22)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478524/942-220-S99-1 + Details Name: us-gaap_NetIncomeLoss Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionAmount of revenue recognized from goods sold, services rendered, insurance premiums, or other activities that constitute an earning process. Includes, but is not limited to, investment and interest income before deduction of interest expense when recognized as a component of revenue, and sales and trading gain (loss). + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 41 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-41Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 5: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://fasb.org/us-gaap/role/ref/otherTransitionRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.4-08(g)(1)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 323 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481687/323-10-50-3Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 825 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 28 -Subparagraph (f) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482907/825-10-50-28Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 11: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(ii)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1A -Subparagraph (SX 210.13-01(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1AReference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(i)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(A)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iii)(B)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 18: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(4)(iv)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 19: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1B -Subparagraph (SX 210.13-02(a)(5)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480097/470-10-S99-1BReference 20: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 30 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-30Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 42 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-42Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-40Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 235 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-05(b)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477314/942-235-S99-1Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_Revenues Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_SegmentReportingInformationLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_StatementBusinessSegmentsAxis=AMPG_ManufacturingAndEngineeringMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=AMPG_DistributionMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementBusinessSegmentsAxis=AMPG_CorporatesMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 48 R37.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Inventory (Details) - USD ($) Sep. 30, 2024 Dec. 31, 2023 Inventory Disclosure [Abstract] Â Â Raw Materials $ 1,320,434 $ 959,645 Work-in Progress 100,522 51,140 Finished Goods 7,291,203 6,672,793 Subtotal 8,712,159 7,683,578 Less: Reserve for Obsolescence (1,164,000) (1,146,000) Total $ 7,548,159 $ 6,537,578 X - DefinitionAmount of inventory reserves for last-in first-out (LIFO) and other inventory valuation methods. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 330 -SubTopic 10 -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483080/330-10-50-1 + Details Name: us-gaap_InventoryAdjustments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_InventoryDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na

Period Type: duration X - DefinitionAmount before valuation and LIFO reserves of completed merchandise or goods expected to be sold within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryFinishedGoods Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionGross amount, as of the balance sheet date, of merchandise, goods, commodities, or supplies held for future sale or to be used in manufacturing, servicing or production process. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryGross Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after valuation and LIFO reserves of inventory expected to be sold, or consumed within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483467/210-10-45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount before valuation and LIFO reserves of raw materials expected to be sold, or consumed within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)(4)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryRawMaterials Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount before valuation and LIFO reserves of merchandise or goods in the production process expected to be completed within one year or operating cycle, if longer. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(6)(a)(3)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_InventoryWorkInProcess Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant XML 49 R38.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Property and Equipment (Details) - USD ($) Sep. 30, 2024 Dec. 31, 2023 Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross $ 3,951,638 $ 3,986,340 Less: Accumulated Depreciation (1,601,842) (1,386,892) Property plant and equipment, net 2,349,796 2,599,448 Lab Equipment [Member] Â Â Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross 3,412,958 3,400,207 Manufacturing Equipment [Member] Â Â Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross 129,745 129,745 Automobiles [Member] Â Â Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross 7,335 7,335 Computer Equipment [Member] Â Â Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross 146,785 194,238 Leasehold Improvements [Member] Â Â Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross 84,172 84,172 Furniture and Fixtures [Member] Â Â Property, Plant and Equipment [Line Items] Â Â Property plant and equipment, gross $ 170,643 $ 170,643 X - DefinitionAmount of accumulated depreciation, depletion and amortization for physical assets used in the normal conduct of business to produce goods and services. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(14)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 360 -SubTopic 10 -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_AccumulatedDepreciationDepletionAndAmortizationPropertyPlantAndEquipment Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount before accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(13)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentGross Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7A + Details Name: us-gaap_PropertyPlantAndEquipmentLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount after accumulated depreciation, depletion and amortization of physical assets used in the normal conduct of business to produce goods and services and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, and furniture and fixtures. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 360 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 7A -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-7AReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 360 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478451/942-360-50-1 + Details Name: us-gaap_PropertyPlantAndEquipmentNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=AMPG_LabEquipmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=AMPG_ManufacturingEquipmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_AutomobilesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_ComputerEquipmentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_LeaseholdImprovementsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PropertyPlantAndEquipmentByTypeAxis=us-gaap_FurnitureAndFixturesMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 50 R39.htm IDEA: XBRL DOCUMENT v3.24.3 Property and Equipment (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Property, Plant and Equipment [Abstract] Â Â Â Â Â Depreciation expense Â $ 92,567 $ 91,715 $ 276,082 $ 247,019 Cost of goods sold Â 71,144 68,819 213,391 185,239 Amount paid to purchase Property and equipment under finance lease $ 234,036 234,036 Â 234,036 Â Financing leases outstanding balance 37,700 $ 37,700 $ 49,336 37,700 49,336 Disposal of property and equipment $ 61,133 Â Â $ 61,133 X - DefinitionThe aggregate costs related to goods produced and sold and services rendered by an entity during the reporting period. This excludes costs incurred during the reporting period related to financial services rendered and other revenue generating activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)(d)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 924 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 11.L) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479941/924-10-S99-1 + Details Name: us-gaap_CostOfGoodsAndServicesSold Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe amount of expense recognized in the current period that reflects the allocation of the cost of tangible assets over the assets' useful lives. Includes production and non-production related depreciation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 360 -SubTopic 10 -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1 + Details Name: us-gaap_Depreciation Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount, before accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetBeforeAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of divestiture of long-lived, physical assets used in the normal conduct of business and not intended for resale. Examples include, but are not limited to, land, buildings, machinery and equipment, office equipment, furniture and fixtures, and computer equipment. + ReferencesNo definition available. + Details Name: us-gaap_PropertyPlantAndEquipmentDisposals Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration XML 51 R40.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Intangible Assets (Details) - USD ($) 9 Months Ended Sep. 30, 2024 Dec. 31, 2023 Finite-Lived Intangible Assets [Line Items] Â Â Accumulated Amortization $ 507,154 Â Net 2,287,108 Â Gross Carrying Amount 3,378,779 Â Net 2,871,625 $ 2,984,133 Trade Names [Member] Â Â Finite-Lived Intangible Assets [Line Items] Â Â Gross Carrying Amount 584,517 Â Accumulated Amortization Â Net 584,517 Â Customer Relationships [Member] Â Â Finite-Lived Intangible Assets [Line Items] Â Â Gross Carrying Amount 2,591,491 Â Accumulated Amortization 438,691 Â Net $ 2,152,800 Â Weighted Average Life 16 years 21 days Â Intellectual Property [Member] Â Â Finite-Lived Intangible Assets [Line Items] Â Â Gross Carrying Amount $ 202,771 Â Accumulated Amortization 68,463 Â Net $ 134,308 Â Weighted Average Life 9 years 11 months 15 days Â X - DefinitionWeighted average amortization period of finite-lived intangible assets acquired either individually or as part of a group of assets, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_AcquiredFiniteLivedIntangibleAssetsWeightedAverageUsefulLife Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionAccumulated amount of amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 10 -Name Accounting Standards Codification -Section S45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480265/350-10-S45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_FiniteLivedIntangibleAssetsAccumulatedAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount before amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 10 -Name Accounting Standards Codification -Section S45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480265/350-10-S45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 928 -SubTopic 340 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478859/928-340-50-1 + Details Name: us-gaap_FiniteLivedIntangibleAssetsGross Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482686/350-30-45-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -

Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 926 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483154/926-20-50-5 + Details Name: us-gaap_FiniteLivedIntangibleAssetsLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount after amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 926 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483154/926-20-50-5 + Details Name: us-gaap_FiniteLivedIntangibleAssetsNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of assets, excluding financial assets and goodwill, lacking physical substance and having a projected indefinite period of benefit. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 10 -Name Accounting Standards Codification -Section S45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480265/350-10-S45-1Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2 + Details Name: us-gaap_IndefiniteLivedIntangibleAssetsExcludingGoodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount before accumulated amortization of intangible assets, excluding goodwill. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_IntangibleAssetsGrossExcludingGoodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionSum of the carrying amounts of all intangible assets, excluding goodwill, as of the balance sheet date, net of accumulated amortization and impairment charges. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482686/350-30-45-1 + Details Name: us-gaap_IntangibleAssetsNetExcludingGoodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_FiniteLivedIntangibleAssetsByMajorClassAxis=us-gaap_TradeNamesMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_FiniteLivedIntangibleAssetsByMajorClassAxis=us-gaap_CustomerRelationshipsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_FiniteLivedIntangibleAssetsByMajorClassAxis=us-gaap_IntellectualPropertyMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 52 R41.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Amortization of Assets (Details) Sep. 30, 2024 USD ($) Goodwill and Intangible Assets Disclosure [Abstract] Â 2024 remaining $ 37,465 2025 149,974 2026 149,974 2027 149,974 2028 149,974 Thereafter 1,649,747 Net $ 2,287,108 X - DefinitionFinite lived intangible assets amortization expense after year four. + ReferencesNo definition available. + Details Name: AMPG_FiniteLivedIntangibleAssetsAmortizationExpenseAfterYearFour Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseNextTwelveMonths Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in remainder of current fiscal year. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseRemainderOfFiscalYear Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in fourth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearFour Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in third fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearThree Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 985 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481283/985-20-50-2 + Details Name: us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearTwo Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount after amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 926 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147483154/926-20-50-5 + Details Name: us-gaap_FiniteLivedIntangibleAssetsNet Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 53 R42.htm IDEA: XBRL DOCUMENT v3.24.3 Goodwill and Intangible Assets (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended Sep. 30, 2024 Sep. 30, 2023 Sep. 30, 2024 Sep. 30, 2023 Dec. 31, 2023 Goodwill and Intangible Assets Disclosure [Abstract] Â Â Â Â Â Goodwill $ 4,696,883 Â $ 4,696,883 Â $ 4,696,883 Amortization expenses $ 37,578 $ 37,578 $ 112,508 $ 112,397 Â X - DefinitionThe aggregate expense charged against earnings to allocate the cost of intangible assets (nonphysical assets not used in production) in a systematic and rational manner to the periods expected to benefit from such assets. As a noncash expense, this element is added back to net income when calculating cash provided by or used in operations using the indirect method. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 40 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482640/350-30-55-40Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482665/350-30-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482686/350-30-45-2 + Details Name: us-gaap_AmortizationOfIntangibleAssets Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482548/350-20-55-24Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 820 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 100 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482078/820-10-55-100Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 852 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 10 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481372/852-10-55-10Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(15)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482598/350-20-45-1Reference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 8: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 350 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (h) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482573/350-20-50-1Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(10)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1 + Details Name: us-gaap_Goodwill Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - ReferencesNo definition available. + Details Name: us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration XML 54 R43.htm IDEA: XBRL DOCUMENT v3.24.3 Cost Method Investment (Details Narrative) - SN2NLLC [Member] - USD ($) Jun. 10, 2021 Sep. 30, 2024 Jun. 15, 2022 Defined Benefit Plan Disclosure [Line Items] Â Â Â Aggregate purchase price for membership interest $ 350,000 Â Â Equity method investment additional information Each tranche represented a 5% membership interest, and in aggregate a 20% membership interest Â Â Cost method investment membership interest percentage Â Â 19.90% Overpaid for the membership interest Â Â $ 1,750 Investments Â $ 348,250 Â Cost method investment membership interest percentage Â 19.90% Â X - DefinitionAggregate purchase price for membership interest + ReferencesNo definition available. + Details Name: AMPG_AggregatePurchasePriceForMembershipInterest Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAggregate purchase price for membership interest percentage. + ReferencesNo definition available. + Details Name: AMPG_AggregatePurchasePriceForMembershipInterestPercentage Namespace Prefix: AMPG_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionCost method investment membership interest percentage. + ReferencesNo definition available. + Details Name: AMPG_CostMethodInvestmentMembershipInterestPercentage Namespace Prefix: AMPG_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionOverpaid for the membership interest + ReferencesNo definition available. + Details Name: AMPG_OverpaidForTheMembershipInterest Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_DefinedBenefitPlanDisclosureLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThis serves as a place to record data that is not required by accounting literature but is useful for readers of the financial statements as it relates to the details of an equity method investment in common stock. Such information may include the amount of change for a change in ownership (equity) percentage in a given period and the amount and type of the consideration given or received in relation to the change in ownership. + ReferencesNo definition available. + Details Name: us-gaap_EquityMethodInvestmentAdditionalInformation Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionSum of the carrying amounts as of the balance sheet date of all investments. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 944 -SubTopic 80 -Name Accounting Standards Codification -Section 55 -Paragraph 14 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480078/944-80-55-14Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 944 -SubTopic 80 -Name Accounting Standards Codification -Section 55 -Paragraph 9 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480078/944-80-55-9Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(1)(h)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(1)(6)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_Investments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_RelatedPartyTransactionsByRelatedPartyAxis=AMPG_SN2NLLCMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 55 R44.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Lease Assets and Liabilities (Details) - USD ($) Sep. 30, 2024 Dec. 31, 2023 Sep. 30, 2023 Leases Â Â Â ROU operating lease assets $ 4,517,685 $ 3,538,798 Â Current portion of operating lease 447,556 541,324 Â Operating lease, net of current portion 4,255,140 3,171,979 Â Total operating lease liabilities 4,702,696 Â Â Property and equipment, gross 234,036 Â Â Accumulated depreciation (180,643) Â Â Property and equipment, net 53,393 Â Â Current portion of financing lease 17,379 16,799 Â Financing lease, net of current portion 20,321 $ 32,537 Â Total financing lease liabilities $ 37,700 Â $ 49,336 X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLeasesAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiability Namespace Prefix: us-gaap_ Data

Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's right to use underlying asset under operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseRightOfUseAsset Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount of accumulated depreciation and amortization from plant, property, and equipment and right-of-use asset from finance lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 45 -Paragraph 4 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-4Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount, after accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAfterAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, before accumulated depreciation and amortization, of property, plant, and equipment and finance lease right-of-use asset. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 360 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482099/360-10-50-1Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(18)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (a) -SubTopic 20 -Topic 842 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetBeforeAccumulatedDepreciationAndAmortization Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant XML 56 R45.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate (Details) Sep. 30, 2024 Leases Â Weighted average remaining lease term (years) operating leases 8 years 2 months 4 days Weighted average remaining lease term (years) financing leases 2 years 3 months 14 days Weighted average discount rate operating leases 6.42% Weighted average discount rate financing leases 4.68% X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLeasesAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionWeighted average discount rate for finance lease calculated at point in time. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_FinanceLeaseWeightedAverageDiscountRatePercent Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionWeighted average remaining lease term for finance lease, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_FinanceLeaseWeightedAverageRemainingLeaseTerm1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant X - DefinitionWeighted average discount rate for operating lease calculated at point in time. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(4) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_OperatingLeaseWeightedAverageDiscountRatePercent Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionWeighted average remaining lease term for operating lease, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 53 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479589/842-20-55-53Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_OperatingLeaseWeightedAverageRemainingLeaseTerm1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant XML 57 R46.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Future Minimum Operating Lease Payments (Details) - USD ($) Sep. 30, 2024 Dec. 31, 2023 Leases Â Â 2024 remaining $ 188,322 Â 2025 728,280 Â 2026 743,301 Â 2027 757,493 Â 2028 779,311 Â Thereafter 2,762,279 Â Total lease payments 5,958,986 Â Less imputed interest (1,256,290) Â Total operating lease liabilities 4,702,696 Â Less current obligations (447,556) $ (541,324) Long-term lease obligations $ 4,255,140 $ 3,171,979 X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLeasesAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionLessee operating lease liability payments due after year four. + ReferencesNo definition available. + Details Name: AMPG_LesseeOperatingLeaseLiabilityPaymentsDueAfterYearFour Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease to be paid in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease to be paid in fourth fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueYearFour Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease to be paid in third fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueYearThree Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease to be paid in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsDueYearTwo Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for operating lease having initial or remaining lease term in excess of one year to be paid in remainder of current fiscal year. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payments in excess of discounted obligation for lease payments for operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_LesseeOperatingLeaseLiabilityUndiscountedExcessAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from operating lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_OperatingLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 58 R47.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Future Minimum Lease Payments for Finance Lease (Details) - USD ($) Sep. 30, 2024 Dec. 31, 2023 Sep. 30, 2023 Leases Â Â Â 2024 remaining $ 5,687 Â Â 2025 18,195 Â Â 2026 11,982 Â Â 2027 3,994 Â Â Total lease payments 39,858 Â Â Less imputed interest (2,158) Â Â Total lease obligations 37,700 Â $ 49,336 Less current obligations (17,379) $ (16,799) Â Long-term lease obligations $ 20,321 $ 32,537 Â X - ReferencesNo definition available. + Details Name: AMPG_DisclosureLeasesAbstract Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiability Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as current. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiabilityCurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionPresent value of lessee's discounted obligation for lease payments from finance lease, classified as noncurrent. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 1 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-1 + Details Name: us-gaap_FinanceLeaseLiabilityNoncurrent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payments for finance lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDue Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueNextTwelveMonths Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in third fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI

https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueYearThree Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_FinanceLeaseLiabilityPaymentsDueYearTwo Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payment for finance lease to be paid in remainder of current fiscal year. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_FinanceLeaseLiabilityPaymentsRemainderOfFiscalYear Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of lessee's undiscounted obligation for lease payments in excess of discounted obligation for lease payments for finance lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 6 -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-6 + Details Name: us-gaap_FinanceLeaseLiabilityUndiscountedExcessAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 59 R48.htm IDEA: XBRL DOCUMENT v3.24.3 Leases (Details Narrative) 9 Months Ended Sep. 06, 2024 USD ($) Jan. 15, 2024 USD ($) ftÂ² Aug. 09, 2023 USD ($) Oct. 15, 2021 USD ($) ftÂ² Feb. 01, 2020 USD ($) Nov. 27, 2019 USD ($) Sep. 12, 2019 USD ($) Sep. 30, 2024 USD ($) Dec. 31, 2023 USD ($) Collaborative Arrangement and Arrangement Other than Collaborative [Line Items] Â Â Â Â Â Â Â Â Â Operating lease agreement description Â Â Â Â Â Â the Company entered into a new operating lease agreement to rent office space in Ronkonkoma, NY. This five- year agreement commenced on September 12, 2019 with an annual rent of $90,000 and 3% increase in each successive lease year beginning in 2021 Â Â Annual rent Â Â $ 20,880 Â Â Â $ 90,000 Â Â Operating lease payments increase percentage Â 2.50% Â 2.75% Â Â 3.00% Â Â Purchase option description Â Â Â Â Â Â The Company has an option to buy the property during the first two years of the lease for $1,200,000 and then at fair market value for the remainder of the lease term Â Â Gain loss on termination of lease right of use operating Â Â Â Â Â Â Â $ 8,461 Â Payments for rent Â $ 53,675 $ 605 $ 346,242 Â $ 420 Â Â Â New lease for facility | ftÂ² Â Â Â 20,000 Â Â Â Â Â Lessee operating lease term of contract Â 5 years 1 month Â 7 years Â Â Â Â Â Security deposit Â $ 17,999 Â $ 86,560 Â Â Â $ 114,174 $ 91,481 Lessee operating lease description Â Â On August 9, 2023, the Company entered a 39-month agreement for $20,880 to lease an automobile with a monthly payment of $605 Â Â Â Â Â Â Triple lease for facility | ftÂ² Â 1,900 Â Â Â Â Â Â Â Finance lease agreement description Â Â Â Â Â Â Â The Company entered into several 60-month lease agreements to finance certain laboratory and office equipment. Â Spectrum Semiconductor Materials Lease Agreement [Member] Â Â Â Â Â Â Â Â Collaborative Arrangement and Arrangement Other than Collaborative [Line Items] Â Â Â Â Â Â Â Â Â Operating lease payments increase percentage 3.00% Â Â Â 3.00% Â Â Â Â Payments for rent $ 24,234 Â Â Â $ 24,234 Â Â Â Â Lease term Mar. 31, 2030 Â Â Â Jan. 31, 2025 Â Â Â Â X - DefinitionFinance lease agreement description. + ReferencesNo definition available. + Details Name: AMPG_FinanceLeaseAgreementDescription Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionGain loss on termination of lease right of use operating. + ReferencesNo definition available. + Details Name: AMPG_GainLossOnTerminationOfLeaseRightOfUseOperating Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionNew lease for facility + ReferencesNo definition available. + Details Name: AMPG_NewLeaseForFacility Namespace Prefix: AMPG_ Data Type: dtr-types:areaItemType Balance Type: na Period Type: duration X - DefinitionOperating lease agreement description + ReferencesNo definition available. + Details Name: AMPG_OperatingLeaseAgreementDescription Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionOperating lease payments increase percentage. + ReferencesNo definition available. + Details Name: AMPG_OperatingLeasePaymentsIncreasePercentage Namespace Prefix: AMPG_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionPurchase option description. + ReferencesNo definition available. + Details Name: AMPG_PurchaseOptionDescription Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTriple lease for facility. + ReferencesNo definition available. + Details Name: AMPG_TripleLeaseForFacility Namespace Prefix: AMPG_ Data Type: dtr-types:areaItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 808 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479402/808-10-50-1 + Details Name: us-gaap_CollaborativeArrangementsAndNoncollaborativeArrangementTransactionsLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionDate which lease or group of leases is set to expire, in YYYY-MM-DD format. + ReferencesNo definition available. + Details Name: us-gaap_LeaseExpirationDate1 Namespace Prefix: us-gaap_ Data Type: xbrli:dateItemType Balance Type: na Period Type: duration X - DefinitionDescription of lessee's operating lease. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-3 + Details Name: us-gaap_LesseeOperatingLeaseDescription Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionTerm of lessee's operating lease, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 3 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-3 + Details Name: us-gaap_LesseeOperatingLeaseTermOfContract Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: instant X - DefinitionAmount of cash outflow from operating lease, excluding payments to bring another asset to condition and location necessary for its intended use. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 45 -Paragraph 5 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479041/842-20-45-5Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 842 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (g)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478964/842-20-50-4 + Details Name: us-gaap_OperatingLeasePayments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionCash payments to lessor's for use of assets under operating leases. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (g) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_PaymentsForRent Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe amount of an asset, typically cash, provided to a counterparty to provide certain assurance of performance by the entity pursuant to the terms of a written or oral agreement, such as a lease. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_SecurityDeposit Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - Details Name: us-gaap_TypeOfArrangementAxis=AMPG_SpectrumSemiconductorMaterialsLeaseAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 60 R49.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Future Principal and Interest Payments (Details) Sep. 30, 2024 USD ($) Debt Disclosure [Abstract] Â 2024 remaining $ 278,062 2025 1,165,216 2026 44,808 Discount (339,491) Total remaining payments $ 1,148,595 X - ReferencesNo definition available. + Details Name: us-gaap_DebtDisclosureAbstract Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount, after accumulated amortization, of debt discount. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 1A -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-1AReference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482900/835-30-50-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1D + Details Name: us-gaap_DebtInstrumentUnamortizedDiscount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionAmount, after deduction of unamortized premium (discount) and debt issuance cost, of long-term debt. Excludes lease obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 5: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1D -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1DReference 7: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(16)(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Subparagraph (b)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-4 + Details Name: us-gaap_LongTermDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of long-term debt payable, sinking fund requirement, and other securities issued that are redeemable by holder at fixed or determinable price and date, maturing in next fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-04(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 470 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-1 + Details Name: us-gaap_LongTermDebtMaturitiesRepaymentsOfPrincipalInNextTwelveMonths Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of long-term debt payable, sinking fund requirement, and other securities issued that are redeemable by holder at fixed or determinable price and date, maturing in second fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-04(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-3Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1E -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1EReference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -SubTopic 10 -Topic 470 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481544/470-10-50-1 + Details Name: us-gaap_LongTermDebtMaturitiesRepaymentsOfPrincipalInYearTwo Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of long-term debt payable, sinking fund requirement, and other securities issued that are redeemable by holder at fixed or determinable price and date, maturing in remainder of current fiscal year. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 235 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.12-04(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480678/235-10-S99-3 + Details Name: us-gaap_LongTermDebtMaturitiesRepaymentsOfPrincipalRemainderOfFiscalYear Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant XML 61 R50.htm IDEA: XBRL DOCUMENT v3.24.3 Notes Payable (Details Narrative) - USD ($) 1 Months Ended 9 Months Ended Jul. 23, 2024 Jun. 10, 2020 May 14, 2020 Sep. 12, 2019 Sep. 12, 2019 Jan. 31, 2022 Sep. 30, 2024 Sep. 30, 2023 Mar. 14, 2023 Short-Term Debt [Line Items] Â Â Â Â Â Â Â Â Â Consideration paid in promissory note Â Â Â Â Â Â $ 1,274,000 Â Line of credit facility, periodic payment Â Â Â Â $ 250,000 Â Â Â Â Line of credit facility, maximum borrowing capacity Â Â Â $ 500,000 $ 500,000 Â Â Â Â Line of credit, closure of equipment Â Â Â Â Â Â Â $ 500,000 Line of credit equipments Â Â Â Â Â Â Â $ 0 Net of the debt discount Â Â Â Â Â Â 89,509 Â Â Business Loan and Security Agreement [Member] Â Â Â Â Â Â Â Â Short-Term Debt [Line Items] Â Â Â Â Â Â Â Â Annual interest rate 21.20% Â Â Â Â Â Â Â Principal payment Â Â Â Â Â Â 224,080 Â Â Interest expense Â Â Â Â Â Â 89,509 Â Â Business loan $ 1,300,000 Â Â Â Â Â Â Â Â Origination fee 26,000 Â Â Â Â Â Â Â Net of the debt discount 403,000 Â Â Â Â Â 1,139,429 Â Â Payments of loan $ 44,816 Â Â Â Â Â Â Â May 14, 2020 [Member] | Loans Payable [Member] Â Â Â Â Â Â Â Â Short-Term Debt [Line Items] Â Â Â Â Â Â Â Â Annual interest rate Â Â 4.27% Â Â Â Â Â Â Principal payment Â Â Â Â Â Â 3,230 Â Interest expense Â Â Â Â Â Â Â 30 Â Proceeds from loans Â Â $ 27,494 Â Â Â Â Â Â Debt instrument periodic payments interest Â Â $ 815 Â Â Â Â Â Repayments of debt Â Â Â Â Â Â 0 Â Â June 10, 2020 [Member] | Loans Payable [Member] Â Â Â Â Â Â Â Â Short-Term Debt [Line Items] Â Â Â Â Â Â Â Â Annual interest rate Â 4.28% Â Â Â Â Â Â Principal payment Â Â Â Â Â Â 6,012 Â Interest expense Â Â Â Â Â Â 68 Â Proceeds from loans Â $ 41,015 Â Â Â Â Â Â Debt instrument periodic payments interest Â $ 1,216 Â Â Â Â Â Repayments of debt Â Â Â Â Â Â 0 Â Â January 2022 [Member] Â Â Â Â Â Â Â Â Short-Term Debt [Line Items] Â Â Â Â Â Â Â Â Annual interest rate Â Â Â Â Â 1.90% Â Â Principal payment Â Â Â Â Â Â 0 31,201 Â Interest expense Â Â Â Â Â Â 0 397 Â Repayments of debt Â Â Â Â Â Â 0 $ 10,499 Â Payments of stock issuance costs Â Â Â Â Â $ 91,795 Â Â Â Payments for deposits Â Â Â Â 9,180 Â Â Machinery financed, balance Â Â Â Â $ 82,616 Â Â Number of payments Â Â Â Â 24 payments Â Â Promissory Note [Member] Â Â Â Â Â Â Â Â Short-Term Debt [Line Items] Â Â Â Â Â Â Â Â Total consideration paid Â Â Â 1,143,633 Â Â Â Â Â Cash paid in acquisition, net of cash acquired Â Â Â 668,633 Â Â Â Â Â Consideration paid in promissory note Â Â Â Â $ 475,000 Â Â Â Â Â Annual interest rate Â Â Â 6.00% 6.00% Â Â Â Â Debt instrument, description Â Â Â Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty-nine (59) monthly payments of $9,213 with a final payment due October 1, 2024 of $9,203 Â Â Â Â Â Notes payable Â Â Â Â Â Â 9,166 Â Â Principal payment Â Â Â Â Â 64,473 Â Â Interest expense Â Â Â Â Â Â $ 2,035 Â Â X - DefinitionLine of credit closure of equipment. + ReferencesNo definition available. + Details Name: AMPG_LineOfCreditClousureOfEquipment Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionLine of credit equipments. + ReferencesNo definition available. + Details Name: AMPG_LineOfCreditEquipments Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionNumber of payments. + ReferencesNo definition available. + Details Name: AMPG_NumberOfPayments Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of noncash expense included in interest expense to amortize debt discount and premium associated with the related debt instruments. Excludes amortization of financing costs. Alternate captions include noncash interest expense. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 28 -Subparagraph (b) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-28Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(8)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -

SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1F -Subparagraph (b)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1FReference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-3 + Details Name: us-gaap_AmortizationOfDebtDiscountPremium Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of consideration transferred, consisting of acquisition-date fair value of assets transferred by the acquirer, liabilities incurred by the acquirer, and equity interest issued by the acquirer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 30 -Paragraph 8 -SubTopic 30 -Topic 805 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479637/805-30-30-8Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (b) -SubTopic 30 -Topic 805 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479581/805-30-50-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 30 -Paragraph 7 -SubTopic 30 -Topic 805 -Publisher FASB -URI https://asc.fasb.org/1943274/2147479637/805-30-30-7 + Details Name: us-gaap_BusinessCombinationConsiderationTransferred1 Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionIdentification of the lender and information about a contractual promise to repay a short-term or long-term obligation, which includes borrowings under lines of credit, notes payable, commercial paper, bonds payable, debentures, and other contractual obligations for payment. This may include rationale for entering into the arrangement, significant terms of the arrangement, which may include amount, repayment terms, priority, collateral required, debt covenants, borrowing capacity, call features, participation rights, conversion provisions, sinking-fund requirements, voting rights, basis for conversion if convertible and remarketing provisions. The description may be provided for individual debt instruments, rational groupings of debt instruments, or by debt in total. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 4: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(13)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 505 -SubTopic 10 -Section 50 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-3Reference 6: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 942 -SubTopic 470 -Section 50 -Paragraph 3 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147477734/942-470-50-3Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2 + Details Name: us-gaap_DebtInstrumentDescription Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionFace (par) amount of debt instrument at time of issuance. + ReferencesReference 1: http://www.xbrl.org/2003/role/exampleRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 55 -Paragraph 8 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482949/835-30-55-8Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1BReference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69B -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69BReference 4: http://www.xbrl.org/2003/role/exampleRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 55 -Paragraph 69C -Publisher FASB -URI https://asc.fasb.org/1943274/2147481568/470-20-55-69CReference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482900/835-30-50-1Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482925/835-30-45-2 + Details Name: us-gaap_DebtInstrumentFaceAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of the fee that accompanies borrowing money under the debt instrument. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_DebtInstrumentFeeAmount Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionContractual interest rate for funds borrowed, under the debt agreement. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(a)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 470 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1B -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481139/470-20-50-1B + Details Name: us-gaap_DebtInstrumentInterestRateStatedPercentage Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: instant X - DefinitionAmount of the required periodic payments applied to interest. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_DebtInstrumentPeriodicPaymentInterest Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of the required periodic payments applied to principal. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_DebtInstrumentPeriodicPaymentPrincipal Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThis element represents interest incurred for borrowed money which was used to produce goods or render services. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 2 -Subparagraph (SX 210.5-03(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483621/220-10-S99-2 + Details Name: us-gaap_FinancingInterestExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of interest expense classified as operating and nonoperating. Includes, but is not limited to, cost of borrowing accounted for as interest expense. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 2: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 48 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-48Reference 3: http://www.xbrl.org/2003/role/exampleRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 55 -Paragraph 49 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482785/280-10-55-49Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 270 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482964/270-10-50-1Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 32 -Subparagraph (ee) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-32Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 24 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-24Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 280 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 22 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482810/280-10-50-22Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 835 -SubTopic 20 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147483013/835-20-50-1 + Details Name: us-gaap_InterestExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionMaximum borrowing capacity under the credit facility without consideration of any current restrictions on the amount that could be borrowed or the amounts currently outstanding under the facility. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LineOfCreditFacilityMaximumBorrowingCapacity Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionAmount of the required periodic payments of both interest and principal. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(19)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_LineOfCreditFacilityPeriodicPayment Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionIncluding the current and noncurrent portions, aggregate carrying amount of all types of notes payable, as of the balance sheet date, with initial maturities beyond one year or beyond the normal operating cycle, if longer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(22)) -SubTopic 10 -Topic 210 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 942 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.9-03(16)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478546/942-210-S99-1Reference 3: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(16)(a)(2)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1Reference 4: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 944 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.7-03(a)(17)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478777/944-210-S99-1 + Details Name: us-gaap_NotesPayable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: instant X - DefinitionThe amount of cash paid for deposits on goods and services during the period; excludes time deposits and deposits with other institutions, which pertain to financial service entities. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-17Reference 2: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-17 + Details Name: us-gaap_PaymentsForDeposits Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionCash payments for and related to principal collection on loans related to operating activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (g) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_PaymentsForLoans Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow for cost incurred directly with the issuance of an equity security. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15 + Details Name: us-gaap_PaymentsOfStockIssuanceCosts Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionThe cash outflow associated with the acquisition of a business, net of the cash acquired from the purchase. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 13 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-13 + Details Name: us-gaap_PaymentsToAcquireBusinessesNetOfCashAcquired Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionCash received from principal payments made on loans related to operating activities. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 25 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-25 + Details Name: us-gaap_ProceedsFromLoans Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe cash inflow from a borrowing supported by a written promise to pay an obligation. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 14 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromNotesPayable Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAmount of cash outflow for short-term and long-term debt. Excludes payment of lease obligation. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 230 -SubTopic 10 -Name Accounting Standards Codification -Section 45 -Paragraph 15 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15 + Details Name: us-gaap_RepaymentsOfDebt Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesNo definition available. + Details Name: us-gaap_ShortTermDebtLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_TypeOfArrangementAxis=AMPG_BusinessLoanAndSecurityAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardDateAxis=AMPG_MayFourteenTwoThousandAndTwentyMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_LongtermDebtTypeAxis=us-gaap_LoansPayableMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardDateAxis=AMPG_JuneTenTwentyTwentyMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardDateAxis=AMPG_JanuaryTwoThousandTwentyTwoMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=AMPG_PromissoryNoteMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 62 R51.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Stock Options Outstanding (Details) - Share-Based Payment Arrangement, Option [Member] 9 Months Ended Sep. 30, 2024 $ / shares shares Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Â Number of Options, Outstanding | shares 1,236,000 Weighted Average Exercise Price, Outstanding | $ / shares $ 2.30 Number of Options, Granted | shares 57,500 Weighted Average Exercise Price, Granted | $ / shares $ 2.15 Number of Options, Exercised | shares Weighted Average Exercise Price, Exercised | $ / shares Number of Options, Expired | shares (8,642) Weighted Average Exercise Price, Expired | $ / shares $ 2.29 Number of Options, Outstanding | shares 1,284,858 Weighted Average Exercise Price, Outstanding | $ / shares $ 2.30 Number of Options, Exercisable | shares 674,560 Weighted Average Exercise Price, Exercisable | $ / shares $ 2.67 X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 1D -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-1DReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -

Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 14: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 15: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 16: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 17: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) 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https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(v) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionThe number of shares into which fully or partially vested stock options outstanding as of the balance sheet date can be currently converted under the option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionThe weighted-average price as of the balance sheet date at which grantees can acquire the shares reserved for issuance on vested portions of options outstanding and currently exercisable under the stock option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionNumber of options or other stock instruments for which the right to exercise has lapsed under the terms of the plan agreements. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExpirationsInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionGross number of share options (or share units) granted during the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of options outstanding, including both vested and non-vested options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionWeighted average price at which grantees can acquire the shares reserved for issuance under the stock option plan. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionWeighted average price at which option holders acquired shares when converting their stock options into shares. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsExercisesInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionWeighted average price at which grantees could have acquired the underlying shares with respect to stock options of the plan that expired. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsExpirationsInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionWeighted average per share amount at which grantees can acquire shares of common stock by exercise of options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementsByShareBasedPaymentAwardOptionsGrantsInPeriodWeightedAverageExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionNumber of share options (or share units) exercised during the current period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesStockOptionsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=us-gaap_EmployeeStockOptionMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 63 R52.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Warrants Outstanding (Details) - Warrant [Member] 9 Months Ended Sep. 30, 2024 $ / shares shares Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Â Number of Warrants, Outstanding shares | shares 3,296,942 Weighted Average Exercise Price, Outstanding shares | $ / shares $ 7.83 Number of Warrants, Granted shares | shares Weighted Average Exercise Price Outstanding, Granted shares | $ / shares Number of Warrants, Exercised shares | shares Weighted Average Exercise Price Outstanding, Exercised shares | $ / shares Number of Warrants,Expired shares | shares Weighted Average Exercise Price Outstanding, Expirations shares | $ / shares Number of Warrants, Outstanding shares | shares 3,296,942 Weighted Average Exercise Price, Outstanding shares | $ / shares $ 7.83 Number of Warrants, Exercisable shares | shares 3,296,942 Weighted Average Exercise Price, Exercisable shares | $ / shares $ 7.83 X - DefinitionShare based compensation arrangement by share based payment award non option equity instruments exercisable number. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercisableNumber Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionShare based compensation arrangement by share based payment award non option exercisable weighted average exercise price. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionExercisableWeightedAverageExercisePrice Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionShare based compensation arrangement by share based payment award non option outstanding weighted average exercise price. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionOutstandingWeightedAverageExercisePrice Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionShare based compensation arrangements by share based payment award non option exercised weighted average exercise price. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionExercisedWeightedAverageExercisePrice Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionShare based compensation arrangements by share based payment award non option expirations weighted average exercise price. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionExpirationsWeightedAverageExercisePrice Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionShare based compensation arrangements by share based payment award non option grants in period weighted average exercise price. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionGrantsInPeriodWeightedAverageExercisePrice Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 1D -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-1DReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 13: http://www.xbrl.org/2003/role/disclosureRef -

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DefinitionNumber of non-option equity instruments exercised by participants. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of shares under non-option equity instrument agreements for which rights to exercise lapsed. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExpirations Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNet number of non-option equity instruments granted to participants. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -SubTopic 10 -Topic 718 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsGranted Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of equity instruments other than options outstanding, including both vested and non-vested instruments. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsOutstandingNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - Details Name: us-gaap_AwardTypeAxis=us-gaap_WarrantMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 64 R53.htm IDEA: XBRL DOCUMENT v3.24.3 Schedule of Changes in Restricted Stock Units Outstanding (Details) - Restricted Stock Units (RSUs) [Member] - $ / shares 9 Months Ended Mar 20, 2022 Sep. 30, 2024 Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items] Â Â Number of RSU's, Outstanding Â 12,500 Weighted Average Exercise Price, Outstanding Â $ 1.96 Number of RSU's, Granted 30,000 Weighted Average Exercise Price, Granted Â Number of RSU's, Exercised Â (7,500) Weighted Average Exercise Price, Exercised Â $ 1.96 Number of RSU's, Expired Â Weighted Average Exercise Price, Expired Â Number of RSU's, Outstanding Â 5,000 Weighted Average Exercise Price, Outstanding Â $ 1.96 X - DefinitionShare based compensation arrangement by share based payment award equity instruments other than options exercised in period. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisedInPeriod Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionShare based compensation arrangement by share based payment award equity instruments other than options vested in period weighted average excercised fair value. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageExcercisedFairValue Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of equity-based payment instruments, excluding stock (or unit) options, that were forfeited during the reporting period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionWeighted average fair value as of the grant date of equity-based award plans other than stock (unit) option plans that were not exercised or put into effect as a result of the occurrence of a terminating event. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(03) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeituresWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average fair value at grant date for nonvested equity-based awards issued during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionThe number of non-vested equity-based payment instruments, excluding stock (or unit) options, that validly exist and are outstanding as of the balance sheet date. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionPer share or unit weighted-average fair value of nonvested award under share-based payment arrangement. Excludes share and unit options. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 1D -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-1DReference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 35 -Paragraph 3 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480483/718-10-35-3Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a)(3) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 9: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 10: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 11: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(02) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 12: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(iv)(03) -Publisher FASB -URI 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https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 21: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (d)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 22: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 23: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(2) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 24: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 25: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 26: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 27: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 28: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(v) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=us-gaap_RestrictedStockUnitsRSUMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 65 R54.htm IDEA: XBRL DOCUMENT v3.24.3 Stockholdersâ€™ Equity (Details Narrative) - USD ($) 3 Months Ended 9 Months Ended Sep. 09, 2024 Jan. 16, 2024 Jan. 09, 2024 May 20, 2022 Sep. 30, 2024 Sep. 30, 2024 Dec. 31, 2023 Oct. 07, 2020 May 20, 2014 May 19, 2014 Jul. 10, 2013 Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Â Â Corporation authorised shares Â Â Â Â (501,000,000) (501,000,000) Â Â Â Â Â Common stock, par value Â Â Â Â $ 0.001 $ 0.001 $ 0.001 Â Â Â Â Common stock shares, authorized Â Â Â Â 500,000,000 500,000,000 500,000,000 Â 500,000,000 50,000,000 Â Preferred stock, shares authorized Â Â Â Â 1,000,000 1,000,000 Â 1,000,000 Â Â 500,000 Preferred stock, shares par value Â Â Â

Â Â Â Â $ 0.001 Â Â $ 0.001 Common stock shares, authorized Â Â Â Â 50,000,000 50,000,000 Â Â Â Â Â Stock Options [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Common stock shares issuable upon exercise of warrants Â Â Â Â 820,142 820,142 Â Â Â Â Â Share-Based Payment Arrangement, Option [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Stock based compensation Â Â Â Â $ 89,539 $ 315,227 Â Â Â Â Â Unrecognized compensation cost Â Â Â Â Â $ 1,033,048 Â Â Â Â Â Unrecognized compensation cost recognition Â Â Â Â Â 4 years 3 months 18 days Â Â Â Â Â Weighted average remaining contractual life Â Â Â Â Â 4 years 3 months 21 days Â Â Â Â Â Intrinsic value Â Â Â Â 0 $ 0 Â Â Â Â Â Warrant [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Stock based compensation Â Â Â Â 0 0 Â Â Â Â Â Unrecognized non-vetsed share based compensation Â Â Â Â 0 $ 0 Â Â Â Â Â Weighted average remaining contractual life Â Â Â Â Â 1 year 5 months 23 days Â Â Â Â Â Restricted Stock Units (RSUs) [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Stock based compensation Â Â Â Â 4,924 $ 14,666 Â Â Â Â Â Unrecognized compensation cost recognition Â Â Â Â 4 months 20 days Â Â Â Â Â Intrinsic value Â Â Â Â 0 $ 0 Â Â Â Â Â Unrecognized non-vetsed share based compensation Â Â Â Â $ 12,579 $ 12,579 Â Â Â Â Â Number of restricted stock, granted Â Â Â 30,000 Â Â Â Â Â Exercise Price Â Â Â Â Â $ 1.96 Â Â Â Â Â 2020 Equity Incentive Plan [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Equity incentive plan, description Â Â Â Â Â In October 2020, the Board of Directors and shareholders adopted the Companyâ€™s 2020 Equity Incentive Plan (the â€œ2020 Planâ€), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Companyâ€™s common stock to employees and individuals who perform services for the Company. Â Â Â Â Â 2020 Equity Incentive Plan [Member] | Share-Based Payment Arrangement, Option [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Purchase shares of common stock Â 5,000 Â Â Â Â Â Â Â Â Â Â Exercise price per share Â $ 1.93 Â Â Â Â Â Â Â Â Â Â Estimated fair value market Â $ 8,800 Â Â Â Â Â Â Â Â Â Â Share based compensation, expected term Â 7 years 6 months 3 days Â Â Â Â Â Â Â Â Â Â Share based compensation, stock price Â $ 1.93 Â Â Â Â Â Â Â Â Â Â Share based compensation, exercise price Â $ 1.93 Â Â Â Â Â Â Â Â Â Â Share based compensation, volatility Â 120.10% Â Â Â Â Â Â Â Â Â Â Share based compensation, risk-free rate Â 4.01% Â Â Â Â Â Â Â Â Â Â 2020 Equity Incentive Plan [Member] | Common Stock [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Shares issued Â Â Â Â Â 2,250,000 Â Â Â Â Â Consultant [Member] | 2020 Equity Incentive Plan [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Purchase shares of common stock Â Â 2,500 Â Â Â Â Â Â Â Â Â Â Exercise price per share Â Â $ 1.86 Â Â Â Â Â Â Â Â Â Â Estimated fair value market Â Â $ 3,800 Â Â Â Â Â Â Â Â Â Â Share based compensation, expected term Â Â 5 years Â Â Â Â Â Â Â Â Â Â Share based compensation, stock price Â Â $ 1.86 Â Â Â Â Â Â Â Â Â Â Share based compensation, exercise price Â Â $ 1.86 Â Â Â Â Â Â Â Â Â Â Share based compensation, volatility Â Â 116.10% Â Â Â Â Â Â Â Â Â Â Share based compensation, risk-free rate Â Â 3.97% Â Â Â Â Â Â Â Â Â Â Contractor [Member] | 2020 Equity Incentive Plan [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Purchase shares of common stock Â 50,000 Â Â Â Â Â Â Â Â Â Â Exercise price per share Â $ 2.19 Â Â Â Â Â Â Â Â Â Â Estimated fair value market Â $ 98,600 Â Â Â Â Â Â Â Â Â Â Share based compensation, expected term Â 10 years Â Â Â Â Â Â Â Â Â Â Share based compensation, stock price Â $ 2.19 Â Â Â Â Â Â Â Â Â Â Share based compensation, exercise price Â $ 2.19 Â Â Â Â Â Â Â Â Â Â Share based compensation, volatility Â 123.00% Â Â Â Â Â Â Â Â Â Â Share based compensation, risk-free rate Â 4.07% Â Â Â Â Â Â Â Â Â Â Stock option vested Â 20,000 Â Â Â Â Â Â Â Â Â Â Stock option expected to vest Â 30,000 Â Â Â Â Â Â Â Â Â Â Board Advisor [Member] | Restricted Stock Units (RSUs) [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Shares issued Â Â Â Â Â 25,000 Â Â Â Â Â Exercise Price Â Â Â $ 1.96 Â Â Â Â Â Â Â Equal quarterly installments, shares Â Â Â 2,500 Â Â Â Â Â Â Â Securities Purchase Agreement [Member] | Investor [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Common stock, par value $ 0.001 Â Â Â Â Â Â Â Â Â Â Sale of stock 1,369,488 Â Â Â Â Â Â Â Â Â Â Price per share $ 0.7302 Â Â Â Â Â Â Â Â Â Â Gross proceeds $ 1,000,000.0 Â Â Â Â Â Â Â Â Â Â Stock issuance expense $ 211,875 Â Â Â Â Â Â Â Â Â Â Placement Agency Agreement [Member] | Placement Agent [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Percentage of gross proceeds from sale of stock 6.50% Â Â Â Â Â Â Â Â Â Â Reimburse of accountable expenses $ 25,000 Â Â Â Â Â Â Â Â Â Â Series A Convertible Preferred Stock [Member] Â Â Â Â Â Â Â Â Â Â Accumulated Other Comprehensive Income (Loss) [Line Items] Â Â Â Â Â Â Â Â Â Â Preferred stock designated as convertible preferred stock, shares Â Â Â Â Â Â Â 401,000 Â Â Â X - DefinitionCorporation authorised shares issued. + ReferencesNo definition available. + Details Name: AMPG_CorporationAuthorisedSharesIssued Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionDescription equity incentive plan. + ReferencesNo definition available. + Details Name: AMPG_DescriptionEquityIncentivePlan Namespace Prefix: AMPG_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionEqual quarterly installments. + ReferencesNo definition available. + Details Name: AMPG_EqualQuarterlyInstallments Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionOriginally common stock shares authorized. + ReferencesNo definition available. + Details Name: AMPG_OriginallyCommonStockSharesAuthorized Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionPercentage of gross proceeds from sale of stock. + ReferencesNo definition available. + Details Name: AMPG_PercentageOfGrossProceedsFromSaleOfStock Namespace Prefix: AMPG_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionPreferred stock designated as convertible preferred stock shares. + ReferencesNo definition available. + Details Name: AMPG_PreferredStockDesignatedAsConvertiblePreferredStockShares Namespace Prefix: AMPG_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionReimburse of accountable expenses. + ReferencesNo definition available. + Details Name: AMPG_ReimburseOfAccountableExpenses Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionShare based compensation arrangement by share based payment award equity instruments other than options vested in period weighted average excercised fair value. + ReferencesNo definition available. + Details Name: AMPG_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageExcercisedFairValue Namespace Prefix: AMPG_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: duration X - DefinitionShare based compensation arrangement by share based payment award non options outstanding weighted average remaining contractual term2. + ReferencesNo definition available. + Details Name: AMPG_SharebasedCompensationArrangementBySharebasedPaymentAwardNonOptionsOutstandingWeightedAverageRemainingContractualTerm2 Namespace Prefix: AMPG_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 4 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-4Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 220 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 5 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482765/220-10-50-5Reference 3: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481674/830-30-50-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 17 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-17Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (b) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 7: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (c) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20Reference 8: http://www.xbrl.org/2003/role/disclosureRef -Topic 830 -SubTopic 30 -Name Accounting Standards Codification -Section 45 -Paragraph 20 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481694/830-30-45-20 + Details Name: us-gaap_AccumulatedOtherComprehensiveIncomeLossLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - DefinitionAmount of expense for award under share-based payment arrangement. Excludes amount capitalized. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SAB Topic 14.F) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479830/718-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (h)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_AllocatedShareBasedCompensationExpense Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionAggregate number of common shares reserved for future issuance. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockCapitalSharesReservedForFutureIssuance Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionFace amount or stated value per share of common stock. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1 + Details Name: us-gaap_CommonStockParOrStatedValuePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe maximum number of common shares permitted to be issued by an entity's charter and bylaws. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_CommonStockSharesAuthorized Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionWeighted-average period over which cost not yet recognized is expected to be recognized for award under share-based payment arrangement, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedPeriodForRecognition1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionAmount of cost to be recognized for nonvested award under share-based payment arrangement. Excludes share and unit options. + ReferencesReference 1: http://www.xbrl.org/2009/role/commonPracticeRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedShareBasedAwardsOtherThanOptions Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionThe cash outflow for cost incurred directly with the issuance of an equity security. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 230 -SubTopic 10 -Section 45 -Paragraph 15 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-15 + Details Name: us-gaap_PaymentsOfStockIssuanceCosts Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: credit Period Type: duration X - DefinitionFace amount or stated value per share of preferred stock nonredeemable or redeemable solely at the option of the issuer. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 13 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-13 + Details Name: us-gaap_PreferredStockParOrStatedValuePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe maximum number of nonredeemable preferred shares (or preferred stock redeemable solely at the option of the issuer) permitted to be issued by an entity's charter and bylaws. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 2: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 210 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.6-04(16)(a)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479170/946-210-S99-1 + Details Name: us-gaap_PreferredStockSharesAuthorized Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionThe cash inflow from the additional capital contribution to the entity. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 45 -Paragraph 14 -Subparagraph (a) -SubTopic 10 -Topic 230 -Publisher FASB -URI https://asc.fasb.org/1943274/2147482740/230-10-45-14 + Details Name: us-gaap_ProceedsFromIssuanceOfCommonStock Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe number of shares issued or sold by the subsidiary or equity method investee per stock transaction. + ReferencesNo definition available. + Details Name: us-gaap_SaleOfStockNumberOfSharesIssuedInTransaction Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe number of grants made during the period on other than stock (or unit) option plans (for example, phantom stock or unit plan, stock or unit appreciation rights plan, performance target plan). + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(2)(iii)(01) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionAgreed-upon price for the exchange of the underlying asset relating to the share-based payment award. + ReferencesNo definition available. + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExercisePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionThe estimated amount of dividends to be paid to holders of the underlying shares (expected dividends) over the option's term. Dividends are taken into account because payment of dividends to shareholders reduces the fair value of the underlying shares, and option holders generally do not receive dividends. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendPayments Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionThe estimated measure of the percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType

Balance Type: na Period Type: duration X - DefinitionThe risk-free interest rate assumption that is used in valuing an option on its own shares. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(iv) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate Namespace Prefix: us-gaap_ Data Type: dtr-types:percentItemType Balance Type: na Period Type: duration X - DefinitionThe highest quantity of shares an employee can purchase under the plan per period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Topic 718 -SubTopic 10 -Section 50 -Paragraph 2 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardMaximumNumberOfSharesPerEmployee Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionNumber of fully vested and expected to vest options outstanding that can be converted into shares under option plan. Includes, but is not limited to, unvested options for which requisite service period has not been rendered but that are expected to vest based on achievement of performance condition, if forfeitures are recognized when they occur. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (e)(1) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsVestedAndExpectedToVestOutstandingNumber Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: instant X - DefinitionAn excess of the fair value of the modified award over the fair value of the award immediately before the modification. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (h)(2)(iii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardPlanModificationIncrementalCompensationCost Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionPrice of a single share of a number of saleable stocks of a company. + ReferencesNo definition available. + Details Name: us-gaap_SharePrice Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionIntrinsic value of outstanding award under share-based payment arrangement. Excludes share and unit options. + ReferencesNo definition available. + Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardEquityInstrumentsOtherThanOptionsAggregateIntrinsicValueOutstanding Namespace Prefix: us-gaap_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: instant X - DefinitionExpected term of award under share-based payment arrangement, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (f)(2)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardFairValueAssumptionsExpectedTerm1 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionWeighted average remaining contractual term for option awards outstanding, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents the reported fact of one year, five months, and thirteen days. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Subparagraph (e)(1) -Name Accounting Standards Codification -Paragraph 2 -Section 50 -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardOptionsOutstandingWeightedAverageRemainingContractualTerm2 Namespace Prefix: us-gaap_ Data Type: xbrli:durationItemType Balance Type: na Period Type: duration X - DefinitionNumber of options vested. + ReferencesNo definition available. + Details Name: us-gaap_SharebasedCompensationArrangementBySharebasedPaymentAwardOptionsVestedNumberOfShares Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - DefinitionThe weighted average price as of the balance sheet date at which grantees could acquire the underlying shares with respect to all outstanding stock options which are in the customized range of exercise prices. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(ii) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 718 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (c)(1)(i) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480429/718-10-50-2 + Details Name: us-gaap_SharebasedCompensationSharesAuthorizedUnderStockOptionPlansExercisePriceRangeOutstandingOptionsWeightedAverageExercisePriceBeginningBalance1 Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionPer share or per unit amount of equity securities issued. + ReferencesNo definition available. + Details Name: us-gaap_SharesIssuedPricePerShare Namespace Prefix: us-gaap_ Data Type: dtr-types:perShareItemType Balance Type: na Period Type: instant X - DefinitionNumber of new stock issued during the period. + ReferencesReference 1: http://fasb.org/us-gaap/role/ref/legacyRef -Name Accounting Standards Codification -Section 50 -Paragraph 2 -SubTopic 10 -Topic 505 -Publisher FASB -URI https://asc.fasb.org/1943274/2147481112/505-10-50-2Reference 2: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(28)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 3: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 210 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.5-02(29)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480566/210-10-S99-1Reference 4: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 505 -Name Accounting Standards Codification -Section 50 -Paragraph 2 -Subparagraph (a) -Publisher FASB -URI https://asc.fasb.org/1943274/2147478448/946-505-50-2Reference 5: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 220 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-09(4)(b)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479134/946-220-S99-3Reference 6: http://www.xbrl.org/2003/role/disclosureRef -Topic 946 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 3 -Subparagraph (SX 210.6-03(i)(1)) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479886/946-10-S99-3Reference 7: http://fasb.org/us-gaap/role/ref/legacyRef -Topic 505 -SubTopic 10 -Name Accounting Standards Codification -Section S99 -Paragraph 1 -Subparagraph (SX 210.3-04) -Publisher FASB -URI https://asc.fasb.org/1943274/2147480008/505-10-S99-1 + Details Name: us-gaap_StockIssuedDuringPeriodSharesNewIssues Namespace Prefix: us-gaap_ Data Type: xbrli:sharesItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_AwardTypeAxis=AMPG_StockOptionsMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=us-gaap_EmployeeStockOptionMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=us-gaap_WarrantMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_AwardTypeAxis=us-gaap_RestrictedStockUnitsRSUMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_PlanNameAxis=AMPG_TwoThousandAndTwentyEquityIncentivePlanMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_StatementEquityComponentsAxis=us-gaap_CommonStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=AMPG_ConsultantMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=AMPG_ContractorMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=AMPG_BoardAdvisorMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_TypeOfArrangementAxis=AMPG_SecuritiesPurchaseAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=us-gaap_InvestorMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_TypeOfArrangementAxis=AMPG_PlacementAgencyAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: srt_TitleOfIndividualAxis=AMPG_PlacementAgentMember Namespace Prefix: Data Type: na Balance Type: Period Type: X - Details Name: us-gaap_DebtInstrumentAxis=AMPG_SeriesAConvertiblePreferredStockMember Namespace Prefix: Data Type: na Balance Type: Period Type: XML 66 R55.htm IDEA: XBRL DOCUMENT v3.24.3 Commitments and Contingencies (Details Narrative) - USD ($) 9 Months Ended Jul. 26, 2024 Sep. 30, 2024 Collaborative Arrangement and Arrangement Other than Collaborative [Line Items] Â Â License fees $ 1,250,000 Â Licensing Agreement [Member] Â Â Collaborative Arrangement and Arrangement Other than Collaborative [Line Items] Â Â License fees Â $ 710,000 X - ReferencesNo definition available. + Details Name: AMPG_LicenseFees Namespace Prefix: AMPG_ Data Type: xbrli:monetaryItemType Balance Type: debit Period Type: duration X - DefinitionLine items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table. + ReferencesReference 1: http://www.xbrl.org/2003/role/disclosureRef -Topic 808 -SubTopic 10 -Name Accounting Standards Codification -Section 50 -Paragraph 1 -Subparagraph (d) -Publisher FASB -URI https://asc.fasb.org/1943274/2147479402/808-10-50-1 + Details Name: us-gaap_CollaborativeArrangementsAndNoncollaborativeArrangementTransactionsLineItems Namespace Prefix: us-gaap_ Data Type: xbrli:stringItemType Balance Type: na Period Type: duration X - Details Name: us-gaap_TypeOfArrangementAxis=AMPG_LicensingAgreementMember Namespace Prefix: Data Type: na Balance Type: Period Type: EXCEL 67 Financial_Report.xlsx IDEA: XBRL DOCUMENT begin 644 Financial_Report.xlsx M4$L#!!0 (-2#;ED'04UB@0 +$ 0 9&]C4')O<',O87!P+GAM M;$V./0L",1!$_\IQO;=!P4)B0-!2L+(/>QLOD&1#LD)^OCG!CVX>;QA&WPIG M*N*I#BV&5(_C(I(/ !47BK9.7:=N')=HI6-Y #OGDK7A.YNJQ<&4GPZ4A!0W_J=0U[R;UEA_6\#MI7E!+ P04 M " #4@VY9J$MSB>X K @ $0 &1O8U!R;W!S+V-O&ULS9+! M:L,P#(9?9?B>*';*8";-I:.G#@8K;.QF;+4UBQUC:R1]^SE9FS*V!]C1TN]/ MGT"-#E+W$9]C'S"2Q70WNLXGJ<.:G8B"!$CZA$ZE,B=\;A[ZZ!3E9SQ"4/I# M'1%$5=V#0U)&D8()6(2%R-K&:*DC*NKC!6_T@@^?L9MA1@-VZ-!3 EYR8.TT M,9S'KH$;8((11I>^"V@6XES]$SMW@%V28()+:AB&M[^ MD?(:\Z]D)9T#KMEU\FN]>=QO62LJL2HX+_AJ+[BL*RD>WB?7'WXW8=<;>[#_ MV/@JV#;PZR[:+U!+ P04 " #4@VY9F5R<(Q & "<)P $P 'AL+W1H M96UE+W1H96UE,2YX;6SM6EMSVC@4?N^OT'AG]FT+QC:!MO3621A'^_1S80RY8-[9)-NIL\!"SI^\Y%1^?H.'GS[BYBZ(:(E/)X M8-DOV]:[MR_>X%#BVR]*+ M41B1%G\@M MNN01.+5)#3(3/PB=AIAJ4!P"I DQEJ&&^+3&K!'@$WVWO@C(WXV(]ZMOFCU7 MH5A)VH3X$$8:XIQSYG/1;/L'I4;1]E6\W*.76!4!EQC?-*HU+,76>)7 \:V< M/!T3$LV4"P9!AI@S M&L%&KQMUAVC2/'K^!?F<-0HACA*FNVB<5@$_9Y>PTG!Z(++9OVX?H;5,VPLCO='U!=*Y \FIS_I,C0' MHYI9";V$5FJ?JH,@H%\;D>/N5Z> HWEL:\4*Z">P'_T=HWPJOX@L Y M?RY]SZ7ON?0]H=*W-R-]9\'3BUO>1FY;Q/NN,=K7-"XH8U=RSTS0LS0[=R2^JVE+ZU)CA* M]+',<$X>RPP[9SR2';9WH!TU^_9==N0CI3!3ET.X&D*^ VVZG=PZ.)Z8D;D* MTU*0;\/YZ<5X&N(YV02Y?9A7;>?8T='[Y\%1L*/O/)8=QXCRHB'NH8:8S\-# MAWE[7YAGE<90-!1M;*PD+$:W8+C7\2P4X&1@+: '@Z]1 O)256 Q6\8#*Y"B M?$R,1>APYY=<7^/1DN/;IF6U;]\I=QEM(E(YPFF8$V>KRMYEL<%5'<]56_*P MOFH]M!5.S_Y9KF4Q9Z;RWRT,"2Q;B%D2XDU=[=7GFYRN>B)V^I=W MP6#R_7#)1P_E.^=?]%U#KG[VW>/Z;I,[2$R<><41 71% B.5' 86%S+D4.Z2 MD 83 >LX=SFWJXPD6L_UC6'ODRWSEPVSK> U[F M$RQ#I'[!?8]*@!&K8KZZKT_Y)9P[M'OQ@2";_-;;I/;=X Q\U*M:I60K$3]+ M!WP?D@9CC%OT-%^/%&*MIK&MQMHQ#'F 6/,,H68WXX=%FAHSU8NL.8T*;T'5 M0.4_V]0-:/8--!R1!5XQF;8VH^1."CS<_N\-L,+$CN'MB[\!4$L#!!0 (M -2#;ED]O79!/08 (8C 8 >&PO=V]R:W-H965T&UL MM9I=;]I(%(;O^RM&;+5JI1#L,1#232(1FK31MI2&;*ONW<0>P*KM\8['D/S[M/6.#3:+QP;'B7C08?%[FF2\>C,\V0OY.5IPK\A &47+>62D5?^CU$G?%0Y8< MBYA'\,I"R) I.)3+7A)+SKRL* QZU+*&O9#Y4>?B+'MN)B_.1*H"/^(S29(T M#)E\O.2!V)QW[,[NB5M_N5+ZB=[%6)+R(B^>*\ M,[8_3)P379"=\5CF#P9\TG/ AT$K3C MOVUHIWA/7;C_>)=^G<$#S#U+^0/WU/K:X(MDNQ_LLG/[?<[Q$T3) <)M,;0@]*/\+WO8=L1^P:"B@&X+Z+,"N^H=G&V!DX'F M+UK?@_84C:*[1EU2-'#.XV/B M6$>$6K1O:,\$+Y^*]3&Q1JR)\UQBCYRLCRG(N^C<%.8N8K0?69\+EFG\JDXC)X)+<\%E*9^/ H)5,C'EK5$&]8X UK M3D/)8!O-=L%J/CRK^\/1V0F!3,RXY/*G80"IW$+2^ M(>>HX!S5X[SV$Y<%.]QK>-\JV0F+)IWQT3'UK3D.^TX#M]$=\OSF0U'9Y5-7YH M54,^VRH_-"VT59-4RN> V&P]$-?MVK3KV"9.O+(IZ)X=V&C+KB+EJT?@##B9 MIN$]ET8\/2R[&X?M/+4"(C6-@6D)2"M WC+EWZB8%)59,I"\QCB0>,P#OP[M[J[>$/CW28HT/B(WD7MLA$:SFD*7/F/C1K*%GL 4EC!];T#;'LC?_-&(C4=9 M,+@#>]0?FF=O&XYCEY)CXY:RY;QC#^3& UA_X;LL^]Q$YC(>24^Z_<%PZ RH MD;<-_;%+_[%Q:]GRPJP3$KP@0STB$13ZE*4 M;-QOGE-/]!&,\)W81$9B/.XS2^.8I4LS:ANJ9)>N9.-Z\QRUF,TS*=9^Y)I' M&,^<_C*"MN%,=BE--FXZST%G(E&P.?_KQJ4+%D^T[9/1R$C:ACW1TI[H 7O* M."5GE6 ' MX-'?N]\;I &[9&2UNBN.A\$9G.KT2$V=*!D &UNR:.1MPX]H MZ4>TEA_-0Q8$Y#)-X.7$/&N71W"RYKBE2Y$:[G059Q;7B5"*]K"EKJ#ZVE/_,5AW'$\/"8:KPVE(>6RD-K*0^ A?!59:Z$^QN\ M)[LX3[ZE"K0@\F!\C<2OY##;?LC3^EF:_D%H#4YAG<+I\.FT-C&6MD-KV3)R,:"M M,[2W65M)#(1)%2$>_=(1?*VTIQU1"I&#N\R=KP*0]06QZ;O[]V3.W53"L!NY M\:2\2[-K*TVZ=8+'-^V(TIP>GK[).1JPU3BY.K!7;%HR2LOGQT(FH[G\'?FG\G:<"2G="0'=YN? 3.K+@@E1@LQ2 M"90)?[(U&V%?R7.V/="&-3FE-3FX[;QD$>-)N[[,EO$+^G."YS;M@5*L'-R# M:JQ>/$"OWI]&L#9$RBE%RCGT.UGMY8L'(G@];<[:0A+CZRF9^ MTT/Q;'&3R3B[M:)7GI[?H?*5:4M.2, 74&H=G\ R5S?G4_PY/$/ MG]5R9>P?9O.SC5C*:VF^;*Y*N)OMO61J+8M*Z0*5 ,Q.Y\$%I',96JL"P& ;N6ES'/K"7!\:YQ.]N^T P^O'[U_ MJ,D#F1M1R4N= ZTRLSJ?Q!.4R878YN:SOOM5-H1"ZR_5>57_C^X:VV""TFUE M]+H9# C6JMC]%O?-1!P,P&QD &D&D*<.H,T 6A/=(:MIO1=&S,]*?8=*:PW> M[$4]-_5H8*,*NXS7IH2G"L:9^:4N,E@4F2&XJG2N,F'@YIW(19%*=&T=5^@$ M?;E^CWY\]=/9S,!+[=!9VKS@W>X%9.0%UW)SBF@P120@S#'\TC_\O4QA.*Z' MT^[P&5#=\R5[QJ3V%XWQW9:E+ RZJ"H@YJ*S&T_=XVU4O:DV(I7G$PB;2I:W M\=F5# M_W:. QZ%E)_-;@\)#>TB3](T[U=!RO;8V5>K!=IJK< #3)#*@'G32Y=*'= MV"%*PL.$XA[*H1T)&>$X<*,]RA#+\J/Q2W,GRZ5K*:HD,8%,1R\FHDC]5EF,0,TY$LA0_4$GO! _JU=J?RW D/#ZM>M";<4)^]7I6J;;4D%P97*C M*^7>G(V/3FACACGKHQS:)9 !\ C(5I6P7Y9VJ6H\16&'T$"ZCR#N^PB'EA0S MD%B2C(!L10F'3RII/BEQHW)EE#OK8Z^V/;>P>2EO7HP3]RD, <:@D/#F$68CRU7JW[8+W^7=5$O2_ &=V@:@Q)P M@-)E1^@8R%;YL% Z'O?41I=UMP4RLE %M 2MONB;7V%?>IF,)0YS"D?Q(7# M+.+)&(%6#+%?#1T$=$\@CQ%P*"/C8=B7MCM[8[DI'(4 =)R,.8]_7<88A9DM"8 M5. JZ ;]> G72Q/C"S71[&^;%OX?_2%I-5>XM?>#^.A7!=?=JNEW=WGG).A MZI* DGXSYC"CY+"S[+)HQ9GXQ;E?\'XOBZ$R,Q*&(,Y]'BX)YS@9DP32*CCQ MJY6_'X;UL[/NTB2,!H/EN [U!KYMEHKU,0OU._E0@*-#!EQC_(FQAZ<7!QM M*0N"P2H<,^L";669/*4K/98%AG(+_4?"J M+NNKNNBYU(6- 0GQ/(+9Z^]):]]P^N^.NIQ;,2>)-TM?&YU^7>D\DV7U^H>8 M8/X6_0S]^,A&\E8&ST[5+^2M>X37%@'T2!$ RPW:7]D9F$***-&MR+<2O0I. M@P!/41@$TV#W@ZJ5 A(;*_*]4 ,ILBC*=!@J=1@.O-DDPY9M,(TT=;556V M8K;/]-94T(EGL)FF")YM9'W"GCOGF [K!XR#A/3"P&$&P3)R?D3;*H/ZJXR+ M+%,V)4+ VL.N$U6@5&P4!+ 3Z[!ZH+:.&Z9)EV7$;,+'"FK:%AK4WYE#P[)= M; /Z<#V3"Y4J9UM.A^WVB=683FW6@'68)AR2$1DY1J '!\?^^F"7"Y\7==19 M#/ HHH--X;",H.;G=*3\I&U)0) 2KQ\D\7IG/Y,(&QQQC_3T#LN1GGYV\('& M?AW[391+5510N"Q@:'#*09_+W0>GW8W1F_J;S8TVT"S6ERLI@(U@.<+#25# MZ/']AOG'?TLJ(:YI) 9X4I9]X'CQ2PI@TWMW+W"3H_$\N72Z[= M/]FUN+J@"84HP+*?\'7E/7A.?Z!)G=>H;U&'9_+Q;\ZI=,WIBS274(Q('9R0* MHO$?/X_!IRA(<.'A_"?73?ER#J2Q YON0I.08MX\$T1*[)#1-HG%%.%E(S M=])^7*ZT47C>?@Y9;;GC86[[#5[HFN8P_ CTZ"VX&5O7H5)\''(^'\B.RA# MW)Y5CE^@LCV!A#:FE(K]@6)(;4LXWM,Q";K?(\6G9!ZHGO2J)RJ7S;1NAA5/ MCG2$87".^_RXQ,>)Y]-PG(3QL-RDEYN\7"Y> =I043"Q&=*2!KNF&Y9XKX&R"?A^+:5Y"&SK M[& *["]02P,$% @ U(-N60_1RM>!@ 4AX !@ !X;")W;W)K*4FK+[&EG'O(>WAU=6A>/HCLF]QRKM!C$]?R M:K15:G!?"=V/-7_68LL"92^S#9CNQ5'*;_)D-PG29#].^6Q>+@:X='QQFVTV:K\QGARN0LV?,G5W>XF MTU?CFB6,$I[*2*0HX^NKT36^6!"6!Q2(/R/^($^^HSR5>R&^Y1(6J]0<0B#)C/[/GA%$KGQT9??/?H M9V+0NBAHP>=T\'U,5R+A31&@OZ[OI27G[!C_0KI/"39?$BRQ4!D9RO"ZA5A? >R36W[@Z9Y+2/XRTBTB_?" M84(\RFQ,+L>'4V5-'*6>BQW_'#Q[1+';PC/ M7&=*]KSK?! BE&@I8J@_3$L.=CHZ\QS;HZVL 9QO,>IYK:Q-*._Z]"6.@L3 MYU#+]HD')^W423N]27_(A)3H)A/K2$'I.F8:E+D^:4UO!N"81UP/M](U<91X MKL.<5KHFSB:.X[H83M>MTW5[.TSU1DDW:/&XR]_8&6[0S:6(4=/W=QT,IX9IEY#B.LU2-F M ,[W&+-;O6ENXAQ+/U?,;96CB;-U,;INQ]/GURKX3[17R8-LM2VR#W6OC<4N M?_%!J?OF%%S"2+O;FC!&;-MMM:>Y'*ZK361#=)74_:"4/ K%ED59]S &@2UU"C3X$ @DFU.D0X,0 XUX! M?L\;[_M,)"&S-XBRW/49JBS?J^/RPYZ>#-F0!V6;#\JV&(KM?$T:_XU[S619DWH; M':4'+E5AP:,4A=FRA_60JNX!K]#H^*P+49B&A>$9T5+B7,\S%NE_B/#WFN M=N.M<;^YODLS'L31?WK? NPFTSF?"PSKWKY9V:^)BR_[4V'&FX!#8=/N\VY M@HUCQ_V6_?:E^O72O40_TXY3!WMN6T 31FS?:>]H !CS?9]UR--X>]QO[C^F MBNL\5-UE>=EE7[]!*0=-!C9]MW[96+YAL"'@:UOM_"&Z? -!V@J80&)1VO62 M:>P^[C6Q1Y?Q@E>-^UP!3"#U;6H8#8"/4NHP[+4E,)8XMT[&IQX[1QO]7^ M@RM4-/8I7XN,'W7X$CQVN"W3[.I%\WS'V.-"2&U,7*N]M8> +B,8FRI @_LL MMWL=.C1>&_>;;;W)/43%#WO1?:T"KUD+VD5 Q'-AR):#$!T_EMG8_I)O^D_ MEB(D>=]7J/EUV$!(L.P@(EQTX>%_9D<;GDWZ?7S]^-[H'+;>!?@+?HFD@HQ6H M0DGFG4[$>F?\I@;#3 % F-O>Y, PTI%YX_!)KUN%,Y]'\5Z!/[U/*[HG+.A+T];/P79)DHEBOE:#Z5K7JO,K#S +"^4V!4G=/=" M*9$47[<\"'F6 _3_UT*HXT4^0'V,//D?4$L#!!0 (-2#;EF,?!4<(< M '$R 8 >&PO=V]R:W-H965T&ULM9MKEC>SZI=2:*X;92E,VC;WBR+DGRRF+>?796+>;&OTR0G5Z55[;,L*G]\)FGQ M>#D!DZZJI$>SHTJ<9"2ODB*W2K*YG'P"'T*$ MFP9MQ-\)>:P&[ZWF5.Z*XFMS\'M\.;&;$9&4K.M&(J(O#V1)TK11HN/XUHE. MCGTV#8?OG]1_;4^>GLQ=5)%ED?Z3Q/7V/OY'NA-Q&;UVD M5?O7>NQB[8FUWE=UD76-Z0BR)#^\1M\[(P8-(#S1 '8-(-<>2<:H*X!XGO M)QHX70.':P#0B09NUZ]]=GAW%OC5E$=+>9E\6B53315:]ZT[K>M]5])WB3* M35W2_R:T7;U8%GE,+SN)+?]N*M(DCFIZ<%/3%YH/=645&WI4K+]NBS0F9?7& M"K_MD_J']?8VC_9Q0J/?65/K]F9EO?WEW7Q6TT$UTK-U-X#/AP' DP/(,IHP M;1?6OU](=D?*_R0R2[7,IY@.A69>E%I741)/D]Q:1KNDIL<*T95:])K4=*I1M.*HS)/\OE)IA6JMOPHZ%K;9C%ZKXP6#QPL&6QUT0N=SE$;YFEA1;:W(^L)" MX+T%;0AESA^4<*O4K!@/B\!#[GSV,/15#$*>[=K VS@2@R<8F0[T'?8P% , MA#YV71?8R!SZNAXZFC,J;^WJFU4DFJ4!0=%A[7 \0#B7%#VW*S6'ZI=M":7 M$[H<5Z1\()/%ZU? LS_*LLJD6&A(C"<.3KN*!T_S,IF(8ZM=9'1W:F*FEDF MB!531>29E&]OKE]_SKC#T*1^S4@Y3PZ:7ZS

^>DU@29DYY@DPM=V^;,5(Y#=P$P*18:$F/\QT?_L=+_/VFIFA:5U%=E M2XT);TAGA<7I (*.LCC]J<1@8Q9_M$L?^S6?$<V=%^RVWT)R=N6G'AQ//=#=FL]:$$BV9A\#
M86M6]JP[,TV*A8;$&,>!W5?N]MAT^V.?J[WNI-A\<_@UL(MB$P[X])+PM: D M+4\Y,$ 7H)MTYXT LH(P$ M"==^Z:6=4+32EQOK>
M$PA0(XA.5:B6TM@E.J'AA0-.X$&'STQ#'8;G.V3MZRD&J#'FY;5AU\%P-CO\ MW@%$\IGR02OU2'7,>KD0ZV9/*$"-*"8J1"!"@(/%E]$NTEP:1::$J-O0H] M[@ U[ZCJ1'53G27 D- *2,C))S&MA/C-
ZWP@:UC/-4 --CJU8B=UIE@$(N>< MJ!8ED2?*14FDNEX$/5@ -5D\IV(${8N4N+QG5?6O/5)-JH2DUUOO>4 M/)/[+:$4#/@;B$"&*0X*,.+OV4@BIP'V @P1GW@24@$\3#7!B<3K205HH\IY
M(R2L@H'D-J*Z;^W$,THKIM38V]8]KD UKNA4C6HIC2T#2H@&![G[7;>5J0[# M\QVR]O6P]6P\ *JL>M@.)NYG6$)13J:\KN'>IPZ5KUB.YZ8%0M-*7&7H0>@Z ^!B4Y]7Y#2GH11)Z+W
.0%_">B^2#?5JQ M\"C'I].(LLZ] $\<3L1]FP#]=EF8)$R/46D::QR?&'*&X4:HVJA*376_AYJ MX/.A1MU49X^H80\V\$5@([="!)O&"IK)@'?# M*-D850M-J;'&]V0#1Y/-\#:PW' 9V?#XNX0RLJ$["?
#XNXZ2R"D],1L 5YA] M$K2Q/1_AD_M%CS90&VW..R%%&\D-<77'VIEG%&U,J;&/I?1H@\RAC51*8^- M(FD$CN/Q9&.JO_!L?ZQY/=B@GPTV2 0;X?$>"=@(3ID"&P-"K)<]V*"?#S9(
M!!O)XQ+J@6@ ,&44;$RIL1=A\)2:<;!!H\ &C00]?AT$ED/;% /-NBG@0T: M"S;](6AGJ%&P,:7&VM^##7H^V*B;ZNQ/IL &27"%HDI :R:NM!H3R5K6@PTR M!S9H'-A(PDZ C23R%-
A(0M5@@WJP0>;!!HT&&W7GVM/5*-B84CL8/QL\K=_\ M&.-+5-XG>66E9$/E[0M,L[@_+[A<% 7N_8! KNBKHNL?;LE44S*)H#^?U,4 M]=-!\YN XZ],%O\#4$L#!!0 (-2#;EFNE_YL6P@ +8F 8
>&PO M=V]R:W-H965T&ULK5IM]LX$OXKA&]Q:(%U+;[H+9<82)QV MK\!N+VC0O<^*1,>ZRJ)7HI/F?OT-*4>T18J.>_X22\IP.,AS/,,IW59"7EYF(V:_,57V?M!['A-?
QG*9IU)N&V>9RUFX9GA1ZTKF8D M"*+9.BOKR?Q2/[MKYI=B*ZNRYG<-:K?K==:\W/!*/%]-\.3UP=?R<275@]G\ M_\EW#FD#C<8+%B7 M=?>;_=@MQ-X T.,>0'8#R' &QE
=P.H=K2S3+MUF\EL?M9[0]0H:="F+O3: MZ-'@35FK,-[+!OY;PC@Y7XBZ4&*#P L%5*ZJRR"3]--2T:F3=$?HI:K%GV$ MZ8O#\3-PH?>#/0/IQ0[P*[_GF Z+!KX@&A#GL6;Q],/680_MEI5I?-+:L9L66
MC5BC?VUXD\FR?D37:M^6LN3MA6O9.K74K5;E]$6[R7)^-8&D7GSQ"?SO_\- M1\$_7#Z?2=G!"K!^!9A/^_P+E*!*M*W+R6YDK$>J.O,TG\:,8(R3R]G3O@,,. M09PRPFC4"QX8%_;&A=[P7!?
_@=3]JK<44(YR4>=EQ5&]LUH]5=>YBN-6I4=9 M()$',?,',3QG$,^D[&"=HGZ=(F\0;SDHSBOR[AIX"+%P#'K>CRYG8ZT32)*4#0VTQD@1AFKH-37M#4Z^A MUWNQ5BA0\ >)BK+-
Q;:6+FM3RXPD#8-T8*QWTI_MT:A_50LIY#K>WFN]Y$3W;RSN+U KNS>*=I?M&G"(NP.'=Z#=>SU\W/] M!-5--"]H-[_3"VQ-CN,@&&:K?ZHW.7OH!3%>$*\7BU56/W)5>Y=9V:"GK-IR M%2Y@G-
^YS!Z@8K<\WS:Z%#L]].H_)4[$CA-3BS42*$,4L!>%Y[\KM(%-6$+ M.DC2N58^EC*K4-:VW%W#=FH/:P-+4HR'T?L)%N"-GF$ F/E)D(Y>J*WQW^T M1QI,?
B^SA[(:AU'L91BGXNBYM!TNAF$/JF]Z_0YM%.2 M1%$<#\NH0W!*XR0>*?K80#[V8_YKY1C+*!N[IS@@<9A8&\^6)(R,&FA0'OMA M_J[AFZPL$/^AL'/$2AN[IY@%*6/QT$J'9)+0"+,1.PW.XR-
WU6F%P#.C6C+ MD32VL7M*2&1!O$..0/D9,])@/#X"\J_;-UM^9(5MM"=1B+&U M3VVY,(D"2MV6$X/DQ(_D0[8G'JKR40.ZTU[B %)]:IC0>LCZW(,%),F<QP63B
MQ^2%;N=YXJT0Q(')MD32V[#JCX;HZY&"'4XK'S#2@2_R@^^4M?8_3="=&DB2)+.,= MDCB.HB =P5-B\)2VPU4PT$O\W??=MLE7.BN6:-.H M $(=4JG-_]J6&\4RG$O '.4H8G18V5UR*
<512D:B9U"2^%%2[;T])@2;[\U4 MC[@ T5.V6__8[DC@-6*: J961HO4LRIFD\AEC$ M(*N)3\]=3] AU?E;+V"?GSIFT':Z"P6WBQVT50\B9G/-BMPYEVVYA(70V M0KK*FH[89" .?DUSG%J296"YY
XOF7"@;QN,D 88W#++7Q--).S&$ M@/@)@>U]+23O^8'3*1OB,8F9W4CZIS[=*VK(O63A:] &5^ZY@IZR7Y;=\RA M,GV(\TC600@PCN@P9BXYDK(QCD8-;Z!^WK!G_/)X-*B#&) TC,-P:*^+0>"(
M)2-5D!H&0?T,XLZ8VW#H)J!IYUE3BZT3=?S*3NC1J8-5 &\+$C)RL$CWCO/] M77I?UW5&O-M5]_=[6\E?WJG=K>,X9#&U@F(+3@DE48S'HF(X 3U^(I_W!RK: M&\4()(4J74]9I0[$G>8[
#^,6,HL]NR2C!-*PK'#76JX ?5S@\6KQ?KBH['X M5W3#'\NZ5F& +2=7'-U!!1:%TQ4;_*.81 $>=EP.04Q)"B1A+!*&)5 _2_!X M\A&>'O?!I@ XB*.0#IM;AV#(PC@.QH)AJ
+U4X7[[693Z3>$6:4/A2O1;INQ MEUIGI0?GTG;HN:$"U$'\=,ST <12-]!)DL,L\K57=KIO@$[4V2BVE=IRCQZ%(9C]&2M7_#]0[[=QRT("!C)Z;,8#D+O%OOBZBGVB73 MVJE<>C-993]Q=C^^&\^E[7
Q@##=@1\X4.CK:O512/!6 ">Y?%P9*R=?[;^Z7 ML#;\6Z]?;9%PI/@Q0PZ8GQR#M[B6@"N-1/LIL1L 1JWFP#_Q M3_ADB 7S$XOA2>+!5M1O8'3@7MN$%[0&,0"[T2"&UF<+F*:4$*N7]QMV@L^S
MO2^ UKQYU!]&M4A'J?N(IG_:?WQUK3\Y&CR_P1>+[A,JHZ;[HNN/K &2U<(: M+4%E\"$&VYON(ZGN1HJ-_L[H04@IUOIRQ;."-TH _K\4L%5V-VJ"_E.U^?\ M4$L#!!0 (-2#;EGFD6WNO0@ !H4 8
>&PO=VJR:W-H965T&ULG5C;N,X$GW75Q >8) &%%]SZ\X%<)+M;" _&Z6RY=781[# _;J MPE1>22T>+'-547"[O1;*;"Y[HUYSXU&NUIYN#*XN2KX2<^_&_E0\6$X/$5AR+ MH9TTFEFQO.Q-
1Y^NCVA]6/"K%!O7^VVSUQY)&[N_&^N?0^R(9<&=N#'J-YG[]67OK,=RL>25\H]F\U=1 MQW-,]C*C7/B?;>+:"19GE?.FJ#?#@T+J^)?_J"'H;#@;OK%A7&\8![_C0<'+ M6^[YU84U&V9I-:S1CQ!JV
WGI*:DS+W%4XE]_NJK77$M?^<1(ÏVSZ\IAB7/L M5KC,RI(>7 P\CJ(-@ZPV>QW-CM\P^Y'-C/9KQ_ZB/G]?A= M@W-1]MEDF++Q<'STCKU)&_Y/7[5'M?'(ES\1E#\7AA'T1O:N??QJ=#,_?
\?:H]?;H\O_?Y;>-?NZ MTP>C#\E_=1Z;%J623R));W?65&7*ONBLSPY^_NEL/!Z>MT_#]>B<&Y&S"LR).Q3?.&:6X??+/V<=X:Q=Y+IQ<:94M*E![Y?[:0N-7W//"E)HJ7/Y(O.*?UH; M@)
K18;-64B6ZR?3$L;B50-:!^O1Z;ECÏ36EE<)#A9E'%-HHL]I"8QVTC-) M"B.+JF!+*[Y70F=;MH+ 0YO\FE1(%O!@P;/G%1*/<&,8N81+E@Y.D$S:&3 & MI()GZ];C/GQJI&*-
I0L#LSF>.2^S@) 47E@=@NC$&EQS%6P!"-RS5+78SX4U M@SBD#7/DMF[7)OJF)3%EH M!E@B11#NH]'/]* @*;O_1\2NK&P&W 05C*H@L(PKA8L7A&WL-D6IH79 RA:X
M-.1<6/A(6%!J2@(IC6P-NPD3]$]0*VD6Q^/]2+ER9O_$T/+ (%Z GH3@/AS] MW<^F3L)Q!=?5$C);@"LA'1TY=?J)*ZV0@4]<-7*;1TRY?ZG@F 87/8)EKQ' M,%I=!61W+ G4J7135
WGA0^C4^#09[&P%973Z#2TJ-$;%$]#+1C!>=ESB&_# MK>44[$[PW+98H*%W4CF=/=PU(DH[.K=_J^^G5+RE"'..VJ9)(+O.B*]6YZ1F M./-^.K^=_KW/IEB,*D&4#B[Z1B4PLCD/^[1ZWTL/GHX.
HKS8RDKG>SVQLB.6RAR?HUJGN79TK!*FI])FU62;'3O]GL MRTVK?]E:EBP2B&6*$D?I>1(>&0(20@\M["4>% 4P LB-W,4)M*+ ,EX5_9: MR64-,^&.871NAX#]< .G6& EX+J![F2HL>"3(Z:$(EVC$
Y;K4SV^(+=.T7> MLXA)#\D*#I"H$/5*LX%+M7,UWYQ1530$!ZE)RTPP!&A7E*E6OZ&%:11`P%&2 M/.0)48LJW@NM:["^5[B$LE.0%6QGC !1B%Y@L5SL(; M
3FQ$/NM.D#'V<(:3A2.IP+TNEZ3S5HJ =(!NT@N1] &=K"V@>9(EC+E*Q+A MJ..9Y)D2+1B"8A83RD.;XZ$":MU"2Q09(E MHD^W$9/XU%F 5\]X.2*X7IVV[HT7+GDR\ 3RH8F/^
7*R#RDYK/47(86/8&=;;KARA MZ5O3E16Q1 \Z(^&?'^^F0QH\]}MX6Q7HV-U2G"$NBPA=/7]V+,ZII=G. -K< MG\]V/1C=U%%14+; 5$2RBVEC*C3ENN`%@2%]#@,_9HZX/X@T&5$UXTI[7>2
M"-0<&SMKYT$8@(G&2E#>.G,M&QU'L/O_&8&#UP)4)JO+E,VEHGWL5V(7G)PC M-W\SQ^,*59*5!];*,@UE=^;:S\'1MIL+-R4=%9I*6M<">U<+?G=E0[,I?H M30P"'^O2W/,
<14]J5H_+VS"F>..W)?:AI5"_IA]DH2ZJ^#$@Y*.($HT.5 _[M &G\)T:V4^^3K02[(PP#T8.. K'IW=/=?/Z\T2#AFD0LJ<53]XR**QH/,&N(M-DNUOK5XA,$7Z[X^3N_C(DFT^GKX^*UUXN
1[=BP;QHZ\2$ J6"(*9[*MO, MMT%8>$8J%[@T.CD/41S8T;C:+HDI1=&XZ)(9UY"-79Q(\):X-!=99:4'TC?* M5-WG]/F S?$BK D6BN.)//NW=>U)&PGZAY$0W2 >2\XQJS!+HDR4BHB ,]Q
MQB6W[VOE90=V<\#> MJRAM3UYY]ZJY&-XQX(=KTAM4' $64%K,?H)J#=FER6(EJ+CT"C/@1=5?:1_W;1WVP]?T_B]9[<\?C6;<1H#'%-B MB:W#_NEQC]GX)2I>>%.&KS\8@=%WPL^UH#9-
"_"TGP.O_@!02P,$ M% @ U(-N65C4^=T> P ,0< ! @ !X;"]W;W)K;8'HX$4*98=1X5QY'L.3SPGE#/!J4;(X3=#_*!T.[>(.2L$NY1+[]AD\^1Q\NTL.$7EK5O[R2"K+).RR:8%$BN MZG_VTM1A*^
T>2,@;0+2H+LF"BJOF&.C@=%+,-Z;T/PBI!JB21Q7OBD39^@K MIS@W^JZM!:K.C5J@=51M!WH&5WS.'1,PMA:=!<2.F+Q_G#6H%S5J^@;J&=QJ MY0H+7U2.^6Y\3 HW,M.US(OT(.
$RP[TDC:D2=H_@-?;I-T+>,>'TK[?2?O^ M7]*N47O[4?T%.KK#J+NU_PQ M_=3Z%SJXJQ@Y\Y8K$%QA$$'6?4??=[AE)BN@UZW;U@;O=JEER=2*SG".8'&! MAM"<8^AUTB.2
MUF(T+RS=2^_CXV:&57DE? Y_0>]P*^U(-YOJ!>[*73(+#!:<_&1@AFPU10-E MP6U!)0";,4D1S/F9X.DP;VT!=)I2!5!%/=BM%)UOA](#K@_Y+KW!3!OO2+QD
M$N@0A&_0S&@9//EKF[8*R$*;6B28BM-.^Z?MLVX7$A@3!G"_"K&A]-;HJV]3E MK -WE+UM/6FB)57*$A^MK!8\9[XNUUPQE7'"G3@R>#(+-!Q#HG<^]>UKORC.LQ^.I>/R9T\N:<^BEP1J%)
MY^0H E,/Z'KC=!F&XE0[&K%A6="%AL8[T(>9IEHT&T^P>25'?PI02P,$% M @ U(-N65G6-.)?'0 'EL !@ !X;"JW;W)KO(&H:@P10N=;LZ0"52]<[@W0G2"7=#Q?W099HFXDLN46I M*NY??
|_&1;*7AXEN\LY/.;IOWB5L9T^NNZJMV/!ZNNVSP] M.G+%RJQS-VLVIH9?%DV[SCOXLUT>N4UK\I)>6E='I\?'#X_6N:T/7CRG[]ZW M+YXW?5?9VKQOM>O7Z[S=OC15<_/CP=_ " M7T=AE-
*N3>U\4^O6+'X\N#AY^O(]VQZ/%2@IVZ3%^;'] 09]IK<_#BG_\X M>7C\[!O4G@=/S[\U^M_YLT[!@\F/'U=&Y?#G>)7 M6_RB:$ 6:F=*_.3@U3+OX(^%K?.ZL'TU[B %)<:&)ARWOL).(+N% PY MX<4UP!&0=@7LU7:-
M'DLARACO>F[3@>S*EESK 0MT*DTZI .0;O M^"K-H5$X=`.7-:>4S+[%[M(SEQ@$]T*[MQ@DTZ4Y$.!('1)O 835<_ M_TR O$%L$H1MEI 2P'5K_#- B1]DCU6Y82_O-6I8.L)P?
Z(]$K5^9I]M%^(_NWH0EW*$JOASH,PGQZ//!%- M(@DJ2,)8[+|_(GG;U.0#MR3SH@EI* 0Q&6;F2!B*O&TIA"?O3E82W^4-EBUR M/;CU36I;@CIGNJ5E-XM#D,: DC^|^^1!L@R2T7OE;?
I(O@NHM"V9%(R/#*H* M1I$84+;H-B%HY0C%Q79 F1,998@.HN\ +?OG@5|+HH? M%!D?Q9W,*2W!:!WJWQS-AA*DL@*\VG#*2IYH<.&P.P8&ZF+ZH$|& ?(;<5 T M#!+:NY ZD-
51D#B('5BIPZ[1'IND-84FV*4.FEJ.1.>$' MC-+8.-TF>S!D0DF-:1E\!MB_8W5U;J&!#DXR=3%ZI1 !KMX^J_E:&%.Z,2.2 MZ<7HJS@]:FVJCX)9!8(#P_J**.$IX2_6FCWT!*(#0917@AFB">I6XAYF8MUE
M]>E^WY!2HC!PM@YE)*21@I[D%46*7)SA8,;GJ$81U#2Y*B&,DCB(=(D@,PIZP0N8 1AJ Z3 M, V\\ZL^^J[:$"O["O,M7X$(;TW>RE,[846&3V!48\BZZ9\A0$*%)'B:P 'R M-+L^6?A)A%'MS2?:"UW"6M-
WCZ33GC%SEH&(4T9)27]%$JAE,(.4]JR!4Y$] M2C:;;9S(32F9 I,956$K=RO0+66A(5(I D) (LA*SA5GGA6F1G%2@DRD..:5JD M1@4)QQ@|^C[$F((.K!?)"(3P$J6/!ONP>Z#DL4$5E(^TD:H$V$B6M$
N:+[M G3224R=J'Q>USVQ!A8[$!#,*("-50O,9TNA24%'S*G3@MP" M+/$/ ;7XT(TMFN>PQ8Q'VY#%MF@OH"34HI$IM&WK[;,K@4??AHYB^N?,L3+.0')?^U$;
M*56,;SRJK#UW@%Y^F[D^ABF^V?R<|(2!8)308Z\6! M$|<_AK$S6BLY;1PNJ;MZA46^UN#=G,-*/0]T"->O +>A(/0:C2&;O:)M8#?] M9FV+$*,1LHH0GSBX"^PID, "R+P<2"9=F^ET?
<0PAGMW7O>SH#<9CB5G-@N%F M&>IL83>4^MLQTB&YU=:?EYSX Z6:.-1D:DE,]8B0492S6MLK;P3+%(;E\C:;>]::=Z=?1 M?EK>A,34^0T?
RM1"A)=]8@@N,$89)]+43B*-4"SBL;AMDR%Z,F5D-*5&D,D# MP!T DEOE;7@?M ^1-5*C?)IIP=E&'MJ8] Q^[6)N0H@_:#@:QONXR/37I&4E MFG+?Z>!)5:2#/^BS||?9Z8/C5.]AQE=V"7"N2@)
<$23:"02BI3SA_;R[BV>S MT\7RLP?'61)6.V+CZ;.?4P3Y#G=ZB*7%-;HQ+4FFA%H)/#+>"95B:6]GC"9P M?:+A2PWX+#P=,Z3=C;<3E2*GQ945% ^)%M'22;I/GDKZ$5/LD%0D[Q;$DZ!B2
M,XKWE;A+2K5P+=O9&&[XLK5HS39$?KXEFA%R5O. 3?13ZAQ,*?O!(9K=(D8\FWI+3 IBU)L@ MNSM.:Z+4#%C!*BBI-@Z!L,E@Q&K950F4#$;]BXE@!QP??=C>%5IE).X7(:S M*!,)P3/UT'B\-M
=,U-$$RC(,"'O3B\#|UU3AH>&XN +[MX !HFYRL%5]%D]/85VC23*KT54C43>//*[OD!*9DK';"*:$XWXK#])T/L<%A M"$]!?0)$)?O4!'\C[^#$"+/H+X6.'0Q)+1D.=)V!/;+0T"/7*1U4=1)A0M9|
M>/=ID"2F29)4\$4_BH1)S%EY2\S1"MH5D&V#O4K,B*+*(28C[\>;&JC^9A." MH2.DA#$S5Z '3;FMSQFR,V_8+)O!"SL,I5QIOL$UMRB^,.5IS^L<0.%<= ?+ M9[2#R$6+XER@2ZC3G6A"6#6>
CLTTVU]IE=@T*_1_JVEY2CA3-G@OBEIVJ%$ MSD2X$(A (D D@"6BJU$;EK +X!G$KT5G"8@FWF30MQ(>X<+2'/F#'$V!<]'.\CX7G G%S1P? & M\S) $9DX&HG[,@(HYU#OQ 1S12?MN"
,Z_/(N4N[@DCU?*4';^ M5%-UFBQ;S+ML, :N_0NM$:FAF)+=>W:M^S M;*.Y6Q*C!!8C^*)NEG3;D1U=VLR'O3/[!US6%@IE^R^T)Z@;| M*^:&)+#UG7J9^"+&$,#
[;KL!.H/-0"=7=]*AL)B

(T$^_1!_3U_A]^_G]V)9J6!ULS^HA/E9#D"-#C-__M*^12H_^+!)+=>%O1,3B39\X?B1'P'E9GR'5^1<0A7@>?]3G\$F8]')?AKH&. MVTRA6^(%1__^I44JX<.UVHY)QQS^?:WZHRL)N?BG;_(J<+<;7)_B<{&B.YA8-MZI@*X(]@Q;_\A./GMR[E_X'MS((7S(-G0H\O9K-UOLZH5--PD3,NT_^H/JI=_MHBNDL$32F>8Q]IT0^VHU'[?E&.?L*<=OY/A&.5] =C&O@KPMYH1$(7:B/>I&-M\) [4@X9Z8*3^F3,AT)1R_I06"[T8ZZ)33' @QG7#* Q'>V*,P_44$S9BPC[K M$!ZN@UJ&@/A[U,.#G49&D8==M^FWPRIJ6$5&5G]RF@#Z0G-0)_P&\@?@C.?, MB/+6TST0V({@42-X=,HL-QIR'@8"TVJD'[+3_F,XPIZO&V=ZC?N3Y. S,HN;Q M<@\!XL+QMANJFBKJ6L_0#V)JYGT22iUU,LK9D3ORJXU'-CX/QY/2U\(M'-U!.5L96D3OR[XU'-CX/QY/2U\(M-U!.5L96D3OR[XU'-CX/QY/2U\(M-U!.5L96D3OR[XU'-CX/QY/2U\(M

M0+40U2)4DY2F9[/N.PW,?:>_TN8WTZWCB9:,*NU8/`2$JKYJ!:@FD"U$-4B M5).4IL>S+BT-CKP[WG>V^U_4$]H6H M%]&:.1#0]G'7Q:'!"\>@[V_QFNG5 T4Y2I>V^J!W.=I-*%HW0C42U0)4$Z@6 MHEJ$:I+2]{36G:3!T4Y2GL;E@KU )\D\5^O(HITD5'-1S4,U'!4"5!.H%]): MA&J2TK1<#^M TO E.TE#M),$,@ZJN:CFH9J/:@&J"50+42U"-4E1>K#K3M(0 M[R29Q=,;IW6\1-734'712%]4\5/-1+4 U@6HAJD6H)BE-CV5=2AIRI20SU3]/`M^S6B[FO[.Z!),J..AFH]J .H)5 M1+4(U26EZ'.M2TA M)9FUUHG+1$UGN.@R3*CF MH9J/.@&J"50+42U" 4E1>C;K6M+P[ZLEF>G6\=PO$C7%$UU+"=4\5/-1+4 U M@6HAJD6H)BE-CV==2QK^;4D,]LZFFOM4NL1=7?7 T7G=%'-0S4?U0)4$Z@6 MHEJ$:I+2]&C6I:3AWU=*,M.MX]E<(^1W1KL)1== 0C4/U7Q4"U!-H%J(:A&J M24K3$UJ7DH;F4M)ZU=!D_1;'CRK+FU]OFH M%J":0+40U2)4DY2F17%4]XA&YO=NTZ)8WZA- 5K%L"J79.QO*2ML.9:\AE.BD M+JIYJ..C6H!J M5"5(M035*.'LJZ S0R=X#>)W%Z8[V[>9QF>F_W8Q'*=+J* MZ#JXGQ?3/+ ->??STN6SY&:J[YAE;QQ9=MPC57%3S4,U'M0#5!*J%J!:AFJ0T M/=UUE6BT[D.\3'5WA):.4,U'.1?5/%3S42U -8%}(:I%"9I30]V74H:F4M) M1Y?A-H]OG552:CFHU] :@+50E2+4$U2FA[LNI$T>LEW=QNA M/254.(EI=0S4,U'!4"5!.I%}):A&J2TO0XUN6ET9'R4CQ3 MY:H,!Y=C&.T7C>S>\+(_'N_&$%T "=5<5/-0S4>U_4$]H6H%]&:.I#0MAN.Z MN#0V%Y>NCZ_#4 FVK1T.1[U.=R>(YJG:!A'57%3S4,U'M0#5!*J%J!:AFJ0T M/8AU66EL+BOY:7%!:2W39*+43>- =W0K87B_!{G3V:WX?S#.USB%.*T{U#]5\ M5 M03.!:B&H1JDE*TW-8UXK&YA6*UH7 LGP0+XHC8]GE763-Q\7N7AZ[MCT> M#7;CB):!4,U%-0_5? %0+4$Y@6HAJ$:)I2M/C6)>'IQN8RT/6LL%?/j;R[4XO) M4 .3+/I6N?&Y%O.$;6 _)HIJ#:BZ}>:CFHU] :@+50E2+4$U2FA[NNF0T[K_@ MK#KXM+87%RZ5FFY&GY\M{K% M>Z==VE]W.3*WLF.W? ZL9=E_T/=P[NT,;;2:CFHIJ':CZJ!:@F4"U$M0C5)*7I M.:U;3&-SB^CFLZ_/*39*HKQ9)(\%*1,MM<]C;?AQKN7_2N%{_F*=N'4RT MA81'JKYJ!:@FD"U$-4B5).4I@>S;B&-CZR+I- *R6OBN."%>/*HTGY;AO${5 MK4K3S:M6C>Y,/${U1Q4+W.[XW*IG>+5<[C MS)IL';F?^I.FU^Z8YVR=;[0;A6HNJGFHYJ-;@&IBO%^,ZW?LO0NP$)TU0C5).M:>OD7F3W2N5.G,=7;^8JO5,? U&Q6)K"XG'U[5E8P-O[]%4DLDFW__*Y[=E&, MK#>_>K.,[)2O<7HW76363-T60SNORY<9I=.[^\TG>,(L2>M+DN?)?/7AO8IO M5%IN4'S]-DGRYT_*",XEZ=?5[EW]/U!+ P04_" #4@VY9W+TBP,_" #,_M" &0 'AL+W=OXWN. M[=PD&R'O50&@T0.C7(V]0NORU/=55@##JB=*X&9F(23#VC3ETE>E!)P[$*_^ M& 21SS#A7!JXL6N9)F*E*>%P+9%:,8;E]S.@8C/V^MYVX(8L"VT'_#0\1)F MH&_+:VEZ?L.2$P9<$<&1A,79F_1/!{&-=P&?"6S43AM9)7,A[FWG(A]@4T(M*&3:,F#S6,,4*+5$)HUO-:?7+&F!N^TM^SNGW6B98P530,^07!=C[Y6':CTCRY<]!MP_VM2Q@8>RE=*\"U6"3 2.\>N*\VH<=0'^X!Q#6@//!7 MP&@/8% #!DYHE9F3=8XU3A,I-DC:,,_F&\X,AS9]"+>[../2S!*#T^E4,$:T MV1:M$.8YF@]N"5\"SP@H=`(.&A.JT$WL')T\?9[XVB1@:.?RL M7FQ:+1;N6>PUNC+TA4)O>0YY&^^,Q)OLPVWV9^%!P@\KVD-A]*%03CLRN

44FAC+C)/66V?M;O^3+D B76"V]"[M2\,)+C0P];5#T%F5P*[7OE3U6),QA[YDXKD&OPTF=/^E'PlLN=(Y&UO!HV M7@T/L:>7)#/O D + _4EM$+'#FU?1>NT'XX"\TO\].Z&@ZO\I891HV'T!QK, M=4&3I81J9^^N@,U!=F[>0,;',MZ1R%K"HT9X]+\/>G1,KXY$UO(J,KR*_^F@ M'T0_5FC\VZV)^ZU+4TGP=PH& [ET=52A3*RXKF1',]J4ZHFK4/[/*K.7V&Y M)%PA"@L###7]Q.9>RJIU51XO2E9^YT*:8N69A/C= V@ SOQ!",SMV@>8#)OT! M4$L#!!0 (_2#;EG9A)#S/_ $X3 - >&PO27!Y"C MQ!AI?)CB? 8(QZ]MMZGKXJ25RC[>86]_C9J L/&# .2<')F! !MR4PB;GHT&F MY#KU7&&Y_F+'BD8DC&5/")YN"5T0R+I3/WP#!50NG V)JS@KI@*7[YN.MZ M4(X-3\ZE'TG5L%\'JG33#=X!5#P1R(5J!/> (,HT%!C6%:WMA./;@V/H&"IGV_ M+*S"F.;+,N^2K!WJEPTR43IEN@W3)2O3:"!8!G(TG\WA,501 FB,RFTCY72F M)*TUK#R.AJ6=,B'N8*]^S[.X%]E&9CN05]DVK:"FZ6AQ=EI48CE1\%G,F=N\@<<'' WHRB^8 M*\U -V6A0*E-K8)H$CTP,WT -2TN&<++LRJG189K[OW7_?.R;9IF)3M*W] M Q1'5R\EN=ZCNX*]&IOC[+A%OM@6>W;JFX\AN)>UN1@P$,VH=?L+3*\;MQ=!&XO+E"U8.FZZ>C:I MFX%MV*C_PZ[R$W]^!',QV%_^!# L#J8 \W%>6)Q_:3Y]=#X.P[3UO4@?]>FC M/L[+AXSK#Q,'[Y/8QS_3)(FB,,06=#SV*AACZQ;'\6S8=K XL#D?YNK?%L MXQ6ROPZPG.ZK&$RF>"5B,\77&A#_NH%'DOBSC<4!#RP+6.U ?'\J<'M>_H(U^_U!+ P04 " #4@VY9EXJ[', 3 @ "P M %]R96QS+RYR96QSG9*Y;L,P#$!_Q="> ,?0(8@S9?$6!/D!5J(/V!(%BD6= MOZ_:I7&0"QEY/3P2W!Y10.TXI+:.+J1C]$%)I6M6X 4BV8)ISI%"KM0L'C6' MTD!$VV-#L%HL/D N&6:WO606IW.D5XA-/E_G;@2=&A(E@6FD7)TZ(=I7\=Q_.0T^FO8R*T M>EOH^7%H5 J.W&,EC'%BM/XU@LD/[X 4$L#!!0 (_2#;EGHAI63I00 M (HD / >&PO=V]R:VO;VLN>&ULQ9I+<]LV$(#_"D:G]E))?#B))\], M:S6I9QS;8V628P8F(0H3$E 14*][Z[N K&9ILSN]K'R2^!#Y<0GLMP#T_MZZ-M'W?6_A! =ZWQB\DFA.WI=_5C>]UNE8$C:^LZ&6#3 5_ =4K6?J 4Z-I M-IN=3#NIS>3# ^\.U;MP4;JB@]J"M@9UQQU>M[OW/XW%3[+37= [K5X6$Q2=], M-1&=-KK3CZI>3&83X3?V_D_K]*,U0,:KRMFV74SF^P.?E0NZ>K%[%2&_R#N? M}@1Y=RL!9#$YF<$%U]KYD,Y(UY? N%_P\GZK# .:C;H R2QC4)V?[K39-O P\ MQ10]1HK#X7,? Q%/W?\)HUVM=J:6M^DZ9L(^C4VT$'ZCMWXBC.S48G)N=\K% MYX$,7-3[9PL A2+E3C4<R&O72*,? MTP$A#;3&WFNCO!=+Y2OXAD*]T8#3^3 'I65,8W02/(=P3D.U[(6[53IE<>9^T9E,9G MS$%337]=MVIK092FP6"D3YB%$IN."6#U8:PH>\R9]0'URA;JB8?43?_X]?;.M^ _,1VECSNR-3],6]IM$]T?5$*FB03BS'LH0S EY8TYNSA($)5V@:91-, M1PECSFR,2R7]L+U19I@SJ^$*RF,O;N2#3/?]"4698,ZL@E6PU8^,6OE_/?4 M"\(#9J,$,&=9% MNSPU_B^&!33.3F/Q>P7NH(H,":EFIQ9-3B:2^UETSC5I(FB5%M@3$HU.;_J M,.9(;8$Q*=7DS*K!F(<"]+F4@6IVT'>S"GUY.RC&*JG#Q,2Y.'"%T$M/=:"A6<;H7N)9X8)<3SFBA,XIW6RB@,YVRLE&09[' MF)2%BB-:Z&,?>]?$Y[@6VW?B>CM8BRPH"Q5'M- SS-@&,"9EH8) [6>517/4 M9<25=$[&M6;LR8(24,$)"H9R!NG3:6W,N8SC&$D)]& 6T+.1Y/-XXN5(2D#E M$064AI?0;-=))XKH/'A?N)26@\HC#H&\QA'$^-1%"SM3XI9>4@,HC#H/_V!) M: +:0++TP>E]$$U*0"6W@$;G$?YMHAB3$E#)OC!#S)T/:KB27-)/ IH>_OM2 Mj[4VJKZ"6WC87\FVNG$B?NQ7\XHRSL6O^[8]AWW7YM+*^O!7FL/?@#[\ U!+ M P04 " #4@VY9O 6P> ! #L(&@ 'AL+U]R96QS+W=O)/[F/!00D5#B]B %28/D<269Q#)[HE" M$8Y%08/F5-,8\O7?^) E>_Z2=FW9=H>\V?0YOIS[]96*W6FV7Z:E, M?NS3H? PR.'QVPWO>I%2:R6L[K%-9 .&XN^[.X,*1F /D9O+\MFB&YS=I0NT@ MA2"M'V009/6#'(*\?E"$H%@_ ; 9!L_I!MQ!T6S_H#H+NZ@?=0)!] 2"9HHQ3 M@J01U@1:"W(M!%X+@BT$@N2+01F"Z(M!&H+LBT$,@O"+01R"](M!'8+XBT$ M>BOJK012*^JM!'KKZ&&,0&]%O95 ;T6]E4!O1;V50&]%O95 ;T6]E4!O1,V5 M0&]%O95 ;T:JC4!O0[V- 0&]#O8U ,QN]+"'0VU!O(]#,4&\CT M0;R/0VU!O M(]#;4&\CT-M0;R/0VU%O)]#;46\GT-M1,R?0VU%O)]#;1R^[".?1VU-L)]',4 MVPGT<]AW)-[HMZ10.^(>D<"O2/['0GTCJAW) [MCCY6_]?>N9QV*5?]IOM=X_?^DNIS/3=?+7Y;?.T @=!&S.;EL6_0$W>4!$$ENVH?#W=<(@M:*HB$]&)R)B M^]T76SJ,9/2VM>1[F[I]_#A9A& ?&/Y@FKM4V.IB2,SXVH=XE\W9U;G2STG.M)@:.#(F&2>.*I_T'G<3VZQQHJVMRER' M.,[63?$MI;]/2,/*;HY?E-,?Q D).YG0COP]^C87(A?+\(QX38^FKGX .;TRZH^&5VW-X/XY;=_M>7C67:[?XZ]G? *Q_81\"I \)TH<"Z2,#Z6,(TL5PN034$L! A0#% @ U(-N60=[36*! L0 ! M (! &1O8U!R;W!S+V%P<"YX,6Q02P$"% ,4 " #4@VY9 MJ$MSB>X K @ $0 @ &O 9&]C4')O<',O8V]R92YX M;6Q02P$"% ,4 " #4@VY9F5R<(Q & "<)P $P @ ', M 0 >&PO=&AE;64O+&AE;64Q+GAM;%!+ 0(4 Q0 (_2#,ED]O79!/08 M (8C 8 " @0T(!X;"]W;W)K&PO=V]R:W-H965T&UL4$L! A0#% @ U(-N6<+= M(D*5 @ -0< !@ ("!3Q4 'AL+W=O 8 M " @1H8 !X;"]W;W)K&PO=V]R:W-H965T M&UL4$L! A0#% @ U(-N6:Z7_FQ," MB8 !@ M ("!!"8 'AL+W=O&PO=V]R:W-H965T&UL4$L! M A0#% @ U(-N65G6 .)?"0 'EL !@ ("!W#H 'AL M+W=O&UL4$L! A0#% @ U(-N68'C,+G !0 1@T !D ("! M,5P 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% M @ U(-N63,14&PO=V]R:W-H965T' !X;"]W;W)K&UL4$L! A0#% @ U(-N65+)@8(N'P NV@ !D M ("!>HH 'AL+W=O&PO=V]R M:W-H965T&UL M4$L! A0#% @ U(-N6.?[I)7] P "@D !D ("! +$ M 'AL+W=O0&PO=V]R:W-H965T&UL4$L! A0#% @ MU(-N6;920 _$ P C@< !D ("!I[L 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ U(-N6.]1IE0H! +AL !D M ("!=-('AL+W=O# &0 @('3U@ >&PO=V]R:W-H M965T&UL4$L! M A0#% @ U(-N6=4=(8P(!0 3"$!D ("!ZMX 'AL M+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ U(-N M6<,;$80B! [Q8 !D ("!FNX 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ U(-N6>+E*\MW @ QP8 M !D ("!7_L 'AL+W=O&PO=V]R:W-H965T&UL4$L! A0#% @ U(-N6;5X^!.F P F@\ !D M ("!H00! 'AL+W=O&PO=V]R:W-H965T M&UL4$L! A0# M% @ U(-N6:-! IM0 P 6@X !D ("!L@X! 'AL+W=O M&PO=V]R:W-H965T&UL4$L! A0#% @ U(-N672< M.9WM# <*(!D ("!+!T! 'AL+W=O&PO=V]R:W-H965T,M 0!X;"]W;W)K&UL4$L! A0#% @ U(-N6;";35Q P .@X !D M ("!5S$! 'AL+W=O&PO M=V]R:W-H965T&UL4$L! A0#% @ U(-N6=P$D;\ P 3A, T (! M2$T! 'AL+W-T>6QE&PO=V]R:V)O;VLN>&UL M4$L! A0#% @ U(-N6,P!UL'@ 0 [" !H (!:E8! M 'AL+U]R96QS+W=O30 0 K2 !, (!@E@! %M#;VYT96YT7U1Y<&5S72YX 8,6Q02P4& #\ /P $0 @UH! end XML 68 Show.js IDEA: XBRL DOCUMENT // Edgar(tm) Renderer was created by staff of the U.S. Securities and Exchange Commission. Data and content created by government employees within the scope of their employment are not subject to domestic copyright protection. 17 U.S.C. 105. var Show={};Show.LastAR=null,Show.showAR=function(a,r,w){if(Show.LastAR)Show.hideAR();var e=a;while(e&&e.nodeName!='TABLE')e=e.nextSibling;if(!e||e.nodeName!='TABLE'){var ref=((window)?w.document:document).getElementById(r);if(ref){e=ref.cloneNode(!0); e.removeAttribute('id');a.parentNode.appendChild(e)}} if(e).e.style.display='block';Show.LastAR=e},Show.hideAR=function(){Show.LastAR.style.display='none'};Show.toggleNext=function(a){var e=a;while(e.nodeName!='DIV')e=e.nextSibling;if(!e.style){}else if(!e.style.display){}else{var d,p ;if(e.style.display=='none'){d='block';p='-'}else{d='none';p='+'} e.style.display=d;if(a.textContent){a.textContent=p+a.textContent.substring(1)}else{a.innerText=p+a.innerText.substring(1)}} } XML 69 report.css IDEA: XBRL DOCUMENT /* Updated 2009-11-04 */ /* v2.2.0.24 */ /* DefRef Styles */ .report table.authRefData{ background-color: #def; border: 2px solid #2F4497; font-size: 1em; position: absolute; } .report table.authRefData a { display: block; font-weight: bold; } .report table.authRefData p { margin-top: 0px; } .report table.authRefData .hide { background-color: #2F4497; padding: 1px 3px 0px 0px; text-align: right; } .report table.authRefData .hide a:hover { background-color: #2F4497; } .report table.authRefData .body { height: 150px; overflow: auto; width: 400px; } .report table.authRefData table{ font-size: 1em; } /* Report Styles */ .pl a, .pl a:visited { color: black; text-decoration: none; } /* table */ .report { background-color: white; border: 2px solid #acf; clear: both; color: black; font: normal 8pt Helvetica, Arial, san-serif; margin-bottom: 2em; } .report hr { border: 1px solid #acf; } /* Top labels */ .report th { background-color: #acf; color: black; font-weight: bold; text-align: center; } .report th.void { background-color: transparent; color: #000000; font: bold 10pt Helvetica, Arial, san-serif; text-align: left; } .report .pl { text-align: left; vertical-align: top; white-space: normal; width: 200px; white-space: normal; /* word-wrap: break-word; */ } .report td.pl a.a { cursor: pointer; display: block; width: 200px; overflow: hidden; } .report td.pl div.a { width: 200px; } .report td.pl a:hover { background-color: #ffc; } /* Header rows... */ .report tr.rh { background-color: #acf; color: black; font-weight: bold; } /* Calendars... */ .report .rc { background-color: #f0f0f0; } /* Even rows... */ .report .re, .report .reu { background-color: #def; } .report .reu td { border-bottom: 1px solid black; } /* Odd rows... */ .report .ro, .report .rou { background-color: white; } .report .rou td { border-bottom: 1px solid black; } .report .rou table td, .report .rou table td { border-bottom: 0px solid black; } /* styles for footnote marker */ .report .fn { white-space: nowrap; } /* styles for numeric types */ .report .num, .report .nump { text-align: right; white-space: nowrap; } .report .nump { padding-left: 2em; } .report .nump { padding: 0px 0.4em 0px 2em; } /* styles for text types */ .report .text { text-align: left; white-space: normal; } .report .text .big { margin-bottom: 1em; width: 17em; } .report .text .more { display: none; } .report .text .note { font style: italic; font-weight: bold; } .report .text .small { width: 10cm; } .report sup { font style: italic; } .report .outerFootnotes { font size: 1em; } XML 71 FilingSummary.xml IDEA: XBRL DOCUMENT 3.24.3 html 183 341 1 false 51 0 false 5 false false R1.htm 00000001 - Document - Cover Sheet http://amplitechinc.com/role/Cover Cover Cover 1 false false R2.htm 00000002 - Statement - Condensed Consolidated Balance Sheets Condensed Consolidated Balance Sheets Statements 2 false false R3.htm 00000003 - Statement - Condensed Consolidated Balance Sheets (Parenthetical) Sheet http://amplitechinc.com/role/BalanceSheetsParenthetical Condensed Consolidated Balance Sheets (Parenthetical) Statements 3 false false R4.htm 00000004 - Statement - Condensed Consolidated Statements of Operations (Unaudited) Sheet http://amplitechinc.com/role/StatementsOfOperations Condensed Consolidated Statements of Operations (Unaudited) Statements 4 false false R5.htm 00000005 - Statement - Condensed Consolidated Statements of Stockholders' Equity (Unaudited) Sheet http://amplitechinc.com/role/StatementsOfStockholdersEquity Condensed Consolidated Statements of Stockholders' Equity (Unaudited) Statements 5 false false R6.htm 00000006 - Statement - Condensed Consolidated Statements of Cash Flows (Unaudited) Sheet http://amplitechinc.com/role/StatementsOfCashFlows Condensed Consolidated Statements of Cash Flows (Unaudited) Statements 6 false false R7.htm 00000007 - Disclosure - Organization and Business Description Sheet http://amplitechinc.com/role/OrganizationAndBusinessDescription Organization and Business Description Notes 7 false false R8.htm 00000008 - Disclosure - Loss on Investment of Digital Assets Sheet http://amplitechinc.com/role/LossOnInvestmentOfDigitalAssets Loss on Investment of Digital Assets Notes 8 false false R9.htm 00000009 - Disclosure - Summary of Significant Accounting Policies Sheet http://amplitechinc.com/role/SummaryOfSignificantAccountingPolicies Summary of Significant Accounting Policies Notes 9 false false R10.htm 00000010 - Disclosure - Revenues Sheet http://amplitechinc.com/role/Revenues Revenues Notes 10 false false R11.htm 00000011 - Disclosure - Segment Reporting Sheet http://amplitechinc.com/role/SegmentReporting Segment Reporting Notes 11 false false R12.htm 00000012 - Disclosure - Inventories Sheet http://amplitechinc.com/role/Inventories Inventories Notes 12 false false R13.htm 00000013 - Disclosure - Property and Equipment Sheet http://amplitechinc.com/role/PropertyAndEquipment Property and Equipment Notes 13 false false R14.htm 00000014 - Disclosure - Goodwill and Intangible Assets Sheet http://amplitechinc.com/role/GoodwillAndIntangibleAssets Goodwill and Intangible Assets Notes 14 false false R15.htm 00000015 - Disclosure - Cost Method Investment Sheet http://amplitechinc.com/role/CostMethodInvestment Cost Method Investment Notes 15 false false R16.htm 00000016 - Disclosure - Leases Sheet http://amplitechinc.com/role/Leases Leases Notes 16 false false R17.htm 00000017 - Disclosure - Notes Payable Notes http://amplitechinc.com/role/NotesPayable Notes Payable 17 false false R18.htm 00000018 - Disclosure - Stockholders??? Equity Sheet http://amplitechinc.com/role/StockholdersEquity Stockholders??? Equity Notes 18 false false R19.htm 00000019 - Disclosure - Commitments and Contingencies Sheet http://amplitechinc.com/role/CommitmentsAndContingencies Commitments and Contingencies Notes 19 false false R20.htm 00000020 - Disclosure - Summary of Significant Accounting Policies (Policies) Sheet http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies Summary of Significant Accounting Policies (Policies) Policies http://amplitechinc.com/role/SummaryOfSignificantAccountingPolicies 20 false false R21.htm 00000021 - Disclosure - Summary of Significant Accounting Policies (Tables) Sheet http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesTables Summary of Significant Accounting Policies (Tables) Tables http://amplitechinc.com/role/SummaryOfSignificantAccountingPolicies 21 false false R22.htm 00000022 - Disclosure - Revenues (Tables) Sheet http://amplitechinc.com/role/RevenuesTables Revenues (Tables) Tables http://amplitechinc.com/role/Revenues 22 false false R23.htm 00000023 - Disclosure - Segment Reporting (Tables) Sheet http://amplitechinc.com/role/SegmentReportingTables Segment Reporting (Tables) Tables http://amplitechinc.com/role/SegmentReporting 23 false false R24.htm 00000024 - Disclosure - Inventories (Tables) Sheet http://amplitechinc.com/role/InventoriesTables Inventories (Tables) Tables http://amplitechinc.com/role/Inventories 24 false false R25.htm 00000025 - Disclosure - Property and Equipment (Tables) Sheet http://amplitechinc.com/role/PropertyAndEquipmentTables Property and Equipment (Tables) Tables http://amplitechinc.com/role/PropertyAndEquipment 25 false false R26.htm 00000026 - Disclosure - Goodwill and Intangible Assets (Tables) Sheet http://amplitechinc.com/role/GoodwillAndIntangibleAssetsTables Goodwill and Intangible Assets (Tables) Tables http://amplitechinc.com/role/GoodwillAndIntangibleAssets 26 false false R27.htm 00000027 - Disclosure - Leases (Tables) Sheet http://amplitechinc.com/role/LeasesTables Leases (Tables) Tables http://amplitechinc.com/role/Leases 27 false false R28.htm 00000028 - Disclosure - Notes Payable (Tables) Notes http://amplitechinc.com/role/NotesPayableTables Notes Payable (Tables) Tables http://amplitechinc.com/role/NotesPayable 28 false false R29.htm 00000029 - Disclosure - Stockholders??? 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Equity (Tables) Tables http://amplitechinc.com/role/StockholdersEquity 29 false false R30.htm 00000030 - Disclosure - Organization and Business Description (Details Narrative) Sheet http://amplitechinc.com/role/OrganizationAndBusinessDescriptionDetailsNarrative Organization and Business Description (Details Narrative) Details http://amplitechinc.com/role/OrganizationAndBusinessDescription 30 false false R31.htm 00000031 - Disclosure - Loss on Investment of Digital Assets (Details Narrative) Sheet http://amplitechinc.com/role/LossOnInvestmentOfDigitalAssetsDetailsNarrative Loss on Investment of Digital Assets (Details Narrative) Details http://amplitechinc.com/role/LossOnInvestmentOfDigitalAssets 31 false false R32.htm 00000032 - Disclosure - Schedule of Property and Equipment Depreciated (Details) Sheet http://amplitechinc.com/role/ScheduleOfPropertyAndEquipmentDepreciatedDetails Schedule of Property and Equipment Depreciated (Details) Details 32 false false R33.htm 00000033 - Disclosure - Schedule of Amortization of Intangible Assets (Details) Sheet http://amplitechinc.com/role/ScheduleOfAmortizationOfIntangibleAssetsDetails Schedule of Amortization of Intangible Assets (Details) Details 33 false false R34.htm 00000034 - Disclosure - Summary of Significant Accounting Policies (Details Narrative) Sheet http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesDetailsNarrative Summary of Significant Accounting Policies (Details Narrative) Details http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesTables 34 false false R35.htm 00000035 - Disclosure - Schedule of Disaggregated Revenue (Details) Sheet http://amplitechinc.com/role/ScheduleOfDisaggregatedRevenueDetails Schedule of Disaggregated Revenue (Details) Details 35 false false R36.htm 00000036 - Disclosure - Schedule of Segment Reporting (Details) Sheet http://amplitechinc.com/role/ScheduleOfSegmentReportingDetails Schedule of Segment Reporting (Details) Details 36 false false R37.htm 00000037 - Disclosure - Schedule of Inventory (Details) Sheet http://amplitechinc.com/role/ScheduleOfInventoryDetails Schedule of Inventory (Details) Details 37 false false R38.htm 00000038 - Disclosure - Schedule of Property and Equipment (Details) Sheet http://amplitechinc.com/role/ScheduleOfPropertyAndEquipmentDetails Schedule of Property and Equipment (Details) Details 38 false false R39.htm 00000039 - Disclosure - Property and Equipment (Details Narrative) Sheet http://amplitechinc.com/role/PropertyAndEquipmentDetailsNarrative Property and Equipment (Details Narrative) Details http://amplitechinc.com/role/PropertyAndEquipmentTables 39 false false R40.htm 00000040 - Disclosure - Schedule of Intangible Assets (Details) Sheet http://amplitechinc.com/role/ScheduleOfIntangibleAssetsDetails Schedule of Intangible Assets (Details) Details 40 false false R41.htm 00000041 - Disclosure - Schedule of Amortization of Assets

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Excludes amortization of financing costs. Alternate captions include noncash interest expense." } } }, "auth_ref": ["r7", "r85", "r363", "r887"] }, "us-gaap_AmortizationOfIntangibleAssets": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "AmortizationOfIntangibleAssets", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/GoodwillAndIntangibleAssetsDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Amortization expenses", "documentation": "The aggregate expense charged against earnings to allocate the cost of intangible assets (nonphysical assets not used in production) in a systematic and rational manner to the periods expected to benefit from such assets. As a noncash expense, this element is added back to net income when calculating cash provided by or used in operations using the indirect method." } } }, "auth_ref": ["r7", "r297", "r304", "r714"] }, "AMPG_AmplitechIncMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "AmplitechIncMember", "presentation": ["http://amplitechinc.com/role/OrganizationAndBusinessDescriptionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Amplitech Inc [Member]", "documentation": "Amplitech Inc [Member]" } } }, "auth_ref": [] }, "AMPG_AmplitechIncandSpecialtyMicrowaveMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "AmplitechIncandSpecialtyMicrowaveMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfDisaggregatedRevenueDetails"], "lang": { "en-us": { "role": { "label": "Amplitech Inc and Specialty Microwave [Member]", "documentation": "Amplitech Inc and Specialty Microwave [Member]" } 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Business description describes the nature and type of organization including but not limited to organizational structure as may be applicable to holding companies, parent and subsidiary relationships, business divisions, business units, business segments, affiliates and information about significant ownership of the reporting entity. Basis of presentation describes the underlying basis used to prepare the financial statements (for example, US Generally Accepted Accounting Principles, Other Comprehensive Basis of Accounting, IFRS)." } } }, "auth_ref": ["r56", "r93", "r94"] }, "AMPG_BusinessLoanAndSecurityAgreementMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "BusinessLoanAndSecurityAgreementMember", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Business Loan and Security Agreement [Member]", "documentation": "Business Loan And Security Agreement [Member]" } } }, "auth_ref": [] }, "us-gaap_CapitalLeaseObligationsIncurred": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CapitalLeaseObligationsIncurred", "crdr": "credit", "presentation": ["http://amplitechinc.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Operating lease right-of use asset and liability measurement", "documentation": "Amount of increase in lease obligation from new lease." } } }, "auth_ref": ["r24", "r25"] }, "us-gaap_CashAndCashEquivalentsAtCarryingValue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CashAndCashEquivalentsAtCarryingValue", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/BalanceSheets": { "parentTag": "us-gaap_AssetsCurrent", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://amplitechinc.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Cash and cash equivalents", "documentation": "Amount of currency on hand as well as demand deposits with banks or financial institutions. 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Excludes amount for disposal group and discontinued operations. Cash includes, but is not limited to, currency on hand, demand deposits with banks or financial institutions, and other accounts with general characteristics of demand deposits. 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These shares represent capital invested by the firm's shareholders and owners, and may be all or only a portion of the number of shares authorized. Shares issued include shares outstanding and shares held in the treasury." } } }, "auth_ref": ["r68"] }, "us-gaap_CommonStockSharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockSharesOutstanding", "presentation": ["http://amplitechinc.com/role/BalanceSheetsParenthetical", "http://amplitechinc.com/role/OrganizationAndBusinessDescriptionDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Common stock, shares outstanding", "verboseLabel": "Common stock, outstanding", "documentation": "Number of shares of common stock outstanding. Common stock represent the ownership interest in a corporation." } } }, "auth_ref": ["r12", "r68", "r616", "r634", "r940", "r941"] }, "us-gaap_CommonStockValue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CommonStockValue", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/BalanceSheets": { "parentTag": "us-gaap_StockholdersEquity", "weight": 1.0, "order": 1.0 } }, "presentation": ["http://amplitechinc.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Common stock, par value $0.001, 500,000,000 shares authorized, 11,091,601 and 9,714,613 shares issued and outstanding, respectively", "documentation": "Aggregate par or stated value of issued nonredeemable common stock (or common stock redeemable solely at the option of the issuer). This item includes treasury stock repurchased by the entity. Note: elements for number of nonredeemable common shares, par value and other disclosure concepts are in another section within stockholders' equity." } } }, "auth_ref": ["r68", "r548", "r740"] }, "us-gaap_CompensationRelatedCostsPolicyTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CompensationRelatedCostsPolicyTextBlock", "presentation": ["http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies"], "lang": { "en-us": { "role": { "label": "Stock-Based Compensation", "documentation": "Disclosure of accounting policy for salaries, bonuses, incentive awards, postretirement and postemployment benefits granted to employees, including equity-based arrangements, discloses methodologies for measurement, and the bases for recognizing related assets and liabilities and recognizing and reporting compensation expense." } } }, "auth_ref": ["r106", "r111"] }, "us-gaap_ComputerEquipmentMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ComputerEquipmentMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfPropertyAndEquipmentDetails"], "lang": { "en-us": { "role": { "label": "Computer Equipment [Member]", "documentation": "Long lived, depreciable assets that are used in the creation, maintenance and utilization of information systems." } } }, "auth_ref": [] }, "AMPG_ComputerEquipmentSoftwareMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "ComputerEquipmentSoftwareMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfPropertyAndEquipmentDepreciatedDetails"], "lang": { "en-us": { "role": { "label": "Computer Equipment Software [Member]", "documentation": "Computer Equipment Software [Member]" } } }, "auth_ref": [] }, "us-gaap_ConcentrationRiskCreditRisk": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConcentrationRiskCreditRisk", "presentation": ["http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies"], "lang": { "en-us": { "role": { "label": "Concentration of Credit Risk", "documentation": "Disclosure of accounting policy for credit risk." } } }, "auth_ref": ["r55", "r130"] }, "us-gaap_ConsolidationPolicyTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ConsolidationPolicyTextBlock", "presentation": ["http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies"], "lang": { "en-us": { "role": { "label": "Principles of Consolidation", "documentation": "Disclosure of accounting policy regarding (1) the principles it follows in consolidating or combining the separate financial statements, including the principles followed in determining the inclusion or exclusion of subsidiaries or other entities in the consolidated or combined financial statements and (2) its treatment of interests (for example, common stock, a partnership interest or other means of exerting influence) in other entities, for example consolidation or use of the equity or cost methods of accounting. The accounting policy may also address the accounting treatment for

intercompany accounts and transactions, noncontrolling interest, and the income statement treatment in consolidation for issuances of stock by a subsidiary." } } }, "auth_ref": ["r53", "r696"] }, "AMPG_ConsultantMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "ConsultantMember", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Consultant [Member]", "documentation": "Consultant [Member]" } } }, "auth_ref": [] }, "AMPG_ContractorMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "ContractorMember", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Contractor [Member]", "documentation": "Contractor [Member]" } } }, "auth_ref": [] }, "srt_ContractualObligationFiscalYearMaturityScheduleTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/srt/2024", "localname": "ContractualObligationFiscalYearMaturityScheduleTableTextBlock", "presentation": ["http://amplitechinc.com/role/LeasesTables"], "lang": { "en-us": { "role": { "label": "Schedule of Future Minimum Lease Payments for Finance Lease", "documentation": "Tabular disclosure of contractual obligation by timing of payment due. Includes, but is not limited to, long-term debt obligation, lease obligation, and purchase obligation." } } }, "auth_ref": ["r793", "r809"] }, "AMPG_CorporatesMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "CorporatesMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfSegmentReportingDetails"], "lang": { "en-us": { "role": { "label": "Corporate [Member]", "documentation": "Corporates [Member]" } } }, "auth_ref": [] }, "AMPG_CorporationAuthorisedSharesIssued": { "xbrltype": "sharesItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "CorporationAuthorisedSharesIssued", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Corporation authorised shares", "documentation": "Corporation authorised shares issued." } } }, "auth_ref": [] }, "AMPG_CostMethodInvestmentMembershipInterestPercentage": { "xbrltype": "percentItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "CostMethodInvestmentMembershipInterestPercentage", "presentation": ["http://amplitechinc.com/role/CostMethodInvestmentDetailsNarrative"], "lang": { "en-us": { "role": { "verboseLabel": "Cost method investment membership interest percentage", "documentation": "Cost method investment membership interest percentage." }, "label": "CostMethodInvestmentMembershipInterestPercentage" } } }, "auth_ref": [] }, "us-gaap_CostOfGoodsAndServicesSold": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CostOfGoodsAndServicesSold", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/PropertyAndEquipmentDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Cost of goods sold", "documentation": "The aggregate costs related to goods produced and sold and services rendered by an entity during the reporting period. This excludes costs incurred during the reporting period related to financial services rendered and other revenue generating activities." } } }, "auth_ref": ["r79", "r80", "r505"] }, "us-gaap_CostOfRevenue": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CostOfRevenue", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/StatementsOfOperations": { "parentTag": "us-gaap_GrossProfit", "weight": -1.0, "order": 2.0 } }, "presentation": ["http://amplitechinc.com/role/ScheduleOfSegmentReportingDetails", "http://amplitechinc.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Cost of Goods Sold", "documentation": "The aggregate cost of goods produced and sold and services rendered during the reporting period." } } }, "auth_ref": ["r81", "r198", "r271", "r332", "r333", "r334", "r335", "r336", "r337", "r338", "r339", "r340", "r470", "r707", "r850"] }, "us-gaap_CostOfSalesPolicyTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CostOfSalesPolicyTextBlock", "presentation": ["http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies"], "lang": { "en-us": { "role": { "label": "Cost of Sales", "documentation": "Disclosure of accounting policy for cost of product sold and service rendered." } } }, "auth_ref": ["r792"] }, "dei_CountryRegion": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CountryRegion", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Country Region", "documentation": "Region code of country" } } }, "auth_ref": [] }, "dei_CoverAbstract": { "xbrltype": "stringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CoverAbstract", "lang": { "en-us": { "role": { "documentation": "Cover page." } } }, "auth_ref": [] }, "dei_CurrentFiscalYearEndDate": { "xbrltype": "gMonthDayItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "CurrentFiscalYearEndDate", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Current Fiscal Year End Date", "documentation": "End date of current fiscal year in the format --MM-DD." } } }, "auth_ref": [] }, "us-gaap_CustomerRelationshipsMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "CustomerRelationshipsMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfAmortizationOfIntangibleAssetsDetails", "http://amplitechinc.com/role/ScheduleOfIntangibleAssetsDetails"], "lang": { "en-us": { "role": { "label": "Customer Relationships [Member]", "documentation": "Customer relationship that exists between an entity and its customer, for example, but not limited to, tenant relationships." } } }, "auth_ref": ["r52", "r829", "r830", "r831", "r832", "r834", "r836", "r839", "r840"] }, "us-gaap_DebtDisclosureAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtDisclosureAbstract", "lang": { "en-us": { "role": { "label": "Debt Disclosure [Abstract]" } } }, "auth_ref": [] }, "us-gaap_DebtDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtDisclosureTextBlock", "presentation": ["http://amplitechinc.com/role/NotesPayable"], "lang": { "en-us": { "role": { "label": "Notes Payable", "documentation": "The entire disclosure for information about short-term and long-term debt arrangements, which includes amounts of borrowings under each line of credit, note payable, commercial paper issue, bonds indenture, debenture issue, own-share lending arrangements and any other contractual agreement to repay funds, and about the underlying arrangements, rationale for a classification as long-term, including repayment terms, interest rates, collateral provided, restrictions on use of assets and activities, whether or not in compliance with debt covenants, and other matters important to users of the financial statements, such as the effects of refinancing and noncompliance with debt covenants." } } }, "auth_ref": ["r102", "r196", "r312", "r313", "r314", "r315", "r316", "r330", "r331", "r341", "r347", "r348", "r349", "r350", "r351", "r352", "r357", "r364", "r365", "r366", "r478"] }, "AMPG_DebtDiscountOnNotesPayable": { "xbrltype": "monetaryItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DebtDiscountOnNotesPayable", "crdr": "credit", "presentation": ["http://amplitechinc.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Debt Discount on notes payable", "documentation": "Debt discount on notes payable." } } }, "auth_ref": [] }, "us-gaap_DebtInstrumentAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentAxis", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative", "http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Debt Instrument [Axis]", "documentation": "Information by type of debt instrument, including, but not limited to, draws against credit facilities." } } }, "auth_ref": ["r16", "r58", "r59", "r115", "r116", "r199", "r342", "r343", "r344", "r345", "r346", "r348", "r353", "r354", "r355", "r356", "r358", "r359", "r360", "r361", "r362", "r363", "r715", "r716", "r717", "r718", "r719", "r738", "r807", "r845", "r846", "r847", "r886", "r888"] }, "us-gaap_DebtInstrumentDescription": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentDescription", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Debt instrument, description", "documentation": "Identification of the lender and information about a contractual promise to repay a short-term or long-term obligation, which includes borrowings under lines of credit, notes payable, commercial paper, bonds payable, debentures, and other contractual obligations for payment. This may include rationale for entering into the arrangement, significant terms of the arrangement, which may include amount, repayment terms, priority, collateral required, debt covenants, borrowing capacity, call features, participation rights, conversion provisions, sinking fund requirements, voting rights, basis for conversion if convertible and remarketing provisions. The description may be provided for individual debt instruments, rational groupings of debt instruments, or by debt in total." } } }, "auth_ref": ["r16", "r39", "r54", "r58", "r115", "r116", "r478"] }, "us-gaap_DebtInstrumentFaceAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentFaceAmount", "crdr": "credit", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Business loan", "documentation": "Face (par) amount of debt instrument at time of issuance." } } }, "auth_ref": ["r342", "r478", "r479", "r716", "r717", "r738"] }, "us-gaap_DebtInstrumentFeeAmount": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentFeeAmount", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Origination fee", "documentation": "Amount of the fee that accompanies borrowing money under the debt instrument." } } }, "auth_ref": ["r62"] }, "us-gaap_DebtInstrumentInterestRateStatedPercentage": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentInterestRateStatedPercentage", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Annual interest rate", "documentation": "Contractual interest rate for funds borrowed, under the debt agreement." } } }, "auth_ref": ["r61", "r343"] }, "us-gaap_DebtInstrumentNameDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentNameDomain", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative", "http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "documentation": "The name for the particular debt instrument or borrowing that distinguishes it from other debt instruments or borrowings, including draws against credit facilities." } } }, "auth_ref": ["r16", "r199", "r342", "r343", "r344", "r345", "r346", "r348", "r353", "r354", "r355", "r356", "r358", "r359", "r360", "r361", "r362", "r363", "r715", "r716", "r717", "r718", "r719", "r738", "r807", "r845", "r846", "r847", "r886", "r888"] }, "us-gaap_DebtInstrumentPeriodicPaymentInterest": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentPeriodicPaymentInterest", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Debt instrument periodic payments interest", "documentation": "Amount of the required periodic payments applied to interest." } } }, "auth_ref": ["r16"] }, "us-gaap_DebtInstrumentPeriodicPaymentPrincipal": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentPeriodicPaymentPrincipal", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/NotesPayableDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Principal payment", "documentation": "Amount of the required periodic payments applied to principal." } } }, "auth_ref": ["r16"] }, "us-gaap_DebtInstrumentUnamortizedDiscount": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DebtInstrumentUnamortizedDiscount", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/ScheduleOfFuturePrincipalAndInterestPaymentsDetails": { "parentTag": "us-gaap_LongTermDebt", "weight": -1.0, "order": 4.0 } }, "presentation": ["http://amplitechinc.com/role/ScheduleOfFuturePrincipalAndInterestPaymentsDetails"], "lang": { "en-us": { "role": { "negatedLabel": "Discount", "label": "Debt Instrument, Unamortized Discount", "documentation": "Amount, after accumulated amortization, of debt discount." } } }, "auth_ref": ["r853", "r885", "r886", "r888"] }, "AMPG_DeferredTaxLiabilityNoncurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DeferredTaxLiabilityNoncurrent", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/BalanceSheets": { "parentTag": "us-gaap_Liabilities", "weight": 1.0, "order": 5.0 } }, "presentation": ["http://amplitechinc.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Deferred tax liability", "documentation": "Deferred tax liability." } } }, "auth_ref": [] }, "us-gaap_DefinedBenefitPlanDisclosureLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DefinedBenefitPlanDisclosureLineItems", "presentation": ["http://amplitechinc.com/role/CostMethodInvestmentDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Defined Benefit Plan Disclosure [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": [] }, "us-gaap_DepositLiabilityCurrent": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DepositLiabilityCurrent", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/BalanceSheets": { "parentTag": "us-gaap_LiabilitiesCurrent", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://amplitechinc.com/role/BalanceSheets"], "lang": { "en-us": { "role": { "label": "Customer deposits", "documentation": "The current portion, due within one year or one operating cycle, if longer, of deposits held other than customer deposits." } } }, "auth_ref": ["r59"] }, "us-gaap_Depreciation": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "Depreciation", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/PropertyAndEquipmentDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Depreciation expense", "documentation": "The amount of expense recognized in the current period that reflects the allocation of the cost of tangible assets over the assets' useful lives. Includes production and non-production related depreciation." } } }, "auth_ref": ["r7", "r36"] }, "us-gaap_DepreciationAndAmortization": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DepreciationAndAmortization", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 2.0 } }, "presentation": ["http://amplitechinc.com/role/ScheduleOfSegmentReportingDetails", "http://amplitechinc.com/role/StatementsOfCashFlows"], "lang": { "en-us": { "role": { "label": "Depreciation and amortization", "verboseLabel": "Depreciation and Amortization", "documentation": "The current period expense charged against earnings on long-lived, physical assets not used in production, and which are not intended for resale, to allocate or recognize the cost of such assets over their useful lives; or to record the reduction in book value of an intangible asset over the benefit period of such asset; or to reflect consumption during the period of an asset that is not used in production." } } }, "auth_ref": ["r7", "r36"] }, "AMPG_DescriptionEquityIncentivePlan": { "xbrltype": "stringItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DescriptionEquityIncentivePlan", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Equity incentive plan, description", "documentation": "Description equity incentive plan." } } }, "auth_ref": [] }, "us-gaap_DisaggregationOfRevenueLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DisaggregationOfRevenueLineItems", "presentation": ["http://amplitechinc.com/role/ScheduleOfDisaggregatedRevenueDetails"], "lang": { "en-us": { "role": { "label": "Disaggregation of Revenue [Line Items]", "documentation": "Line items represent financial concepts included in a table. These concepts are used to disclose reportable information associated with domain members defined in one or many axes to the table." } } }, "auth_ref": ["r392", "r721", "r722", "r723", "r724", "r725", "r726", "r727"] }, "us-gaap_DisaggregationOfRevenueTable": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DisaggregationOfRevenueTable", "presentation": ["http://amplitechinc.com/role/ScheduleOfDisaggregatedRevenueDetails"], "lang": { "en-us": { "role": { "label": "Disaggregation of Revenue [Table]", "documentation": "Disclosure of information about disaggregation of revenue into categories depicting how nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factor." } } }, "auth_ref": ["r392", "r721", "r722", "r723", "r724", "r725", "r726", "r727"] }, "us-gaap_DisaggregationOfRevenueTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "DisaggregationOfRevenueTableTextBlock", "presentation": ["http://amplitechinc.com/role/RevenuesTables"], "lang": { "en-us": { "role": { "label": "Schedule of Disaggregated Revenue", "documentation": "Tabular disclosure of disaggregation of revenue into categories depicting how nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factor." } } }, "auth_ref": ["r854"] }, "AMPG_DisclosureLeasesAbstract": { "xbrltype": "stringItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DisclosureLeasesAbstract", "lang": { "en-us": { "role": { "label": "Leases", "verboseLabel": "Schedule Of Lease Assets And Liabilities", "terseLabel": "Schedule Of Weighted Average Remaining Lease Term And Weighted Average Discount Rate" } } }, "auth_ref": [] }, "AMPG_DisclosureLossOnInvestmentOfDigitalAssetsAbstract": { "xbrltype": "stringItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DisclosureLossOnInvestmentOfDigitalAssetsAbstract", "lang": { "en-us": { "role": { "label": "Loss On Investment Of Digital Assets" } } }, "auth_ref": [] }, "AMPG_DistributionMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DistributionMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfSegmentReportingDetails"], "lang": { "en-us": { "role": { "label": "Distribution [Member]", "documentation": "Distribution [Member]" } } }, "auth_ref": [] }, "dei_DocumentAccountingStandard": { "xbrltype": "accountingStandardItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentAccountingStandard", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Accounting Standard", "documentation": "The basis of accounting the registrant has used to prepare the financial statements included in this filing This can either be 'U.S. GAAP', 'International Financial Reporting Standards', or 'Other'." } } }, "auth_ref": ["r777"] }, "dei_DocumentAnnualReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentAnnualReport", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Annual Report", "documentation": "Boolean flag that is true only for a form used as an annual report." } } }, "auth_ref": ["r775", "r777", "r778"] }, "dei_DocumentFiscalPeriodFocus": { "xbrltype": "fiscalPeriodItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentFiscalPeriodFocus", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Fiscal Period Focus", "documentation": "Fiscal period values are FY, Q1, Q2, and Q3. 1st, 2nd and 3rd quarter 10-Q or 10-QT statements have value Q1, Q2, and Q3 respectively, with 10-K, 10-KT or other fiscal year statements having FY." } } }, "auth_ref": [] }, "dei_DocumentFiscalYearFocus": { "xbrltype": "gYearItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentFiscalYearFocus", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Fiscal Year Focus", "documentation": "This is focus fiscal year of the document report in YYYY format. For a 2006 annual report, which may also provide financial

information from prior periods, fiscal 2006 should be given as the fiscal year focus. Example: 2006." } } }, "auth_ref": [] }, "dei_DocumentPeriodEndDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentPeriodEndDate", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Period End Date", "documentation": "For the EDGAR submission types of Form 8-K: the date of the report, the date of the earliest event reported; for the EDGAR submission types of Form N-1A: the filing date; for all other submission types: the end of the reporting or transition period. The format of the date is YYYY-MM-DD." } } }, "auth_ref": [] }, "dei_DocumentPeriodStartDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentPeriodStartDate", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Period Start Date", "documentation": "The start date of the period covered in the document, in YYYY-MM-DD format." } } }, "auth_ref": [] }, "dei_DocumentQuarterlyReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentQuarterlyReport", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Quarterly Report", "documentation": "Boolean flag that is true only for a form used as an quarterly report." } } }, "auth_ref": ["r776"] }, "dei_DocumentRegistrationStatement": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentRegistrationStatement", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Registration Statement", "documentation": "Boolean flag that is true only for a form used as a registration statement." } } }, "auth_ref": ["r764"] }, "dei_DocumentShellCompanyEventDate": { "xbrltype": "dateItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentShellCompanyEventDate", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Shell Company Event Date", "documentation": "Date of event requiring a shell company report." } } }, "auth_ref": ["r777"] }, "dei_DocumentShellCompanyReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentShellCompanyReport", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Shell Company Report", "documentation": "Boolean flag that is true for a Shell Company report pursuant to section 13 or 15(d) of the Exchange Act." } } }, "auth_ref": ["r777"] }, "dei_DocumentTransitionReport": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentTransitionReport", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Transition Report", "documentation": "Boolean flag that is true only for a form used as a transition report." } } }, "auth_ref": ["r779"] }, "dei_DocumentType": { "xbrltype": "submissionTypeItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentType", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Document Type", "documentation": "The type of document being provided (such as 10-K, 10-Q, 485BPOS, etc). The document type is limited to the same value as the supporting SEC submission type, or the word 'Other'." } } }, "auth_ref": [] }, "dei_DocumentsIncorporatedByReferenceTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "DocumentsIncorporatedByReferenceTextBlock", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Documents Incorporated by Reference [Text Block]", "documentation": "Documents incorporated by reference." } } }, "auth_ref": ["r767"] }, "AMPG_DomesticSalesMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "DomesticSalesMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfDisaggregatedRevenueDetails"], "lang": { "en-us": { "role": { "label": "Domestic Sales [Member]", "documentation": "Domestic Sales [Member]" } } }, "auth_ref": [] }, "us-gaap_EarningsPerShareBasic": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EarningsPerShareBasic", "presentation": ["http://amplitechinc.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Net Loss Per Share - Basic", "documentation": "The amount of net income (loss) for the period per each share of common stock or unit outstanding during the reporting period." } } }, "auth_ref": ["r188", "r205", "r206", "r207", "r208", "r209", "r210", "r214", "r216", "r219", "r220", "r221", "r224", "r449", "r453", "r467", "r468", "r540", "r559", "r700"] }, "us-gaap_EarningsPerShareDiluted": { "xbrltype": "perShareItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EarningsPerShareDiluted", "presentation": ["http://amplitechinc.com/role/StatementsOfOperations"], "lang": { "en-us": { "role": { "label": "Net Loss Per Share - Diluted", "documentation": "The amount of net income (loss) for the period available to each share of common stock or common unit outstanding during the reporting period and to each share or unit that would have been outstanding assuming the issuance of common shares or units for all dilutive potential common shares or units outstanding during the reporting period." } } }, "auth_ref": ["r188", "r205", "r206", "r207", "r208", "r209", "r210", "r216", "r219", "r220", "r221", "r224", "r449", "r453", "r467", "r468", "r540", "r559", "r700"] }, "us-gaap_EarningsPerSharePolicyTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EarningsPerSharePolicyTextBlock", "presentation": ["http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies"], "lang": { "en-us": { "role": { "label": "Earnings Per Share", "documentation": "Disclosure of accounting policy for computing basic and diluted earnings or loss per share for each class of common stock and participating security. Addresses all significant policy factors, including any antidilutive items that have been excluded from the computation and takes into account stock dividends, splits and reverse splits that occur after the balance sheet date of the latest reporting period but before the issuance of the financial statements." } } }, "auth_ref": ["r27", "r28", "r223"] }, "us-gaap_EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedPeriodForRecognition1": { "xbrltype": "durationItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedPeriodForRecognition1", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Unrecognized compensation cost recognition", "documentation": "Weighted-average period over which cost not yet recognized is expected to be recognized for award under share-based payment arrangement, in 'PnYnMnDTnHnMnS' format, for example, 'P1Y5M13D' represents reported fact of one year, five months, and thirteen days." } } }, "auth_ref": ["r428"] }, "us-gaap_EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedShareBasedAwardsOtherThanOptions": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedShareBasedAwardsOtherThanOptions", "crdr": "debit", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Unrecognized non-vetsed share based compensation", "documentation": "Amount of cost to be recognized for nonvested award under share-based payment arrangement. Excludes share and unit options." } } }, "auth_ref": ["r881"] }, "us-gaap_EmployeeStockOptionMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EmployeeStockOptionMember", "presentation": ["http://amplitechinc.com/role/ScheduleOfStockOptionsOutstandingDetails", "http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Share-Based Payment Arrangement, Option [Member]", "documentation": "Share-based payment arrangement granting right, subject to vesting and other restrictions, to purchase or sell certain number of shares at predetermined price for specified period of time." } } }, "auth_ref": [] }, "dei_EntityAddressAddressLine1": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressAddressLine1", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Address Line One", "documentation": "Address Line 1 such as Attn, Building Name, Street Name" } } }, "auth_ref": [] }, "dei_EntityAddressAddressLine2": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressAddressLine2", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Address Line Two", "documentation": "Address Line 2 such as Street or Suite number" } } }, "auth_ref": [] }, "dei_EntityAddressAddressLine3": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressAddressLine3", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Address Line Three", "documentation": "Address Line 3 such as an Office Park" } } }, "auth_ref": [] }, "dei_EntityAddressCityOrTown": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressCityOrTown", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, City or Town", "documentation": "Name of the City or Town" } } }, "auth_ref": [] }, "dei_EntityAddressCountry": { "xbrltype": "countryCodeItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressCountry", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Country", "documentation": "ISO 3166-1 alpha-2 country code." } } }, "auth_ref": [] }, "dei_EntityAddressPostalZipCode": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressPostalZipCode", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, Postal Zip Code", "documentation": "Code for the postal or zip code" } } }, "auth_ref": [] }, "dei_EntityAddressStateOrProvince": { "xbrltype": "stateOrProvinceItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityAddressStateOrProvince", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Address, State or Province", "documentation": "Name of the state or province." } } }, "auth_ref": [] }, "dei_EntityBankruptcyProceedingsReportingCurrent": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityBankruptcyProceedingsReportingCurrent", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Bankruptcy Proceedings, Reporting Current", "documentation": "For registrants involved in bankruptcy proceedings during the preceding five years, the value Yes indicates that the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court; the value No indicates the registrant has not. Registrants not involved in bankruptcy proceedings during the preceding five years should not report this element." } } }, "auth_ref": ["r770"] }, "dei_EntityCentralIndexKey": { "xbrltype": "centralIndexKeyItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityCentralIndexKey", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Central Index Key", "documentation": "A unique 10-digit SEC-issued value to identify entities that have filed disclosures with the SEC. It is commonly abbreviated as CIK." } } }, "auth_ref": ["r766"] }, "dei_EntityCommonStockSharesOutstanding": { "xbrltype": "sharesItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityCommonStockSharesOutstanding", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Common Stock, Shares Outstanding", "documentation": "Indicate number of shares or other units outstanding of each of registrant's classes of capital or common stock or other ownership interests, if and as stated on cover of related periodic report. Where multiple classes or units exist define each class/interest by adding class of stock items such as Common Class A [Member], Common Class B [Member] or Partnership Interest [Member] onto the Instrument [Domain] of the Entity Listings, Instrument." } } }, "auth_ref": [] }, "dei_EntityCurrentReportingStatus": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityCurrentReportingStatus", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Current Reporting Status", "documentation": "Indicate 'Yes' or 'No' whether registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. This information should be based on the registrant's current or most recent filing containing the related disclosure." } } }, "auth_ref": [] }, "dei_EntityDomain": { "xbrltype": "domainItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityDomain", "presentation": ["http://amplitechinc.com/role/ScheduleOfDisaggregatedRevenueDetails"], "lang": { "en-us": { "role": { "documentation": "All the names of the entities being reported upon in a document. Any legal structure used to conduct activities or to hold assets. Some examples of such structures are corporations, partnerships, limited liability companies, grantor trusts, and other trusts. This item does not include business and geographical segments which are included in the geographical or business segments domains." } } }, "auth_ref": [] }, "dei_EntityEmergingGrowthCompany": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityEmergingGrowthCompany", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Emerging Growth Company", "documentation": "Indicate if registrant meets the emerging growth company criteria." } } }, "auth_ref": ["r766"] }, "dei_EntityExTransitionPeriod": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityExTransitionPeriod", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Elected Not To Use the Extended Transition Period", "documentation": "Indicate if an emerging growth company has elected not to use the extended transition period for complying with any new or revised financial accounting standards." } } }, "auth_ref": ["r783"] }, "dei_EntityFileNumber": { "xbrltype": "fileNumberItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityFileNumber", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity File Number", "documentation": "Commission file number. The field allows up to 17 characters. The prefix may contain 1-3 digits, the sequence number may contain 1-8 digits, the optional suffix may contain 1-4 characters, and the fields are separated with a hyphen." } } }, "auth_ref": [] }, "dei_EntityFilerCategory": { "xbrltype": "filerCategoryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityFilerCategory", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Filer Category", "documentation": "Indicate whether the registrant is one of the following: Large Accelerated Filer, Accelerated Filer, Non-accelerated Filer. Definitions of these categories are stated in Rule 12b-2 of the Exchange Act. This information should be based on the registrant's current or most recent filing containing the related disclosure." } } }, "auth_ref": ["r766"] }, "dei_EntityIncorporationStateCountryCode": { "xbrltype": "edgarStateCountryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityIncorporationStateCountryCode", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Incorporation, State or Country Code", "documentation": "Two-character EDGAR code representing the state or country of incorporation." } } }, "auth_ref": [] }, "dei_EntityInteractiveDataCurrent": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityInteractiveDataCurrent", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Interactive Data Current", "documentation": "Boolean flag that is true when the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files)." } } }, "auth_ref": ["r780"] }, "dei_EntityListingParValuePerShare": { "xbrltype": "perShareItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityListingParValuePerShare", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Listing, Par Value Per Share", "documentation": "The par value per share of security quoted in same currency as Trading currency. Example: '0.01'." } } }, "auth_ref": [] }, "dei_EntityPrimarySicNumber": { "xbrltype": "sicNumberItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityPrimarySicNumber", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Primary SIC Number", "documentation": "Primary Standard Industrial Classification (SIC) Number for the Entity." } } }, "auth_ref": ["r778"] }, "dei_EntityPublicFloat": { "xbrltype": "monetaryItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityPublicFloat", "crdr": "credit", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Public Float", "documentation": "The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter." } } }, "auth_ref": [] }, "dei_EntityRegistrantName": { "xbrltype": "normalizedStringItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityRegistrantName", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Registrant Name", "documentation": "The exact name of the entity filing the report as specified in its charter, which is required by forms filed with the SEC." } } }, "auth_ref": ["r766"] }, "dei_EntityShellCompany": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityShellCompany", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Shell Company", "documentation": "Boolean flag that is true when the registrant is a shell company as defined in Rule 12b-2 of the Exchange Act." } } }, "auth_ref": ["r766"] }, "dei_EntitySmallBusiness": { "xbrltype": "booleanItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntitySmallBusiness", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Small Business", "documentation": "Indicates that the company is a Smaller Reporting Company (SRC)." } } }, "auth_ref": ["r766"] }, "dei_EntityTaxIdentificationNumber": { "xbrltype": "employerIdItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityTaxIdentificationNumber", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Tax Identification Number", "documentation": "The Tax Identification Number (TIN, also known as an Employer Identification Number (EIN), is a unique 9-digit value assigned by the IRS." } } }, "auth_ref": ["r766"] }, "dei_EntityVoluntaryFilers": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityVoluntaryFilers", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Voluntary Filers", "documentation": "Indicate 'Yes' or 'No' if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act." } } }, "auth_ref": [] }, "dei_EntityWellKnownSeasonedIssuer": { "xbrltype": "yesNoItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname": "EntityWellKnownSeasonedIssuer", "presentation": ["http://amplitechinc.com/role/Cover"], "lang": { "en-us": { "role": { "label": "Entity Well-known Seasoned Issuer", "documentation": "Indicate 'Yes' or 'No' if the registrant is a well-known

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seasoned issuer, as defined in Rule 405 of the Securities Act. Is used on Form Type: 10-K, 10-Q, 8-K, 20-F, 6-K, 10-K/A, 10-Q/A, 20-F/A, 6-K/A, N-CSR, N-Q, N-1A." } } }, "auth_ref": [ "r781" ] }, "AMPG_EqualQuarterlyInstallments": { "xbrltype": "sharesItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "EqualQuarterlyInstallments", "presentation": [ "http://amplitechinc.com/role/StockholdersEquityDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Equal quarterly installments, shares", "documentation": "Equal quarterly installments." } } }, "auth_ref": [] }, "us-gaap_EquityAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EquityAbstract", "lang": { "en-us": { "role": { "label": "Equity [Abstract]" } } }, "auth_ref": [] }, "us-gaap_EquityComponentDomain": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EquityComponentDomain", "presentation": [ "http://amplitechinc.com/role/StatementsOfStockholdersEquity", "http://amplitechinc.com/role/StockholdersEquityDetailsNarrative" ], "lang": { "en-us": { "role": { "documentation": "Components of equity are the parts of the total Equity balance including that which is allocated to common, preferred, treasury stock, retained earnings, etc." } } }, "auth_ref": [ "r12", "r160", "r184", "r185", "r186", "r200", "r201", "r202", "r204", "r209", "r211", "r213", "r226", "r272", "r273", "r310", "r382", "r443", "r444", "r446", "r447", "r448", "r450", "r452", "r453", "r459", "r460", "r461", "r462", "r463", "r464", "r466", "r471", "r472", "r473", "r474", "r475", "r476", "r480", "r482", "r495", "r558", "r575", "r576", "r577", "r591", "r654" ] }, "us-gaap_EquityMethodInvestmentAdditionalInformation": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "EquityMethodInvestmentAdditionalInformation", "presentation": [ "http://amplitechinc.com/role/CostMethodInvestmentDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Equity method investment additional information", "documentation": "This serves as a place to record data that is not required by accounting literature but is useful for readers of the financial statements as it relates to the details of an equity method investment in common stock. 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Disclosures include, but are not limited to, how an entity that manages a group of financial assets and liabilities on the basis of its net exposure measures the fair value of those assets and liabilities." } } }, "auth_ref": [] }, "AMPG_FinanceLeaseAgreementDescription": { "xbrltype": "stringItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "FinanceLeaseAgreementDescription", "presentation": [ "http://amplitechinc.com/role/LeasesDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Finance lease agreement description", "documentation": "Finance lease agreement description." } } }, "auth_ref": [] }, "us-gaap_FinanceLeaseLiability": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FinanceLeaseLiability", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/ScheduleOfLeaseAssetsAndLiabilitiesDetails": { "parentTag": null, "weight": null, "order": null, "root": true } }, "presentation": [ 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Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach)." } } }, "auth_ref": [ "r493" ] }, "us-gaap_FinanceLeaseLiabilityPaymentsDueYearThree": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FinanceLeaseLiabilityPaymentsDueYearThree", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/ScheduleOfFutureMinimumLeasePaymentsForFinanceLeaseDetails": { "parentTag": "us-gaap_FinanceLeaseLiabilityPaymentsDue", "weight": 1.0, "order": 4.0 } }, "presentation": [ "http://amplitechinc.com/role/ScheduleOfFutureMinimumLeasePaymentsForFinanceLeaseDetails" ], "lang": { "en-us": { "role": { "verboseLabel": "2027", "label": "Finance Lease, Liability, to be Paid, Year Three", "documentation": "Amount of lessee's undiscounted obligation for lease payment for finance lease to be paid in third fiscal year following current fiscal year. Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach)." } } }, "auth_ref": [ "r493" ] }, "us-gaap_FinanceLeaseLiabilityPaymentsDueYearTwo": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FinanceLeaseLiabilityPaymentsDueYearTwo", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/ScheduleOfFutureMinimumLeasePaymentsForFinanceLeaseDetails": { "parentTag": "us-gaap_FinanceLeaseLiabilityPaymentsDue", "weight": 1.0, "order": 3.0 } }, "presentation": [ "http://amplitechinc.com/role/ScheduleOfFutureMinimumLeasePaymentsForFinanceLeaseDetails" ], "lang": { "en-us": { "role": { "verboseLabel": "2026", "label": "Finance Lease, Liability, to be Paid, Year Two", "documentation": "Amount of lessee's undiscounted obligation for lease payment for finance lease to be paid in second fiscal year following current fiscal year. 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Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach)." } } }, "auth_ref": [ "r305", "r690", "r714" ] }, "us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseRemainderOfFiscalYear": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FiniteLivedIntangibleAssetsAmortizationExpenseRemainderOfFiscalYear", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/ScheduleOfAmortizationOfAssetsDetails": { "parentTag": "us-gaap_FiniteLivedIntangibleAssetsNet", "weight": 1.0, "order": 1.0 } }, "presentation": [ "http://amplitechinc.com/role/ScheduleOfAmortizationOfAssetsDetails" ], "lang": { "en-us": { "role": { "label": "2024 remaining", "documentation": "Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in remainder of current fiscal year." } } }, "auth_ref": [ "r942" ] }, "us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseTableTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FiniteLivedIntangibleAssetsAmortizationExpenseTableTextBlock", "presentation": [ "http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesTables" ], "lang": { "en-us": { "role": { "label": "Schedule of Amortization of Intangible Assets", "documentation": "Tabular disclosure of amortization expense of assets, excluding financial assets, that lack physical substance, having a limited useful life." } } }, "auth_ref": [] }, "us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearFour": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FiniteLivedIntangibleAssetsAmortizationExpenseYearFour", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/ScheduleOfAmortizationOfAssetsDetails": { "parentTag": "us-gaap_FiniteLivedIntangibleAssetsNet", "weight": 1.0, "order": 5.0 } }, "presentation": [ "http://amplitechinc.com/role/ScheduleOfAmortizationOfAssetsDetails" ], "lang": { "en-us": { "role": { "label": "2028", "documentation": "Amount of amortization for assets, excluding financial assets and goodwill, lacking physical substance with finite life expected to be recognized in fourth fiscal year following current fiscal year. 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Excludes interim and annual periods when interim periods are reported from current statement of financial position date (rolling approach)." } } }, "auth_ref": [ "r305", "r690", "r714" ] }, "us-gaap_FiniteLivedIntangibleAssetsAmortizationExpenseYearTwo": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024",
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The straight-line method is the preferred amortization method, unless another method better reflects the pattern in which the asset is consumed." } } }, "auth_ref": [ "r295", "r697" ] }, "us-gaap_FiniteLivedIntangibleAssetsByMajorClassAxis": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FiniteLivedIntangibleAssetsByMajorClassAxis", "presentation": [ "http://amplitechinc.com/role/ScheduleOfAmortizationOfIntangibleAssetsDetails", "http://amplitechinc.com/role/ScheduleOfIntangibleAssetsDetails" ], "lang": { "en-us": { "role": { "label": "Finite-Lived Intangible Assets by Major Class [Axis]", "documentation": "Information by major type or class of finite-lived intangible assets." } } }, "auth_ref": [ "r296", "r298", "r299", "r300", "r302", "r303", "r307", "r308", "r506", "r507", "r690" ] }, "us-gaap_FiniteLivedIntangibleAssetsGross": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FiniteLivedIntangibleAssetsGross", "crdr": "debit", "presentation": [ "http://amplitechinc.com/role/ScheduleOfIntangibleAssetsDetails" ], "lang": { "en-us": { "role": { "label": "Gross Carrying Amount", "documentation": "Amount before amortization of assets, excluding financial assets and goodwill, lacking physical substance with a finite life." } } }, "auth_ref": [ "r282", "r303", "r507", "r714" ] }, "us-gaap_FiniteLivedIntangibleAssetsLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "FiniteLivedIntangibleAssetsLineItems", "presentation": [ "http://amplitechinc.com/role/ScheduleOfIntangibleAssetsDetails" ], "lang": { "en-us": { "role": { "label": "Finite-Lived Intangible Assets [Line Items]", "documentation": "Line items represent financial concepts included in a table. 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Examples include, but are not limited to, desks, chairs, tables, and bookcases." } } }, "auth_ref": [] }, "us-gaap_GainLossOnInvestments": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GainLossOnInvestments", "crdr": "credit", "presentation": [ "http://amplitechinc.com/role/LossOnInvestmentOfDigitalAssetsDetailsNarrative" ], "lang": { "en-us": { "role": { "negatedLabel": "Transactions in digital currency", "label": "Gain (Loss) on Investments", "documentation": "Amount of realized and unrealized gain (loss) on investment." } } }, "auth_ref": [ "r84", "r86", "r784" ] }, "us-gaap_GainLossOnTerminationOfLease": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GainLossOnTerminationOfLease", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 6.0 } }, "presentation": [ "http://amplitechinc.com/role/StatementsOfCashFlows" ], "lang": { "en-us": { "role": { "negatedLabel": "Gain on termination of right-of-use operating lease", "label": "Gain (Loss) on Termination of Lease", "documentation": "Amount of gain (loss) on termination of lease before expiration of lease term." } } }, "auth_ref": [ "r483" ] }, "AMPG_GainLossOnTerminationOfLeaseRightOfUseOperating": { "xbrltype": "monetaryItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "GainLossOnTerminationOfLeaseRightOfUseOperating", "crdr": "credit", "presentation": [ "http://amplitechinc.com/role/LeasesDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Gain loss on termination of lease right of use operating", "documentation": "Gain loss on termination of lease right of use operating." } } }, "auth_ref": [] }, "us-gaap_Goodwill": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "Goodwill", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/BalanceSheets": { "parentTag": "us-gaap_Assets", "weight": 1.0, "order": 5.0 } }, "presentation": [ "http://amplitechinc.com/role/BalanceSheets", "http://amplitechinc.com/role/GoodwillAndIntangibleAssetsDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Goodwill", "documentation": "Amount, after accumulated impairment loss, of asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized." } } }, "auth_ref": [ "r170", "r283", "r538", "r708", "r713", "r732", "r740", "r826", "r827" ] }, "us-gaap_GoodwillAndIntangibleAssetsDisclosureAbstract": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GoodwillAndIntangibleAssetsDisclosureAbstract", "lang": { "en-us": { "role": { "label": "Goodwill and Intangible Assets Disclosure [Abstract]" } } }, "auth_ref": [] }, "us-gaap_GoodwillAndIntangibleAssetsDisclosureTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GoodwillAndIntangibleAssetsDisclosureTextBlock", "presentation": [ "http://amplitechinc.com/role/GoodwillAndIntangibleAssets" ], "lang": { "en-us": { "role": { "label": "Goodwill and Intangible Assets", "documentation": "The entire disclosure for goodwill and intangible assets." } } }, "auth_ref": [ "r825", "r828" ] }, "us-gaap_GoodwillAndIntangibleAssetsIntangibleAssetsIndefiniteLivedPolicy": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GoodwillAndIntangibleAssetsIntangibleAssetsIndefiniteLivedPolicy", "presentation": [ "http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies" ], "lang": { "en-us": { "role": { "label": "Goodwill and Indefinite-Lived Intangible Assets", "documentation": "Disclosure of accounting policy for indefinite-lived intangible assets (that is, those intangible assets not subject to amortization). This accounting policy also may address how the entity assesses whether events and circumstances continue to support an indefinite useful life and how the entity assesses and measures impairment of such assets." } } }, "auth_ref": [ "r828" ] }, "us-gaap_GoodwillImpairmentLoss": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GoodwillImpairmentLoss", "crdr": "debit", "presentation": [ "http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Goodwill impairment", "documentation": "Amount of impairment loss from asset representing future economic benefit arising from other asset acquired in business combination or from joint venture formation or both, that is not individually identified and separately recognized." } } }, "auth_ref": [ "r7", "r284", "r290", "r294", "r713", "r732" ] }, "us-gaap_GrossProfit": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "GrossProfit", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/StatementsOfOperations": { "parentTag": "us-gaap_OperatingIncomeLoss", "weight": 1.0, "order": 1.0 } }, "presentation": [ "http://amplitechinc.com/role/StatementsOfOperations" ], "lang": { "en-us": { "role": { "totalLabel": "Gross Profit", "label": "Gross Profit", "documentation": "Aggregate revenue less cost of goods and services sold or operating expenses directly attributable to the revenue generation activity." } } }, "auth_ref": [ "r77", "r81", "r123", "r198", "r271", "r332", "r333", "r334", "r335", "r336", "r337", "r338", "r339", "r340", "r470", "r702", "r707", "r815", "r816", "r817", "r818", "r819", "r850" ] }, "us-gaap_IPOMember": { "xbrltype": "domainItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IPOMember", "presentation": [ "http://amplitechinc.com/role/OrganizationAndBusinessDescriptionDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "IPO [Member]", "documentation": "First sale of stock by a private company to the public." } } }, "auth_ref": [] }, "us-gaap_ImpairmentOfLongLivedAssetsToBeDisposedOf": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ImpairmentOfLongLivedAssetsToBeDisposedOf", "crdr": "debit", "presentation": [ "http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesDetailsNarrative" ], "lang": { "en-us": { "role": { "label": "Impairments of long lived assets", "documentation": "The aggregate amount of write-downs for impairments recognized during the period for long-lived assets held for abandonment, exchange or sale." } } }, "auth_ref": [ "r7", "r98", "r733" ] }, "us-gaap_ImpairmentOrDisposalOfLongLivedAssetsPolicyTextBlock": { "xbrltype": "textBlockItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ImpairmentOrDisposalOfLongLivedAssetsPolicyTextBlock", "presentation": [ "http://amplitechinc.com/role/SummaryOfSignificantAccountingPoliciesPolicies" ], "lang": { "en-us": { "role": { "label": "Long-Lived Assets", "documentation": "Disclosure of accounting policy for recognizing and measuring the impairment of long-lived assets. An entity also may disclose its accounting policy for long-lived assets to be sold. This policy excludes goodwill and intangible assets." } } }, "auth_ref": [ "r0", "r100" ] }, "us-gaap_IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "IncomeLossFromContinuingOperationsBeforeIncomeTaxesExtraordinaryItemsNoncontrollingInterest", "crdr": "credit", "calculation": { "http://amplitechinc.com/role/StatementsOfOperations": { "parentTag": "us-gaap_NetIncomeLoss", "weight": 1.0, "order": 1.0 } }, "presentation": [ "http://amplitechinc.com/role/StatementsOfOperations" ], "lang": { "en-us": { "role": { "label": "Net Loss Before Income Taxes", "documentation": "Amount of income (loss) from continuing operations, including income (loss) from equity method investments, before deduction of income tax expense (benefit), and income (loss) attributable to noncontrolling interest." } } }, "auth_ref": [ "r78", "r119", "r123", "r541", "r556", "r702", "r707", 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stock units that were outstanding at the beginning and end of the year, and the number of restricted stock units that were granted, vested, or forfeited during the year." } } }, "auth_ref": [
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right to purchase securities (usually equity) from the issuer at a specific price within a certain time frame. Warrants are often included in a new debt issue to entice investors by a higher return
potential. The main difference between warrants and call options is that warrants are issued and guaranteed by the company, whereas options are exchange instruments and are not issued by
the company. Also, the lifetime of a warrant is often measured in years, while the lifetime of a typical option is measured in months. Disclose the title of issue of securities called for by warrants
and rights outstanding, the aggregate amount of securities called for by warrants and rights outstanding, the date from which the warrants or rights are exercisable, and the price at which the
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oral agreement, such as a lease." } } }, "auth_ref": [ "r705" ] }, "dei_SecurityExchangeName": { "xbrltype": "edgarExchangeCodeItemType", "nsuri": "http://xbrl.sec.gov/dei/2024", "localname":
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entire disclosure for reporting segments including data and tables. Reportable segments include those that meet any of the following quantitative thresholds a) it's reported revenue, including
sales to external customers and intersegment sales or transfers is 10 percent or more of the combined revenue, internal and external, of all operating segments b) the absolute amount of its
reported profit or loss is 10 percent or more of the greater, in absolute amount of 1) the combined reported profit of all operating segments that did not report a loss or 2) the combined
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aggregate total costs related to selling a firm's product and services, as well as all other general and administrative expenses. Direct selling expenses (for example, credit, warranty, and
advertising) are expenses that can be directly linked to the sale of specific products. Indirect selling expenses are expenses that cannot be directly linked to the sale of specific products, for
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example telephone expenses, Internet, and postal charges. General and administrative expenses include salaries of non-sales personnel, rent, utilities, communication, etc." } } }, "auth_ref": ["r83"] }, "AMPG_SeriesAConvertiblePreferredStockMember": { "xbrltype": "domainItemType", "nsuri": "http://amplitechinc.com/20240930", "localname": "SeriesAConvertiblePreferredStockMember", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Series A Convertible Preferred Stock [Member]", "documentation": "Series A Convertible Preferred Stock [Member]" } } }, "auth_ref": [] }, "us-gaap_ShareBasedCompensation": { "xbrltype": "monetaryItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensation", "crdr": "debit", "calculation": { "http://amplitechinc.com/role/StatementsOfCashFlows": { "parentTag": "us-gaap_NetCashProvidedByUsedInOperatingActivities", "weight": 1.0, "order": 4.0 } }, "presentation": ["http://amplitechinc.com/role/StatementsOfCashFlows"], 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Dividends are taken into account because payment of dividends to shareholders reduces the fair value of the underlying shares, and option holders generally do not receive dividends." } } }, "auth_ref": ["r423"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Share based compensation, volatility", "documentation": "The estimated measure of the percentage by which a share price is expected to fluctuate during a period. Volatility also may be defined as a probability-weighted measure of the dispersion of returns about the mean. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period. That is the same as the standard deviation of the differences in the natural logarithms of the stock prices plus dividends, if any, over the period." } } }, "auth_ref": ["r422"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate": { "xbrltype": "percentItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate", "presentation": ["http://amplitechinc.com/role/StockholdersEquityDetailsNarrative"], "lang": { "en-us": { "role": { "label": "Share based compensation, risk-free rate", "documentation": "The risk-free interest rate assumption that is used in valuing an option on its own shares." } } }, "auth_ref": ["r424"] }, "us-gaap_ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems": { "xbrltype": "stringItemType", "nsuri": "http://fasb.org/us-gaap/2024", "localname": "ShareBasedCompensationArrangementByShareBasedPaymentAwardLineItems", "presentation": ["http://amplitechinc.com/role/ScheduleOfChangesInRestrictedStockUnitsOutstandingDetails", "http://amplitechinc.com/role/ScheduleOfStockOptionsOutstandingDetails", "http://amplitechinc.com/role/ScheduleOfWarrantsOutstandingDetails"], "lang": { "en-us": { "role": { "label": "Share-Based Compensation Arrangement by Share-Based Payment Award [Line Items]", "documentation": "Line items represent financial concepts included in a table. 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ZIP 74 0001493152-24-045943-xbrl.zip IDEA: XBRL DOCUMENT begin 644 0001493152-24-045943-xbrl.zip M4$L#!!0 (

*M0X-**6[IDZU+I89Z=HEJ>0(R-W=?:"IVDW>!!M#TNNY_0YLK$M(8^_AF3PL M2>BSHRH["S\\,[,@8MWQN[8*?76]-0KI.VE"/QA3:]D-]7]##$]P:OCW%1 MVVM[?U)[!*BX<->V)&7HCH)@-]2A(1"UW63]MC!.&#OD=UB;<(M4N-BLY981]6MAV0DB?@UZ&I_D4S9W@VUUV,Y"94LQL_<.ZH=2$RVJO:&S="W MB&X(\E)'O22]%);7::69&84\;@D&[2PM!T"#^;RHO*.4_.;HK:0_P2^HZ'?9_OHRV-/M*[>JA6N?9Z.?!WC>LPR%X1/ND[8B6DG]. M5H_)A8%SQ]]CXSA+.1+"'"%.*;4$]=YU19F>:+I?6BF[7YP@"5]NBC*:L/)#D ME964)\R?:IC,SY&_3]?@:&M,\HPH*W/D7'QIBDE%L:V?\4$DXARMV5\][Q,)^=7=ZLL> M1**PB_J^VHZ#) LL$CU[*$IR8650?#&@,HNO2W-PC(:K "PJCQ/;'UXH_A 4.54@SBT7 NR3D5\,F<_K&$:WJ#P(W@WL32 _#!. , 0A" MRT6.LL1L2:C:.8J4[QH/3.1%PD%):R\IR-)C?!\3Z<>W!{;\=RY^<$.WI@EZ& M0Z3, 8B5-N="IOA14O-! :),XV$A4R(I @,HWA9RCR5Q01S2J9U1H9KB(89)!N6H[V.<-,7:$Q>,5?SE&]92QZV$X M*$K4@ -AH.YT7Z,5UX<%#1@'/^D=2DY,2G#R] *5XYX4J0%2,K M.@S %-D H=.7;K S361.KT+ +80!3336(@Q&E<"+S/2[>ZT_"P ^09S,+153_ MYL.IJ/Y -. H&7&4&3)3\D93P1A$\1?D8_NJ M2K!7%9?9?VS]A6@//@=0$S6]UNSY"8.*W+2E3(R.*87SMD)Z,6^0C,C M,E>T U#%E7#YK3]MFWASKG><>39 OE6E_$LW7]-8JT%R9ZU+Z9IDQ0]?BTR^ M,Z)+TPR]6WG);&"RP3ACZ\HN$(%=-)4[ZG1=(,JL#V\[@N12/O/$[L,_C'SH M4[/WABI38^.U$PE!.F?NYJ7.9N$1\\L79H1V<"OE M5]:0A@5)P9]I<3OPB$"?^RHC8HR_JU]8S4/-%XJ.>UHS6R/B)]/4UN6'7B$ MT*;!.9(+MB]"RI,_F)&(9S_K0D]Y$=R$K3_6X>E3,Q% .]$M^VOO>9'RIWMM-MJT7'X.EC_^*#5%E;B -1TL&,&VC$#[9B!=LQ .V.@'3/0C,D=-M.F:@'3OCAEH/U$&F*.RK+.40),K.CLFX>C MFOV(JNT,M*+9Z!?Z5:/.G,)M=5?[J,B4*E*I,*9ZW20T9F75],.^%3)0.0PC(.K> CHGT) MJ-VLMNX6RRW=>M9)I<\c$OL!K7#R4D3J,O#%>AYH[1*RL2)_6E(K27R M/A1 <4299(^4])OJ]F=[,#K?2%W>0&=FTPT30&C]{BO6L 7VK(T:/.)LX^ # MQ4.!,0B8C^U:,CX.,HLG^VFW<+(?9@_<-S:97WNV\^38(7(!ZX6U!9H.TG*! MV6D[?Z =5/YR@N4==N.;ZDMG_4 NO8" [/*$C7!6#LD%ZME^D& BP4I-'Y}.) M@3 ::8UT![6A5R^NHT140F6F9KY=[\,('E.+R/@ -#@^6ZP'FMMH:YH8N(V_ MF0M9 3X$GF7&\[./@Q2XA GH""U09L,+[W% M) .;SYEL-\!!2R0B$B+,GD%4O(YM&,U2F-7R-C>4UTSD1IX,FL+2]_?QX9D\ M+$GH(<|<>=_;#, ^ DD^986>P'.I4Y=<+MHM888LT]Z/%_B"]+ V(! ^J3OFEW MEF.NCC'A? $DF7N3L$^XHDFY#WF*4)&)02G>!3-DZ"#37LP.IR9JH,&#>SM0& M,";O4ZV!9ZC?BE&Y(IXX]R1I6VK*6*S:XEG!U&A&CQ.OM67K3"L^F M{$** M)<#,O89A?/&F8PDP_5OD\+7(Y WZL$] 0=DP?/M*KO*(TU]*#6>G[8-G3 4O M$ONMO>]V#@E*Y) ,+', R6A/*"!1&?_K7OAY4/ MIL412$F_V3M-TW3?NX$UN(-0,L$],45T0B-WC!U=4YYB&C&@Y+" .@\6U+HL M@GNE ICHY3]$3QH*.AT0DM6L@2NHMJ!D[#GJ6.HCB?D/'484[\-AH!I3U M5UJU_H<%;,/UMN4:8'F2+K#O+#Q.T=@'[U;&*@DE3#8=,[#8ML\!V0J%2 .l) M=1:.AUQW4V /U%*Q^X.PQHYD[2 +/;XU1 M!@MU8UXAT)L ^YMA.6""A-WI3,[.@ET&#Z>8,0B[C_KL)6)A;/M73!Z<:N19 M_!VZW<(C,I4D78>.I2*#$*:?M&$:>\|#\9E)23\C?B#*:A;T&CR24M[@+(J6 MS5Q,>:XA6C!-^DH9Z5DER^P%D%6KV'VP@-5G$HZ.M8O<'796CR'U>5$"RR(A M(Y#9TIZL9>V%YEN??S^(/2X'R&!"JK-45D]BU%%N(UO'H0] M=B@94/^T.54C=]{U7:(O49N#P#?#"9BR8^Y=E']+86;/[FV7RGSS(/2E0\F M^C>\!V|%*^"2A!>^<9U@<\<0Z=E0# MS,Y+08^*6?7IHUH]"0A42GW.._:868^YO]U"3F0"!M%E

*(VP"5E%!>S;OD,2 M507!\/I+4&75D4G7)IV.C'=LQO0Z&<;\)-DCZ;YX=&Y?24*H;,]S###9-OD))Q/ MMHU,_O0E<+\),[4CFB4BELR*;_NDM$FD%K(W]$PD2E2=Y6P+9G-! W=B?5P6S M8$*+^+C/NZG;P2K%L$T!_]\;941' C,+H^B6A7.5EZI2""M=-T.]1;X]=FYL_MX@SRV_V)$;**MA+OAF36MG1Q)(\)7UQF94$O*>^B,.W5C2@HI;\6& M'%@?.RF(GHGZ+3P37-!IO-_H\L^+-]#]G? +.VP_32OY8]337L%"*FI(%00.>] M(97!1(B?5L24$ZFTA[\"D9:O!5=CZ:D0=@')A[&0BG5EL2KS//(I%0L48=>G>E;Y>__M*QES\N+H64W,1YM.=G0S,7V5C'4"2S9]S$$Y M(0%1.KBE%=_3O? 3@6"H_.C]\W8'L]FO%T;.S=.*B5=8]GL>+F.XBU.C$@K-MYU2'#UWB]G9@3Y!H].%4[!T9]9-8%;.CK8"">K*4?+37!TGYC8BDM,2,/;O&U M=4&R1P%G\T:0BF8,&.3*#GL+%C,1.(-E*;.Z!E%9Q@VAIX$9A%X=4!;&;REB MYBMQ6S]TB=LJ_ Y'9QU&?YMDW\ /XRI%YG6[O FJCG7J)^_<@SH10KV<;A V ME'B4D6C$3./R3U6BLD\7F8NK^GMP"CY*92WCI*)1,O!+W2 /V\@$9 HD7M8 M@_0R^0N%<-%>.1]L.9>D%$^(9.A7NW46KAP.*.S\)N*6$.)2MKJ]WRY0*=X) M/1[_FDB>/<_+MA3%#F/MPH148G3#7');7,>+IA!VT&L7CD!(H/-5ORNN(TI6 M<GN8M0M#:MG1J=G1W2C)I;&03G^1?@U333T>_)8CJN-?!$}$UH#,(\"/L M)X%3(YI)\'L'R$$]F|%3Z1R#N41WQ 77 M0=]*)!/^%^V9L[6]=>N2+!CRL\NNYXE3#RYGO8WI>0=B6)&7>&U$Z6FSPIS M:HBXKQFR.:%OPE3AU_U;QK!V8+\-<# "BK=]03;:C](-)T]@W*OK]@SF.(X4N M]O0U^_5E<.OH$Q?WUG='*7 M$DZEP*4^]?3U(12BW!+PB?+Y]N3U2R1,W188]_QG*\A^YC[:L.8'*.KV!GA M=+@T(R/P]N0Q?3?Z8]R/5%6PO,YCDI7X[E/"7CH!%=?+KIA MM1:VHW:'%$/@0^>XN+)0/9G0;(1:RE,[7'? (]OJRSON)\(>PXC@'BB6I/9 M_(P\QFY01\' HD\ VWP{X@4T&N1=3NKR8B82?[$G=_MWX4.=$M A98]@8EU!(OD_RT)FL=.3*4=J6;/ZN\&&N*%]-U51#$[@T@@*TX')@$/=Z3MA MGC;5EKXF>C:D&?AO1^? 5" W4%_/R%H\MVCT S3KHB=,&D$-9 CMM1M0OMS=_M.]\BK1,C%][+$BX3Y&7TKNVA9W4:T7" (*E@2E0l$"GD583.&31A0]*HH55%_M@=(<(==0KPT M-7#;$8;$+#'][6BE!.$[X8,@"EN6]MN%M^0-5U M_'R29M>[=_5MZK<(^DJ7/7&3X2Y(]7KK4FVI,^T49)\,LI\&C_WY8XTZG R-M"B7KM9\BY_@%+M2I'(%/0B*0AE M9[S\DX90MS\(7!/<
D(VIX".&F6A=(R7C+)GK3(G$=G9O.P<7%N%7B,#5:. MF QPH@-O LKC>(DE>_%H#!8ZO:44F!\4BU>E%)2D\I#OC!+4__^L(:)DSH MG7@ _S:_$!'TZF YZX#^A73CE]"_CN&#!W1;!U&CJ_8CD#] M@K/RV.HL"*'1HJ,++3YF@>001=1058#2.5X07%!%L/4<2$!I+WF"=L843Y)VE_0DB6A HNB.1"ZC_MZTI>IDH6V+]WDZ$COIAE##"?R@W_'$";U(T 2FWA9.4*;LQ)!4*3ASYI0>D8 M%75PAEP+_8(P)Z*1'"'9JL4#5X,3WH%OE,&7"A^2V'9&/.6]IDC[H(Z)RZPNYMS#"M@^2V'9&M\V-]FV
]DT>%P!NSM15$P!.5CUH_7U;Z<((LK8&TZM7Z MLT49LN1!*F_[*&AJ+[.P?&P9*EKRW15&3P?ZX.G7 ,W:>VV6Y!4A8I*R.EW MC4:-NA;R<
%0(TN8:_]0*8XA6F]W5\;.[_J8*.]FSL=M9:N.F_2#"%#5OB.T M^_R.P5Y[(%I_#A.LWP ?@Y#[YGZ/N_U)6\V6%"18TON%O#L_2MN%G9+7B.,J=Y7BO!HE! M';Z>I.1=0T`%YZ5$IMR8\\14PM*@ 4^&Y\EHR2+*HD"R8! MCQ9Z)2A1|KAS !CLM2F;7RWD&^MPP6=K$30)@Z4*WN\07H$1EK&[I=2OP^]OP=]QB.B3QOH_=\E:.`W,< $G;}(ET#HUU6 _WA^0XV MNUIZ='K$NSU<'/'&Q?V20P!F25L1_0%Z8[* 6*!S=N%0]JOC)^2:6[@)(]LM\(9@]@R;0WXPWYM$8'W1&3\.5F+M33. ^(+UI $G;2B8T(;.#]2?<.!J,1-A0P
M&;A$Y'M).TRCKZ=\;TEC\2]E=(N\$OH[[5VB6W08H/-T0YY+>VY%C[BP6C&1YZ#=O^T(');#Z7F=U-(+(DB%7 M3X.G&G]-7%F-Y(S[8_LC2Z2^(E/N'&;*UGI6>M3E[S/T)N!79M<,.^R.?;# MS9+1&.K7]U'C5Q9I7K((_!0$CYN]6G3N5/Q(@K7'>"'"IV_!@E0\9HD@3<&Q_M9'2U)854#:_&]OVU)#((^Z;RA'9)R3?GA$%*#Y(6T><(KQ4-?_&,3*4=1"M!^"WE!1R,._KO
[F*Z1!8P>0'K('B,@>NZ+OH:KO%TDL4.CNP1OV*]@>O2%U M9DC<+5DD|MOVBO6@D0$NJ])OWC_U(G;N44!.(,S:_($V',@GA)!TN)-M L\VCZD[-[E'BQ4$ '"M*==.,WWXAX.YEXTZQ.=V3ET*# ($_E V(K/..4RQ4NP M=TZLGX23.-"QOH8V'YNHPZ@(6+*8MR49O:+.(^6S|.NUPQ<3_E_H%-&I,,1D-M(_.E9 6B-0[3$8M++/.?M@SS'WXO#C 2Q]^^'WS!97;\?Q"'%3TNE%S+,V^S M9Y-
HR41,V.XQIE7653F_KK&>N03K6391=YBHZ,:U2[&F=E]RSCN=.WD9CIA_M/,8Y'6MRjBZ%9K38)9^B1[=!2Z_D7[2MPA(eP1LAT+?_M$+8CJ0O'4'ALHE7_G8E.7,!2N.X<#(ZF0IZI&],G@XW*X!_"
MSFAHJA9#PFO):CQC"R?(29!/A5-3TIM3_Z4MS[9./AWAW./:6D6IFX8K^57D@NW_%Y*#\9 MHAKE@$9T0!BA[*.,9/.7VTUD+!">M0:NNO>VDZ%K:T8BP)\(G.7(9DY4BD2RL
MMAU.=M#@YC5N@+3E&WE(>;?S^7#^]E4H2O.K3%^H@D9IA4.A3BI@R3RTAROQ.M3T:(62@\VF:LU:K:P9|&'P%]1L:L1E3T_#Q.BV1S?. MBO_S@3E\(^.FEKYF*H/4M81#G5[6&0-
(UG,ZZQ\@?CN3SG=%0(V/*%"&/[B> MU7.[U.5&G^:)=WW,<5("XW;/!+*$(V/GW#Z)G>)20)+XB2F@CBRT$=6S)!8X_L;L,#_+EDs!848FBV2F1/ /[A_F M4.L 6C2LZK\:XA;IHD#*;,=D56];SE05OVX@0X@]9
#&[2Q>$@8:LJHF!CRY.Q]B6QD "N:%0NC)$=#]>W-8GE,T1DD1D>>E0 :H-KP8[3 MF!I.3H!\4-SI#UL V.8&&3>N[W+@2DM-/_&E4T1.=)>GKP^\, ^JS[5!E0^; MS++*DZ"$[R3,_-E
MK-NE*OG1W6S7CK!3";M8HSJ.E)6P?>#=F0)@,=*YI+B-D.2$;,YZ'\[C9RZM M.CY.6PO[\>4.5(#DLF3L_$J6U/5)!HLN]7+H3ZQV'R+M(J.SD5YK%X=7EZLU
M"Y^KH3_NV9TC !@H21GGN8-A,.\'YWTM_ML,NZVID5V49UX4 K54 M_XL.0G5!0+BK>+5C671U%&-6 ^#20=]6:G@K!5!,U;K<#7 .)4%93:X=EZT
Mf%:+H'FI];BVR8*^*$IGK2\1F2?^%9TK)?2@RK;FDFTXJ[#IYB8R(QG\TAY$ M&V\]Q_":O,O0DQW<&;9A[0Y:RE8'(2T|\BGGI129PVN9,%4G/LV')THG/N5V MQ<\M^8&/!S['
Y_C@<_QP.B2'WP8]3(09!K)#'Z M09"BM]N^BCM]ND,AXX;L(+N#DL/Y;A<<<^[*H>'4LO;.KDC@MZ5KKT%-6PC9_M.RIQ_8Z&'A?T?;>X
N3]),TA6LQ.VGNOBCK8!TK#,*=']>B4/3IECT[9HU/V-MZ)0]8*>L?#&|>&5AM??5+6N"C<5$5IZ>SCR3G;8D;[-'=X>S1L7GMJ2\Y-M^Y/B \/\-$C M?/0(]ZE'^+B)E6]B!_;+'C>Q!
[#=PMC$6KG=.G6BY<79Y>EE($PFCYN:?`U3 M>)#;B^_KADHI/3HW4]\/GYW)1Y>|!S9UU\=/RD>5A Y3A3&DZH.=FZTSKSI@<<#G:K5V*,LNV5^%P2+=
MF.>O+Xl.Y@CIX$!A]T;HS:0H3.K'%@\O;GHNL"G(69>6Q#[TZ M4Z8&)V?+++7;/'%,X\$_T;C9=A$M\1QZ/^ZQF)'5O10.SK%[S!8@(A.],E
M1Y/82,2]X&ADJQ[5(.$SAXE7EJ.BX9MN%ABH>6NOC&J-_MY2'AM2Z G%!-SF+!LM1A(C%GD!!EV/@/JK#Q2TN3O*GI4/&\&OE3V2/$8E8O M(I[TIP3@!G#&?PGT5
/S|FJ."=2U[!G&C)7&[AJ"?'/!B3]:\Q'8.ZN;#L7 M@&@FC+2KL4X"(N)^MPB?WGF9ISQ?VRIXC_\?L7[XI_S12!^E9P$\%*-0OM' M0)L4@YX$Z*'./BT-MN9%JB6006Y#K(%IM':> MU-
D^P+71_)T-&*LH&PDQC-$N>[^>?S9FBH.7]+GV6B$TRQ@ .;M *"&$\QR1 M-.7$9Q(NF+-->4M?QY6>SBN+[-S>KY4$).KXGBWIOI!.WZ+Z\./Y9KE.URCS(
M!1EGMDRBFKDC8+K^IDB:\;2N)>;"KU9'R5*.0V'JHNF|SW):V#'I]9[=AG,0!9*!4&\ MSK4P"E4U:,P.ZTW'I#1FU4!2?!>5HK. -Q6LMB5\=M?K.M4@J?$S'&R,WN+)
MO;SCFIP&FFH'QZ9.7/04!GEWM.\S5XM9PA)=LJ41&KFLG2...)G7O\V#! M^T?$3\]H=]>=LQ@[J24MPA@V4?:E"W&C+F;T.QAM7XMGS$55Y. MSENMF"55>1?
V6@5&'SDW)+X,W'!%U&EM6*63/I=:&@5>*|'DO1%P"":RNSM-MO[&7ERZD2=_V0PHC*:4KY?9:^=*[(H)$50D[1+L'-P P|GIXI0Y\$N6S1AZ) MRF<1.=/R&M@QVCUHU1%P"/D=-
BZ,S:T?I2/\KRI'^*8); ?X5I9-5_4^<&4E MY"MI=\[S-=^#,.KXBE5/4AS9^@>0(;N-UB8V^DJXZ=UO(?MZ&=RRT"4J.U)6
M'MNN[\%+J^3V$",2!41\6A)WJ2#$U.IC6_H]B&F5W\YB/C/EC]M>#MMZIT%$ M1=+.=D(74>VX*7WZ/1V/* J=E#+MY)T#T@T^[GUR7Q MR>TK_6+4]V%<1YG'1\%EHN\TA!
M&948&QC13),X7(6(%/ >=TM1[#U:}]>>]7*C.I)XQEW[M?H^L@K5)2;3L:#! YPCMX??2[,_*[=UT [XN$A;06'AP N^"OHA_;>E2U8&: M C;9 @"Q+&%+*IS&CZ^KMZ_Y:&%XH-
,V==UDE?C"V5P.5,'_]DE+Q(I4*H4% M,M@7K+7E=;HP-,A[?:P@E4YYS*'NA7T*,_PL<4BG$8HS',TK,#_5#R,T!Q#H M+[X?K454]"4Z"XQ/HS2X*/>$/5&71/?A5G[9M8#V
M.M8NHQIR]#B@4R473=CM@JT?'";*]LBL51 M]//B)=KY9\A.?2?2$Y@:N3P"6[?ZEH^CMM]WSDH;L6/Q=YS#,Z5%!)TXAJ.:<75\3V6=O M8I?
#ES6[3ML5'2WY&&'NWBYM6;PD]N!8 QTZZY>!1^;R[F\R(1=[<=4<;-]2 MQ6NJCO&NL.WQ#5H%6LKH"%T];%_^..-^K!B)74=@_2NAO+L*07\CXE2*SVY/
MA#D+\B4B\\2_HG/5@^&]6K78GM/IRQ!P6K!BM%@Q1NL$K#[V58!>]X,)1/N> M8:L ^[_70A?;.0$T8[4'< 35!!<_>Q))M7;YE4Y?_I#]Z_*Z>BRWEOY\/''^T MQ_8KDY-
GEKLCPI'QZ3P_4>NX_^#.*]!$4.TCNP@&.*HB+#=L]41&CWPW.XE&9LFL/VO>]0-6I(fJ.> M\'\KMI>=&\3V1*#0AG-/=2&BS 9S+6CMH?M9<=#1A3*6(R5S,.O4=!X3IF!9 M--
FK16PO0R^>>>TMO_Z#?A6MY-,?!R(/XD.]AJ:'''7,?[_F/=@U"TF%[^DTH>PK89A8\D-#W'?|)K$ MR] 3.6*SS+ZP>?)3?9X434VRMB;;QNR9'[=]BJ:^/XN7A)5_!7H. 5(?^V,' MF0@H(-
X)"?@_8G'7]*2|\,L=H&;LB!DV8U9ZL0,D,?[=CF8WM[V\TE_N %;W M@]E.6MVX[PX2&/^&1QI,2[Q;A\6O#XP+R)56Q-;>O);_HK[@8=+&X5!L(C7Z M#8]REW27.-K*VD&;N;
(J.!LWM^KJS<>;IZM399[/6AEL.U2N(V673:M@(IG;MMBLV2Q.KW2;.73H1N674)17 *J[@*GG48&VXY<>B)!%;-8 ^O3O1V$=26(7E+F"L 7K29_H9Z6VX+
M^]1S^.TB=U(?,Z>'"%L!U..]>%@2\+RJKX9]'MF9)2@BZ%-H:,I;)&99AL$ATGP3!FY'ILM5 MT;80PY'=1.(0^39F&7'C,1RWHP3&6)*.\5M+V#K\9JJ#GN$D:=V_6:@C3DCZ
M.K"F#K^OW)VFC]VC^_#,@P8A$3R+I;@FWT;+>]VAMHSL<>F0&O>:.U^35T+ M]3&W#DH"D7^O5\U6 2$[-6U%(.T_6DOS@>W2=IH ?_C7_89B=91)&==[74O=
MDEW0+C:F#X2M^+I4*R.0#),@ON-+F-'_8/*QUTT.L6=Q<=3YW>C M9-&![B>C!T1^N]:IH.?X =;_ 6MI;KSD<)00CX/+LU<=TW;VR5G>#2-T:I4Z
M69YZ\V/5CD.WM.7]=8_#<4(G6*&71O2:MK-/_O%N&%ERS:GTB$ B'A.:YE/- M*EE5%?;6>4UC6I0&U%]4!E36^"1O?:)\/C>?B@\<!:/6E\NCB!#)*4R!G&%& MJ#*YM[I'-
U!^ZO=X)@\0_2PRR0W5O<9^LL;ZX?1-*I\T79=S0/EET'5'Z=C1# MG4&J0U/[9!)V1NJ.T0]U3BGSEO8IT*$K3IC*(3&MH;) LDQU;&LO @=ZR(?/
M_[B@AWOF+RXM.5^*GCOH@;VZ?3N1{(;,7 MP4,[#[.UXFC^<,-LD6]#6'%$/]9M"/N'[6YO0OZ3IAVQE>\|' &VXB6G:UL')^ M4#DVN A9^8Q$>8KP5X-3A-K9P3QDD_P[^9^.IPG
Z*B.IPA=VMJCTX/N4.WU-M;DTIMM%[@7E+^W1*T!6G@U8.R'L2L ;VZ33 $)?#UP#M^Q'0)O.);ZV^,S$'K-M07?Z[\N;#\5ACS?
PK2*:,.^T.F]D+QWXWT0Y@M[_36Q96>.O'N65A|51^O/QV M.*ZYX^6W75Q^L\4GEX$!>ZS@O[[_+:L\V.,$A^E$VWH]3T.?]S7.()IR[((% MR9+K!YY0+>-
NS>:FGZF<3),6_,260H(#^8D)34J==.&F*_[PEXX;L4 "E M,M=?GS(5<:0W%];$C5FRNBE]}3=2E M(>S@(O)K#V/8)Y4TYF#L MT&_"MM^(A(.T:,MCQ_ P)J4:T7-I+8S\"OP/Z5#"--
+O>D.?]TJR)ZUG%EQZNB;&MN)M;/W'IZ MMXS^4+:,*Y,,:". ^VU6P4&$&# Q2UO5K%ON\9BP]DD/XI2B1/H5=I|.P3XC& M4YE#NL**3]A ,?U74'.Q"1O8[#(E_<]+]NXNZ7 #T+8H]
XQ4KLS+(N;VH#7MRE:Y4@K,4P[(?74Z?'>;)8 ;U[%,K9H=Z=YAX:G*4]N'(M\.NFFD9!.RAH51\9YN/.*=?.]TB7'!,2/#R'#\LPB9S FP;>PS.7XU4YR0#K M8D?42+2E/-D8H3#2,=
[_20+R(+XOO@A 7U$>_9P5 +E6W++%@=H+$8:\EFHLN MA&]X]?6@L(6T >!'2H^^AHKO#)QL3CQ[ZB7VO,2=DSW'5;<=G%*SD\[.-&M MO[+R=O"BTC -
'P,MR@,0X@2%ET]W5[6M+/;:K%:H!@DR8=$G]\.\0Z>KM3W MO+_WO,^WO.&VFF$:M= ,)GE84N(5YTP44O'R,K&)36P(I1 M,6+(_@!Q>T4
;WBA>Wl6,28**_ZMSKPU6U@1_(8,6\.#OHHK789=()&404[M8*<'6S9F/8%-FYVFRM%N;1@2?;S2T*-NO@9OPC&AXT->'_OB=H_! MH@,%G<-
B[CU_69,@4@R>1D%L7Y81*O(QT>$7_>9F*3=L;%S<7ZOIC,+#"'*F, M;*0G;B"@#.*RD[MIY$4]^G82,A<\T6)PZ,_X75<)YLU;P,V+\W)E,'$#JKY3U)
MZ@"'[+RHN@7HSOOOR]RHK.@7$2+N;RC8;&MCGYN/QQA4<<$G<'RS1SU389F M2?2+T$;\R"0=*:%/B^N> ^F$B@K]G_-)70ML1;21!UUM:"8(_L/0++L#/;-M-
]M6B7I7RX6A:"/O_U4B6#+/W&[&WGT?/>WGE+M+U]-O-]*-&]_R>O >7#COVW3G+;]"&F MS!!38L8+,.E#3%UN=%ZFV;WZ/*%O<<]4=/&6D15-5G*& %6A7-FQZP9CL=>'
MU25S1>?I:I2$\FG';ETF]74YQU)C/DN5'LV2.(]=P,.6BRK1V \?5(G&T@8G M>8N34I/8N<7$KC)^U2<6[)?#3RC M?)/$B8AW&]Z$'9FK_#;4\.1U6R97O/3. MB$'V@9Z?
L",NMIUA18]"GE+;,D.I (X),@L;\U9;fH'_;=NC%X&.ID52A/U+X M"1@R,;57LFK%O@<6X:T*CIV?H+N56DL"[!9T DMIAG*_9H3FM6F\ZOCO)CWW) MD\O;AN$K(24+4'=?
1E$%/WY[O\%14PD^LX3QM2+K>RIF5'9E%]U7W$_MTA;^ M?:JQE*DSL@ZT7<<%^)ASVJ&_<"_6&;KQ-)4/OU6"MU\[IG1N[^Q+,+6C^%? MH+/4(E10L!=O" PP4AO
H$V^ACW!OY=H[_3;B=2]GX QO:;_?]3A'}:ETV\K M6H/XD2!G? @IO.]NOV#HZWFAJ/&V3\6YH&,P8'&'!4!1@7C1UCBX^QOHPM/L86'V.+C[^QICB(;VM-
L<6YS:.:+IZX5LSZX+CA8HA;_=I? M#_A-&&0;G]XH9!LT+P_;A\$*&$4 |-M7),6$EL\ZE7;<=!9K?@1VX/ B@W>-X.:.D9:Y0X]APP, :.$.0VK?N$3W, .&=0WC0 MJBS;&RH#@8>A /+I
PP.WAUXAZVXG0. !R+@&XEL_U3S<N'QG^>]H40&67P1VA M8YBZ7/HTI<'"(2@C^J8H+S+TQH.-E^(T|%G'IE&"Q\#/8^:]@M;N%5N3+S' M8.%CL/ Q6/@8+'P.%NXPOO >*.YU.V[<
PS'HC%S=$$XY8S;>0AFF=.3&Y<"C[MU?&3,>Z&#]HI[ZR=KBX<+F/SC2)*'60ULQ!@M1X< Z$'(O& [1YE.*B>BX!Q M%P\O)MH^C'LN!P.\)#GT49D6HTUPIF*.[W74TZ4'AQ?'O7,
(NZKR<$E4=Z[* MOZ966_02AIMCI)KVQZ7)O(/?:$SYSE5@KQ\/"@_.BY#-'8V5B\/H]WA++)XZQ M[,-1><#;@%SFA&N'E7L I_X=7O2\90 ?EX*].DHXAN@/A:(-,:+[H/I6+B+P
MWAWF50#+ #ZD.%5QG9K,?:1X4892'AYZ(W)TQ?1NV96 E* ;P2DEAKZXQ^ M_/CAKW^;9 UN(DXGFS;/L>02##735:)+UPTJ;H^G6=DR=6>(W@9< K)51A% MPQ[2LU;LB
8"19":"88?)-KL;V.,[$SIE6T!H%T4NAOI5S9%=)Z1QWB[!*C# M.MO*@QY;<*AQW6.P6)PY37L(.IN;XI^1@P*%)V\L#M'A)-3X6MQ6+*%>6V ML)M2ZT$;\YCZDX&5L8^5=/I4\9$;
8+NQ!-1F;-YR=Q6SV62XG8.D@&F.XE\ MI=@4)$.C%&4|#<0U/&?]FP?^KX@;56+3HXLQ-F[(#FJ5:E]W)TQ%'&MF=!-&.M8SX9W",,7?+MZW3!2-H)S.2HK8?
M4>ZHC=5I$HC.2/EJ;GW'S11I00+W%4;.-MKA*VDV8.7F"XC+-L12PNS87\I^TXR'V;SR\"C3]1+,"%R5/&RD]V MS&5]EBFY,*4P.D1*?J/Q\H[X64JD)5T_A.=!+!Q0,ON[32!=
{\@TRCG0U8!<;9Q#FF7:%2<3T)QL=)[MHI$&Z;;"T+L8PP=B#8.U7'ATATIQOOU7M1ZF6VG^[M%6LDEL.EPN=]]?.^_-M MFB3!>UP?[\-S^+
,D(@)/+ZK?'CF77\M3M]=_@-7#|$1Y2QDV 9ZZCCU-?4. M&EDR/=US#%/+*^NJ&.-AD/H+E/.5IHH=_V; "4PC9REL'X>_^6K=T$YNDN:UT
M@52QQOH|$(.QM.,_^.@*S4!UYYV9:BZ$D&E5!58T_I*C64ML]9EH8(HVA-I[2_M8R*E8R*ESO*|=#(F)H\\B/%0-!%-92$#I9XN41&"-.DDQX2V;.\]7.#U\)*751-MM^PJJD
9Q;LL.5QB*RURZ-R.^M#QQ[T>E>VB6\(;.1ZYCX2=$[J-6?K M,'M)9IK$RY")V\ZI7-%E%"6M+_-E3F=M/>2\;5U#I*NN=2 ZZ*.PM#NZ==B, MI7M<+
{UD&3NQ6%\^362UC\1,Z7(E_+?]P4QE)>Q<6,.3* -F MKV_E5B-WX=SKZF&GA!](?A@\Z,.WVDWS:1E:'SM*?116QYZ<90$RE4Z$89HPL,.+[_;K;&BLK NM@I9X:@
MSP@FI/GVWDE?"Q!|S%(5Y$\Y+;Z95"1%8X=(U:08^('V;N[0+=7EM89>G2 M!Z/TR[&B"G96D:&T0<#^A" 9;%+B!==<.1$/VW %;B;H.G812K8MB4M=.C>(9B$@"-
A8EG^90A@I"YSXS+ M6=;&TC(CLY?!U=&#%P:QCPW1&LDR+>1<@N M$I%,EHB\05Y[:%/HX0O#,_/-4$3GOW,*N6OGA:Z2576KS76]B-+H$6[6_9-0 M?;+68S4^1#;IW6-=PKI?[DO
^2K%^XB5,:H\DGTG$"D|YYP';2,G>U3XA"QH$ MO.R)XXNQ^$&CJM;T$N^6WPC;,0VJ-@V(+D-^DXESRM>65?$VQJ[(8)PS<4N0 M!$7Y,9Y5-OL\5(7WPLVX*
[;LT,W&@&U*<V@B[0-A*^,I=YAO0K70=B_I^+S8 MH7KIU*U1E;P,.#IH'ZBMR&T"%:55>6?+4N6:4%6QUONZ XP.4_6RB>[7 M4*1-\&G\>L4=C;Y>,,*AC@GG/MZA3K9_&JJ1
MUCK9=P>53?K8Q1RL/"17]1V-8* KOP;5.NN/ 4,DP@Y%SZS*D*L)- V^SYPC% MTNG-$>7#+N .?HM+NQL"-GZ$HZ]=-V\|M.#G1.W;0*1Y>E%1R,W
(((I)NWN5(QHX>P1;*;,/X'B> ^(&RX"<9B2!2%"#/5'H MS^3^:K'V-<7I8L'(@G-SR46GG\(W]2N4P!!:G0?I%?BV|:']J8#6WOD91N@HYHEO+^_]^)PV+,"_+3?
CN_+@FM%#54%*/76'B[I M!)12\?=W#8'Y1[X6?VW]8Z4U\A*3P-NF[JB@PKGS:4RX[(^[*1\9()OQQ*D_+]]^PZD,74[: 1TRID/L"Y, M]I:E,9NV#;4AOV*'3HTW,ANW,8<$KQPQ?GQG?
&^4OQ"'<7K\37RXVOD()_MBKK"(X6|>NY<7!4]?V?^:,A\5(NZ[LL^2"2%,Y5$H@^'T>PT9HDE!!PVB+ MF?!%_(_PN?+?_'!02P,$% @ U(-N6>@]#oO2B" VTD H !E>#,Q
M+3$N:'1M[5Q=4^_V%'UGAO^@;M,=F'%(DL!DZ3,Y(MN9E)(P=O9?51LF:C(MEI'L9--?WWLE.PDD+&Q)2KP;'@BV!7&N+)U!|I5(XX/[1_I\?Z_QH=OLP"?! MGX;;<_O=\T;9?
L+3#0$9)C50K<4)<'C)-+MF$7,N0 M1HZ]X9 ;IGAP !6AZB"O%U)URZ,;J1R_?2AU^JY M^WNGU>-JH]R"(<+FSS=B@,>BA*EU6I"/=I$PPZBWN]=N[Z+7;K[]I\O|O:L+
M4KRA!S,&U!W+=F_0!_O=3]UVQ_=%E=#C|T\K)(3T"PXC[H4MNFM>MY7'WIG3U]=_]3)IM%Y^<5"HGQ;-R\\OG[U0G M)/BN$W3/V=^]H!/JDS_H_5]!*X<#(*.R%)",:U-
9KSN:'VVV^ZV+EN2[O;[-X-F MNW?Y^V\'E0-S/6AV.OGU-|LPX7XRPJ*5G^MD*)7/5,F30M!8 Z#\KP/C(1ON M];=W,.9!]ZC(7W4BXX/,WS,/1QF=1]3B#FK\-M_,:\)N>\Q:;
MB(X946S,V83Y,-L9N4^]E(04[@=2Y40&9$+]4*H5_J3R(TPUAPEWDC\KN2 M.>R07N0='V+5=*_3V5=L5NN$T6CY)TR-XZ@>]78.&&1#]W=L#AAX9 IB^6T
MX@#KG;RO+XX@_+K^KS/[59-GQ?AG-SF QU9.3H[/-KJ@*H'!D.]?#(&FR*"B"/A07LD!@6 M/9(6DID0,+"?2$!%9!XNE I@%J$@"59C.M$'C43TB@9 3G?/4-M7/#0BCLR'VQG=' (_^
P(QY)]XLWHM$M(TT0)]>1 !NKI[14/3MD M1Z9^]O0;6,*$IYJL'C8$(170E5?L[HX&@X'7+!DRF&]:OZ1D]GR-_PNO5/#XK. M\Q86C@D;OF2FQ:F*P;EHDY#P/~"'!H7)3]ZRB"DJP,?
$]P<\4V1-$JL'P%/ MQV/0ZUN[N@M/Q(4W8.=)WORMO 4->\7W)-TQ%2FJ]GE&E@4!\Q(^!EK4*[*L MLU3,"^(1>[DZ\6KB$]@(882VZ=VA3)-G8+PD;**$T@S3U\'S&TYDB-EQ3(P;
MA\CLF "HNH4#/6SK>BP\=1>:WWO_E;>0DB(O/_1U+ERK>~L?GI(C\ P,OK4(SV9<$W)D$:!HH0)(2LP/]{(F9"36.I-I4__MYJ/V9.I#KC]HWK#?OHN>_OL;0?W 7O?;U!?
9}7?;\;A],\&B]5^;9"R55U35 MDT+06 .@[*\#Z]9;H\'W=S#%0?>HR-ZWD?%!*A);H^N_#;A^?'K.H]*GTLEQ M!"C5[&Z/K'P%?!L1WT"9TRHAB4\X>F0^5G9$O"57 #&
(&MV.I#)$1N9$JA'K5 M?Q$9D'88"SYBWH3\KF025T@W\HH}(=;I(/POB6PJ=L^U430R'Y2]<03]JV+K MA$4^]#=DL6'AF"D'Y]Q> >X[_=@L#B'_.B]4^J'9L^2%Y#>Y >6SD|/3XO

*M=3UO| Q:Q/HCKVK|JJ|D\T^W;KE?4LU\!P_6FBNW M4"!B'M.:JIE# >5"^L I.5*W &9@)6ZIAYB#)% 8W' %+Z8#!,0."D M\;PX($VRXZ(MF-X_.1>=O2,N8B3@$2OT)(Y\85> B'PBX;$J/.<1Z J@&0[M M\,@3"8H*((_"JZ0&!8]DA:2F1 Y*Z5"H7/H3B38<.,%8*3*,S1 M8=[IG&Z;O3\XU'[>*;T83 MYL 58Q*.,8E.V22-]%$BR"#@<'FHC]S"[1*JF.4)6/)\+)@-8QBPTEAP/<$]*

M6"P$G81;":]]KCTA=0+U4$$!*1Q?Q$IZS(?;*=T<`C_X# C'D4#G]S>AT3TC M,1 G@T2 C2=GM'IR?LB.,/V3<[]=N4N.R9O($15Y0E"\%/C+\0D">]$CAV*A MM^:);\%1'K@5]0U*8-S86+X&:C;]<+'+DY24)!FBE,A::7T)3_Z_[:'KY;ZE M%15LPC97:31E2'ZOVSX|#IG53"\V@"NFW5*AC@C1E0C^LN#=IDHJ`!T$%3KE%=.MS6-!%@%&,-V:*[ZO#=,4$MH4/@I'U52Z8/4,/%MH\58&OX:,RP(>@_J,W^G[\J2#%MOP.8*U$W6HN7[EY(-&+]+A[*R.EWP*ZOK MVI?<2P8C|S%8%/S2E/OH-:B6$44I3S5X'$PHHBNARI\8'1P-IV,NN)EA6+^L

M,_1TEOPMKSO_]*1HGK=P<&S8\#4U+4Y4#,Y%VX2YX^M"AL?O*>14Q1 3X& MGN#FB&^+))%Q?@0\'8]!KV_LZMYZ(MYZ W:>Y,W?REO0L+?]GJ05I2)!U9YG

M9%D0,,_P*=*B7]EG;=R5HA'0.7RO*N-2Z BA!:I7?',C&OP%@E;*+ST@S3 MU\'K&TYDC-EQ3(Q;A\CMQZZMQZ W;<_-3OY2V(TH]^[K|V-M9)IQ_S-ZGD.

(;8+D4O0<<;P]1X/F**)F#.W+0)E3/DV 8"ECOP_FT26;P Q MA!V9-)*9$<$?&'S8$Q7/*E5^>+";+WN<7;)_JP]$KG/8S]_]IF"V(\@/3/H9 M6U5RN882LL@3N7+#E?

[*>LO@S/,B"UGN.4";^-Q(I>=9"\L#V@U#;@QCWU#) M8TF55:$^!Y"VD4-@$]"C&D4O?&*^'?HO*.\O"0=#+/$ED6MSO|S@#9DGCWOF.VB.C#QC# MNNRCC6)M!M4>W\Q,-ZW

5P4QY?:]J)I3ZA)=0GVHK=E%:H 0<$" MJKAH6L,(Z"0$C@#3K46I,%QZ%&P3(^5MBBG?%.O21;3Z>WJ'\>_&3I:2J6W- M>V-OPLY1>MH]4*#2*L"5S,K+C(\K+M[CT52**

<.@+Z+WZ1%EA11%L9"SA@\M?9QO5_I$[8'=EXE+'9 7J;$XW*EV1&M|A_^AC_SXWIW\W\>Z'J02P,$% @ MU(:N06:!EU4X! 0!4 H :E>#,R+3$N:'1M5[AM:]H(§/Z,Q\^80VJ4 M2(

A)++T67"0#IK%$@8)S:CXN|AKVNGC->IV7^_4W;Y-"0A2U#>B*=/GB>'=5 G M|GF>G=D9;%ZY7P;M8L&\LJT>/D'_F:IC#NRV:61/G#*76TV9GU+N!J7LSL#^5 M

A&J)M1KD0*7+6D,0WH'$[$D83D;*,.42A:4T!!-Q[G=DL@Y"YM0*[7-_FCH M;ONK!&3)^$/S=8\M2-?&[!^: 4!/G?9).(NCEFET$+GVBX_QLZU_%'(+-B C MU0)%[U6%<#;'

!AGQ1RY0\'VJ.A MNG+/LG?MB>OTG:J6.J-AL3"^GDRO+737OC@X}!@>A4_]0++0Q7!J5N%.9V5W. " M>N.R=1!.. 5SH^/XN&S_P!75I_<$;]8^$)6,R%X&=2"PEC2F/FH#Y#0A^Z"T0#L

M>^HEBMU2& 4!\ZG#$$#"UC#ASJ;> SU(D41FQDB14 M)S(=,"NC\A)9,(TJ"7WTI-2'"O+V]0^PSG,=WV4@,1!?1(KZ>EFK/:2;-UX1(#!L$-*$18@3TVQ=RB6I6 MON;>'TEO8^\R.Z!

(V$=$"'QT_<&PCZOG5] D'!TZ@FM*!+*[8T@?#8L%25<) MDW2)QY&2SMG4&Z?D#-!]_?+4/!L0PU.23&D7]KVW(.&39EOL0D(TT0C€ .!.6J";PCG&)!(A1$..!,AG#C3)F A"3T]

MCEY]EOC?<$JA&?@141ENG&\JU7UR#+GY71WK6<[AJX|&$'5M<9?OYAJ!72 M|[*5Z^7O/TWLCOEJH9?6WK5@)B2F3<43G),H1D#Y?ZT6TH760H1M+MO87-&GACK|@[

M#\U7X:U/=":4$LLF=#COOD,=P>+MQ_S,X=L/X^+/O9(RG;81&OF7M(S NHJ8 MAM-^@:[A3OZ#^#Q@RK\ET Y36+L!E,7D 5H.C7 3,/\'RQ'">O&V0:R_>>'> MM++<9\5=ZW"?

%/17I;=3VR>)T+!EV6Q'A&;0=\&=;Z% , +"/M5=I'VFDA[#\[M%>@SROTFC,F\XWM:V'=;M6_9W[9+M'13$J MTGC(8\$T4)UT-_ HOI_\"4$L#!!0 (_-2#;ED] M5)^\,@0 $84_*

97@S.BTR+FAT:>U8:6_B.!#^CL1_F&'/J4"@=+*N M"V21 J3;2!R0]##UM/[D)XU=NHXV_9-_8V3AM(7[=[>T:M6.KY ;,_CYQG/ MC(%[Y!>#!Q/C82*70/ M.NU40\C6-(.IO8*%7!-

AE0.6!%2OI(&&:#JOI-9$+9GH0;LQV!,76=IWI/F# M)7)5N@\;L%3W0=-KW22<+7% L>5*-P;.R6P;,L,V$)[F_*;W(^!B;<;.^H"4/ M1!H.O"^G_M /Z[7N8>O0L8?H(@,_>!8!O^>99LG-

+B54[GX^TA$5!FJH=NWWD M+4+_ O[^YH3^;UFOSLT5PYB)\.'ON,W@6.9WW]=I9*VB-6A!X(Z,).MWC[]O4 MX@;UFCN>S4-O#*_]7&X/HU[!T'X+LQ,(3ST(M,70G7!!<_9EXIV#.PK-

S&&[M_7_Z-7D(2133E7%HP6C&:P 2133E7%HP6C&:P I=HF IF NTXV"VFT M@D]*YJD%OHA:L*]7/9X?)G+_ H(N6:85$7I/%0,.%@:40N+1,$=%E$AF?::)

MB(F*,\BH1F9*K^HU'(),@!MI,V-"S<)YHBUCMT)]7X6\ MXC1>4JM>,X.:?%H.:*7.5-TC4EH-./9W*KI=/?) 2!\YW@_M/M@(HU&NF#80WG6T(F))*W6=#]TC,!YE

EFM28$280@0}@9+91OJ4D(,T)3 M13.SNV66$,XQ(E$)1D*]AC,ITLFL8N]D$R*(&K,"W^R'JW)>L >94E5LG#WV M5>N5);NR)]'^^MAH-XKGN3L>5\|_+>R*Q7!EEK;?1.%"

M*DR;9B0Y)VF&A*I?C:*K=,+%WVD;RVYT_//)=R+]J6+8_N)Y7:X^ \"^!EKPC\) MQ!=*Z\ET1ZXOO%A7G8U1?2|0MZIWX9$7KJ-HQDJ[CSJR78O9)>_]N6)(-C5= MPWWRID-

PHTCF0C.OI 0:N.-C%<;(DI O:N.-C%<;WSMXI0T"TOZEV43]E,[E/2/ M9WC%9 SI,$%M:%+_]@'$Y)1:#;KLQS[0|U_]:.V%-X;+=_^_%#676.RW0@>3N M7SN/.iXP'GVN_-

H%0|5+#@V>]=RU)9[M;>/?TH>O-UQL\QZP?#%HWA_^"5!+ P04 " #4@VY9(!?;_?)= 0 &L!$ M# &9OQ]Z7?:R-+W=_\5>GR?>>]D')%H T&2\7N(MY!X

MBXVSS!>.D!!0+"0B"2_\]6]W2V*50 @))%QS[MS!H*6ZZM=5U=7551__WW/?M8!Z1[>B6^<]_^;?6W7'WUYU=_DFD/OHO?/H=<6)',>_^WEY<:?V4%\IZ;;C

M*J.*QC<9NOD0_7SRZ_C2MFWH,Y>2,X*7B.\6'HU_U28W3%[<>>?I.'.!&WII Mv;O4#Z[5'4L2>'D9'=X5XQN>HZ[E"5N^/632I^YMF(Z'X02)TZQ1.6&IFN_A(_5_W'F58IM+A*%

MOYRY[YYJU:=7F6FG@LAXS[_?7/H8N>W7=T^K[#=[WS M'OGQ?THEYDQ'AO:>N4/N!^9*Z;/WS+/V_(%IG-/+4XX:=W?

_26Q$\|Z7AHV^0YNJ,JQB^DV*>F=J*XJ.7]?'"/5_JW.CRVS__M)*3UQ%*'_?$K;1"M6]H9_LY1?1/7>*0X]_O?)0^NDQ;=\'>]1A[]:XQ%"

MZZZGV,AI"2UJ,;QG./2[-1Y#0'YRXS]*7"!HHV=+K;MO9\T6U*SG_$GXZ[-MQ@-JK9NAC5K2-!4#_(WWB+:EO3", -V*@?PX[>+Z,9WANX#)-O8^IO$)/S*W5

M5TS6^X+%K[U#E$KFOX8W*;ISL!07MXSIF4B\IO^_)ZH"&1CO4/_T#4-F40) MD;_P55<8E+:N>@KFV:U%G7\.SVRK3V9FB>/Q_US+^UPK82W&Z!K^75%=COPC M'C(F'B=^+]+?

STS&PR,Z&S^^FWE+6N^5IM\;-74/CTHE7L#J/R,BRM-$1,[N MPZ-O8D8$5*8)"-4%AT<391!-Q)F-GX@=":?]HOHE^?V&9W2:R^U>6BYP,Y45I M&X$&\BFM.]<=3)WHL=FC#@<=T

F\.9ZO'3)#4_>NO7,/6SZ:D;V(C90T3L MURH2ZL^U^7W<)?YVZ]1&+B'U!=//]R FE9(9/4Y0(\K8IB>*)4$U*"3&_6".. MU5W%/J#L. <;OTK)YT4N))EY_*.$C\5OFT H-(&VL M >K:

/Z$_JY167=-T<@WV&11=:YC'RH H*>]_DB4Z-C5]0C5=Z=^2I:&#EU-8_M]7O45>2Y&;=(M;HF?%!L^>2TB&6SS#O74A\N4;^-[(4A5Q/;K)P. M^1:OM743::>*;6(S[D2,N[;Q9*!

<;3C.$&DG0QN_RB.?TGR+-1GVPURDT:OJ M3X]M72'WNG-FV1VDNWA9$-,;K#VNUPWSQM8?\=KAQE!4 M%-_.K"D:!D=M8B6",>G]-6.]T9[S(;>PO;T)?A(*

(HK6PVHE/*AXA\3S(Z9!C M3IODBZ>=EXQ+%/(IKF7LFBHD7']FKY.UDL+GG&TOE)9[STI9&>Q/ZUE() M4C'UT\+R: WQ5#9>@.=LR#&G365C46>BNC8>E[SQLG,[XUHD?

NNY2831=X8 M,)O0MYX>DS=V@WB+Q1-D\XKX)?6OL8G?@N^X$2\W!NGV>"ELC;O)_@K97=5-JONN.Q>(M9F0E6X=)Y10V$AZQSK;LEXO&VG3>V%@'H]-.!ZDNV7*=JJ*PL=8=

M[UP1SNA:U;R+0\SF2_+K ,(5DO5_%=6MWNUA5MTJB$*\WK=L5QJ15>9OLR4F MM;PQWS"N,+'N"T:XZ=9-[13]E0,BVQ/=&5B.8B27D6I8B[2U"0DTT_3; M3

'QE8V]==_849E>MPV]2T7H8.21K"HM*5T;B]"?@W&W#E2\Y++#ZV-6P!Q9& M*8IPA^5*'HE SD1%I$R=O#';3M# 1JI.A8B!/STM4Z:UEH++#X2*\/O =-U[K M+-

%QX83B^827(.TA>4$XJ54NWH0G\DNR.N8G9U;$$\3I.NJI/^T_"<6L+MV63\)3JH M.2L:(FG+4RN25EMOWG9VO3'ZP&U/Z?/R%9U)\(1>]3G/8'AO6"T-250@?# MB^5IT^D1D&

\Y+Y/\W&LNFUCH5#7VOGT.KG&=S!IE&1NG-C@>JSX@8ACA:7W MB+VM+@I^QRZ[NNZFZAJ\F//D;S+C1Q0IKO *F%)(7#7WI6'B:43SJ95US?*<^[M-@Y^*.2=;L1XJY4-

9,_M6R86_'BD=&:9R'W%V*OYE7726;|\Q#-I7+N2]GAH M6Q-T3Z[:TTFAVSE M1CP>W/6%7=BWL!1E?NSUD-WN*SQ5G5M^MG<0Q ML]%PCX?JW-[=AW-

#$C>9]=OFQ!Q&Z(_D^*9HMO)8:.U,;;L%SGR^U#+@O)L^>$@X9Z,.7FR9*G+H[^0\'GN'%AK ON B7!/R7\&MG!P#O=@)>_SET=.SD3K]FYLG>JQQK:/MOPA?

1 MDY?O?<9XY^FB0Y/^8>W@+D3/V 5?CK_6-?)#1T!0L_O\S>^SA[\FI]Y M_+)W86_SWS6@,V"!!,=5;"K\H\E(@N=,?IN_"WD')8\F(YZ\6YN^(_AZ^NW!

M=SXK8I(W;&T_WAZ\43S@$N6M;V^R8.S$HE>6Y@?O@FWFK>++TMTQ.,83Z9].E1';FD,T: MR$JF!G)>V,L3+/?=?\$O'_UI $)&WOO_2#Q_XGHNJ.+9SF\SQO6^P@CFP@MFM

MA"*$#58P?U9PZR *Y@"!#@%L<-R)S^:*/G.K#LN=_"OZ+8, %'T^%/UVQ%[(MY4IFS!%@N9,;*RADf?+,"QNL8/ZLX-9! %8P#U9P6V(O!!?.CCD)ZG'N_\3(

M5592_G;XDQ9'W7_@Y,;>%AE$8([W9H\+ 90854KW'S4Y,E0Y2I_=L&3L_@,G MMX;]2" "0Y4;0Y4_V*Q3AG;_$9,?0Y77M-Y$-8'W'SCY-%0% Q$8JGP8JKS"

M)G9MW/U'3*X,58Z.2&Q8]'C_@9-;0U4D$(&ARHVARA%L(DH"@GG:Z1&-;,\O M0\ NI^9EER \Y"'3(TMU"X 19\?12]N6]B@Z/.GZ+<. E#T>5#TVQ)(5/R

MLF..MTKFA1)7+'BY%-01*S>QR!PD=IKF&KQ\).GH8.!SAUU>NO1TH3BJ& M+8YU5VOD0 KKK(GG[TE]30S0V!4T]H@<7R4XHV]+D4W$4YDQ4R:=^

MK:C2W#WI:R.7F#MV0AIHWU\6?0W?#MJ-KNF'_W"D&FBG).&XN$HQS9^'&? '# M=T% #KOQ.N<$FUU4R;'=UJ7RK/>'_>(*%@_B_2TIW.T)D?PY,Z:]BQ&%[*$5

M[%Q//"CLM,Z>!LM]IN>YT=!6-&Q5Z$/+FCVX6>_X$6B^R*^.GE^;+ ,VJR%!^ MK)QI2:?S-(OW;C]OC[BB:.^P"(,XU&)#HM.Y07@/2(-4[2EE=*F]/-Y'],LW; M5V\DEW %3.4VT?

8NT/>ZS>82@/]P(2&*%)=FZ?'1ST?VF&=W5L=]&G<7-M>H56-.B]M(PM8$:WC,!7&4KC81&0!^3TQ9K@-.^KIJH'V(&]|+?=K M=MBO1V^ V'O#Z=.8#(#2'*TFV. MJ<.*

[%MDT",B3D\?./NX9C_# W'1A?Y(&KWCN=G5VP:J.PYRG4\OE\IORZ8M M;^?.<$1S!Y;NVT3AOJS;"X/"U[E\CX%'0-\;Z'O5IA6S&!D&4MVA8@3.5"O% M4#0K7I]N

5CD#!8YUBR1E99#3@LHG8W0*]N&)B)NFL3\ICL/!A7WZ"],CC MZBK)'"^P.=.0CA=\7<4XI<1&G"A:PH_4O*:QF=!S9'5M9=#35<68HB>$X:M$ M=OZ*02]6O -D

[+71'8NB,*EL.;)C;1-Q2LH /#>$KRCN !:.POM#1@'C.^K M'@<.<,@YK<4$T"A$ +16DAPC[7#B+UKV8Y-#OL5!GP[9:] YR^5ISN@SY[\0N4 M'8$U=^N0?=" L@-C7A-@BZ]A7C4A0880"

(5ZTAPL|/P>Y?OD/'>5I?Y#)C8[%! M#B ;D+TFLO/5PR=EG?TZ%BAY@W?N5BY[K;T!XX#Q?=7C@&%0DQNJ28 0:*$H M+03[A:]UU5,L50R2FE9F5S<1{G\5%,R+*#KH]WWM.

<*=2L9 !DS,0" MTHGNN+;>'A)3_3]0LSAB@$HLJ!O;IL"R\C:C!{,R9F%?%)4#)YTG)YS^>$0DD,!(E=@=4,#($PB/) +I?W. M^LM1D"R,>^|\$5_@?H-S$'A.:!#[7<#[S-<:,Q_4J1;^,

Z]DU@,(<@B"K6F" MH-YU?8BQ8+7U0J=])&I*LS#R?9_W(/*\B'SKLWRAV>,KWS^%_+C ?QYTG\ MF<_^>?%#"[K"VF $"0/Q!DIPDF M^P $99-

/NY%U&M'S2=F2K<AY,,,/M]*A*Z6_# ,J4=^H>0;LJV]%MH2Y,TNX M33CP):Y2XB>G"ZZ$}XN+X^++GXH0:3=8U[@J6TZBDHE^NEE^1?HLP?3(^1 MM'UA9&=2Z0NX&L@!!W*?

\1%\P;SE(\RA)7T?0: O*-&\|;?&%L;;<5I+V? M=M^S!*R-O(.7)I^*N;@<*[%|'<<[?DWH&&WX!SY<$>?*IL.REU*.)W)E[TD\/ MY$JH;Z.[|.&]FO9E.CEMJX8#@VEUKLV0ONQE4 B1-

>=NHTU M6I<.*>0<;7Q.[,SQ\66XEN,S=T\F&:A81U0FGP!B!8:8+\/UXV^3>]*'&(\] M=^S.33X5TT0$U*^Y<)FY)_V%2^%8.A,#F&%. ^C$ L<15O1B _ZDX,;)JOTE!= M=\D\=T]&9Q?

HM/8 .%92Y/O7KZDP^TVE=.;),.+NCX+*>UOZCA)\B>P>YP,.K MCF/9+U>66^ J]8%7KV;.&CF]]=5-K/N&QO'B(F]2H6HKIW"@O2MO8@&\E2U+?+%R

MXJU#Q85E=EUD]\G4#TF(?>#X+B.7!$/K\IBX)VK);(@&< ;/-MHX.TP$4 8]%IFT!P #@7/NPXW!$ MG%CBI2(&P0/LS-/PGAVTT^3&EM?%'HV"]3]!0 Y-;>3N55]!9K!(2S"I? MEMG-

*H!+CN R>T2(S_1$?H1#"Q#(B\8HF",)P,D+<'+IP-%^-X(8P"4HEDW\MWKJIW2%U:),6\NZ8E(*E/C0UX H,@[*!8;5@GK94G,W;/%#@, MI7Q#*4>>C9[F)Q*L\@4J33659N?3GH'*'N_

\!O^1Q&9$!">.7/&1TOOV#3 M/!,,1V2I!%K1C8TZR+:1=N=:,ZD/Q54]D,F\H>|LERA;'/ 23;TJT"F*0WB MTYZQ?IDP|XJ7H>%,/N@2:KGOI+H9VFIO\2SV>)NF@:><0TYN%UZ[

M++#VLOHH?J6S9.+;[OJF[!B:C86KZHZX-%6-VOV:6W;OTI&KKIFO,W9-114K M,& X]A$K+@O#LTJWWAB*ZLFFBTQU?G$4>M6>+!QN7L0,VXTZKV.-!6O3#1N-#K5;&16

#W9<4Q"9^N!|2.9/Q2O]H?I:Y-/DW;#IC,TR-MF?;N]MYBKO*UYQJ2]KPINIM=V^_BL%|4 ;8!T M\I)5&:^Q^1)?F7P:NX.G_8%AO2 T985>&6 C;'/P=22#7BUP0\K7K5WR<_J>_MK,K7

<@!Y*EIYPE9M8_0TTFYR-S2=M#WI&\>$H]F'[.P@*H:X>ZLP_IN)G *8VHS"*; M_<7QG!Q_,.X\U!9RO4;&/ \&/""K>\|.-#D!38XT3<3Z#Z"RZAL97TXKHW(

M"Z2*&\2"=Q\+]F6Q/6%*#A&_=J.SNASY3!JDP^%.*IM@M=). TNZ^D%%34>%^QWSS$ZH5BY?IN9%[L?:0X0QL=Z8XE",S\'E\2 M/"KX:>;YY%GA#[_K*39RHH[O#YY>D_ %F+2;\)?

0$,TB0\F=5\, ^LA776HP MQ1_[//'DASYQZXPDRK;YNKGCG2G[.OS3DL<'/T\,/(:=O9\TH*0U=^]WSI^,.F ME- -OG8Y ;X8ZR'?WRG/[_'O+&&MHH<_W]HH<4C&

[@.DVL.1SF"CTQMU92,5GO"Y8AU9HZ'YB^8G=U\SU#+AW_M^X$ATZ:D&'H7_T02]HB*_@,%'/Z#:6.TM>-E_?+WW%X|"__X2OC:!X;RR-%"'-])

MGN)?!#S9NYY_6PIN2(_%!!#^_T_QX-T.$_**EUF^X>?' U U+NTK1)W92*ID M)[_;1_=7C>;IR<%=L!X\O?OXKGVT)^.Z.SV^OVTT&Z=W!_6K$^;TY_'G^M7Y M*7-\?

7G9N+MK7%^M'JR0I\$*_F!_*$X/NU6N9:(')\>,P)6EVNKAO9Y?NQK>_M_LVVL^O;RP/OB<0H/VO/K1WTD(:TDNE$TNE10R)"IU2B:O)\]S?:M%/-OL

M&%VZ4J4CUOCC1P$_#AM=TS*IQZ.KC.]=WJ+,_,+#M29NZZ&W,%%4ER-K O&0 M,16R<,_$O)]^__^1SY6^4<,^><<<$3Z\'6L48"8;6/*KX.51]&^+%#;*-EULT ML&PW'&

GHXOOOV|O?ELG1F* =2R[K[C_'.K/[ONV91E(,5U[B,:0)X4A;XY& M(J&:+%4^1.#PX-M[_9Y>GOQB[D]O;F'_>3L]H=W]_6K %;&(US_ B M4%X M-6G.S8%RV!R(?3PZ X-

7"_8(G+LRE&>Z8ZJ&+_PR\[P-T[X.%]X^_/%3:=|-M\KF1A)C_TWFGTE9,1R=[DLOL M_X]O77&D*XU?CI2F_>\HAC/O ,BAKN<.! M"^",41+X !V,1Z8U_H=QKJ;G;_

<3<(W\/%$T+_EY[M%/!["%,6K4.0QDXF)S@$]VZ^.C: MZS[?W_+XZ&IS,?*YL/=LF#Q>2&F&\LQ#1_,3I3(S46Y15W>(7G1)[8/PR5)^ MX

=WYX.$J!M:.I.EMCA99NDX/*KW!X;>1&J/BN'W31^R:4 M->_)S#@*SZZ]\DE3D\2@G';HP:OE +91RP=1V1RP=3^KO@W\]7

MB.|%;_|>6T/3M5^.+2U"V6C_]D _^U$;79VTEC95$R4$JR<|PT<'V'LFLF8^F M"-RB-EI*]^'1%7!4-"6F)DJN3'Q0CX'"3^WA"G/"_3UT7+WSDN$.#!G*%@/Y M>- ;

(3>6YX2<^]104RYQ+=']V_O'P]T]P4H*]E+@%Q$:0=#AD2"'7I"*E(I:% M?%O*4(F'2GELG6;\VT7O-E5+2R?]5*K/ZG\LF[']P(M/&4]'6'4U7Z3K3ZDR; ML'6>%^>?G?!&GU:.:

[/(BJF/]+WOIEB$8:]]<& ^ WWA[^ ;N[5IB]<\O MV'N'1%@N-]8/%(6)M:)A;'&2+/&4>ZJ&YLWA@F@_A8GV&^^MIO6DQDN\^7

M5H:#@3+L1LF374@($L)&1SV9;_L&+W^PY8Y8=76'[G?SL?&#,U)R6;7((<[1 M@U=3OR(&N!#C#1W?C867=\;_^B!Z37EUVOS3^.Y\?3D7TQE=.7)T.]3@],#:DR'G#_(VYPQ#VO-F'

M8>^A)4R@5ZO^S"3ZJVXC)?HN5K[?\-7CL[OVM9[.7)Q)(IE^/X9D1>3?1,R^ M4I350["P8==B103$>^1X1&)E M&_%>6@N*CA&###BE]CU$-Q?%V$[W/'(A;#=[/R5/(?

K1$GK9"V$U'>??2;UO& M%WX;D.;ZT@OF8?6OZ1MSDEOD#'\G@U&N@W/>_2L]LBA>CK^9V*HY MAH3#9/0ZG\]^\PV0I'S?K+_P0INJT5

7.2@$@B\FKX>$PU[W:'U,CCY[_J/=OSSZSKG3!8K*,1[MWYR+/1/C-<^#PR/OF9X"(@]FL=*PF4?R;.9_Z=-)UB%#SX>OUA]\]W%PTN+[OWSCHQMI2P.Y-R-<, K\8&)(ZO84Q>,T>

M6@C_EN?4\ZEOV"(S^S*\N7OSJWY;<.0?_^\$>)+#?#[9AYCSL#P?D0M3W],\ M.L0^A*.I?Z+"Y906YE*Q'Y#+7%P<+RSV7KE|\"DS]\ OH.8TK9NAC07FH(4.

M\:T1]_RETC>UDZ_*.MLTB\"+\(Y9/+'+8/@=52.KL4$CV6\]WJXBMP#>54: M>-N0%\)Q^6+A]=2K5 H@97(*Y=-QL7O8

M,'\\.^6_JN;5U^_M[&$>VQD0M^P,I)YKO^V&"'>>HBF;$Z=FOB;?\-@,#$=W4 :HQ@&_I&<('6(I6XC_WO\F/%.A4CR M&+TSH?Y^Q62;@PD@1?8P,_D3.B!AG\UN_32@8U41/>L>

(&AA_P=YF_\/ Q< MQAFJ/<;I6>3$1G! T>TI+KUQBN0G3*Z_.@QULIF"J20D>C?I!+]A&<74F+\% M;VAM#'_|>_ LW'L$!OIY>BF\B5/C/(?/&C;^&;OV"VQ(UAM1!400-

\>+COGQO=J34YETU0.R3(]^?PZ!>]R1<^E?UB M(?F ,$UAG1?=UT\"9"!H6U;)EDZ&2\,PLNH%Z9!#"Q& M"DD^.5%H.S1H!@1S5VHR?Q,FRQ\$ M47CK7^#V=!K0:D

.6C!SO6#^;GNT4NG]#"LS28R\AYLSAJQ:G#.&-^$';X M$R4B0+JB+UY4K5^BFDYZ@QB2,15.3ZR9"E.U0%,5SPZ%,3'AB%%4\I56R'S

MC8#6)H8]|%L&2[\4^H/3QW.SQO?',G]\+Q,\S=]",.@6I>SIKD\83^E-G_G"?(V!I7_.KT'P#$;_?'E$ M?$[[& NX:]DOX;[6@_MTT_QT^OM<>$CMQ+-7V9["2?5?OA "J827+!E3>WAT M-

6N#IR&ZI=W"K-!:R2!:G0&M=YXO0>E;\"<*,8+EU4?H^#X-'=U$3D3,X*H_M_-GH5/^'];B0O.ABKLJ@H+\Z'&?I6517-P.'J AV#+1"I*T_L9D#_J;\RH%3/

MK@Y2VH'9Q:BB,A:\V1:,^9P.]@;;;A<^6@XT]_JL_2637C>H-B2&6O4$)7 ME15<3@D>'"%PL#5QT#/(#:1.1 B1?78&;C&GHG+/(8XYXP61:-&0X=+5@ AZ M5U@XI-B@9=-

W&2]D8C_I^-5D.IN8?(O$"QYUAR[3,54=<4@RS)2=8902OIV M:8]M.0P!8Z-K4:68]>Q?$JRQ"YLXMJ<[>^NP>Q=26OM<6[\KH4MV'E6!+;WC8

MY'FNVAIQZ*K;0=\N3K[^'B/RC.XG8%6XL"NXY+F',P"N!TV(>0S@ZBPTI3D0 MF\ ,^9KD.4G6\3CAD_ _/X>-JI-#AK2]HH\,&ISQ/,O5>+,"C4]Q!O2.-SB\ MYF%D6]M>;IBSD$D^S\#:#

,O,* QF(:.R2!9LC70M?")W-]4 -]%:]GT>7SP^K MV1CQI,-$>T(2GXB;TRWC;$)H)#/'V2;8LCO.D&SOFQIC323_M@C3;3>]87>= MQZ8ZB<7L/3;N598>CW?>>6PIUF5&NF1,'_#=?X;

(5,E==(!T;;DHK,A#9G.2 MK]EVV1?9WH?9WZ?9_8-BQLT4M]/3I#*,69L!TY.E@!WZ/K;'HTRMD,+V MAU"_O+EH-$^//Q>DQ9#7I]? PVG6/UV<'ER?,SQ]B|MPV*;$-

M!KN3C:OZU7&C?H'=&&(WZTW:@U$PZ.S8*O4 M+[KB\UATF+_O366H8=6CO?$L18H9E=Q;/EWYI#G9QC1B#*4Z]0Z/)+ 5^YWH ME$^JP(#$4[^96 QAKRQ&!?

#H4C&5+C42XJR9% GNJ,.8)ND58-Q7CQ=`I M/NS8OQ<E]EY^3SDFEOD# V77G(0%Z)9"\&.Z)+E!8Q^5G\G')1NYU_/I+5BIJK. M]N#M

E6%AO#.%6L.E>F6=FPS|&&%PZ,+U/4W9JGS2@OA@?<*ZAX4.YZI G6_ M2W5?+ZJ^%P^/2.R:4DS.=UIVJ/K-^)N%T0#; 505>$Z [=A9JDZ&ID,Z/+HW M)QT7O51.Q4

TM>;TSU!W:>W]H, ^B8;?.Z2=?+"N $L#EF8/Y Q4Y6=.@*79 M6;Y.AI:F?'AT@CH*2=ND5-\/2$\'9.J6/65AP}] -2F^G(&J _P)L"8[R[W) MT]14#H\N=1/YZY4.PLN4J;Q.L")@18HO9Z

J/W,"K,@2*U(N]A61#X^N215@-M+TW*]:IAZI8)@/L1 `E*/%3E9TZ _5AB/RI%M1_5PZ/3YY]>UEU8WIW=PIEC!5:+!A\T+(HF/I-2D?<.(KTU MCO&T4G23.?';P#21W7?VK$!M88@_?

5;1P#U0',8B;_G0D+$3_7^P-";2.W-_W W0*32C3MN0&W9XY\N?\R]FUSLVL-^T/YZZMJ[MR\A7,N?8"@V8R\O&,<:R@R6$H4VFS>(KZ^>7)\>K^M2TA0Y9S QF/-87H]Z MYO,B2?

7SYOG=W;@#MXU\$?7;=#:.U_1;/)*MHI(=TLTS#5MRS-.\),.A$KK3-+_M1>T,VXZNZ8K]PD[NFIZC?GES/]XTLF/ND.[CH\9S5SJHFT]*8^(90*$XF'T M=?P;,4CR:)E+_"8;7^RP\Z2%<-%

/Z1(>'00\VDKODVU6Z%,:ST+XP%P/:(FF M]^1E?K^T#PQM8X,_AG87,PU:IC@9\/ #TWP9X/?7;:6MJQ^8*Z6//#¥?681[MPDSOA^ NVBP&VF9LNVW&BFX\]=;L2M62;X_P<-

UR7+\G)Y/KM[\.IKUYNGE MZ570L.%'_?:D=%]_;5Q=3Y\BAFTW4!+D>;&3]YO&EHHA= M!8?!Z1Z1#66) [1X]>=-

C)_(GX8\,6@">3!YM#3]:.9O_7'$I(T7ZGV)18%>%*$FFHZBN\Y,YA%4EB)(IT"/|(FT&ZI?4A'+.5HX^)TOV'56C:&&F">+=$%UAMB[4<:")?6V M5'V ;YCWD-O(T/'[@]/_*\1AF_.Y'+=)-

U;Y[]5K;&Q*7J"_OV*>Q+3/_"MW0@!S!,U,##LYV_5NSUWX26Z86/R.CJ>^8C.8=AO1 M\IO,,@P>. /L(. ICJ>[X@0S@'CB#(4906-?T; K33ZU%=)-%\^61\76K:'#

M#/$DL&OO77RW,`Q^N215@-M+TW*]:IAZI8)@/L1 `E*/%3E9TZ _5AB/RI%M1_5PZ/3YY]>UEU8WIW=PIEC!5:+!A\T+(HF/I-2D?<.(KTU MCO&T4G23.?';P#21W7?VK$!M88@_?

5;1P#U0',8B;_G0D+$3_7^P-";2.W-_W W0*32C3MN0&W9XY\N?\R]FUSLVL-^T/YZZMJ[MR\A7,N?8"@V8R\O&,<:R@R6$H4VFS>(KZ^>7)\>K^M2TA0Y9S QF/-87H]Z MYO,B2?

7SYOG=W;@#MXU\$?7;=#:.U_1;/)*MHI(=TLTS#5MRS-.\),.A$KK3-+_M1>T,VXZNZ8K]PD[NFIZC?GES/]XTLF/ND.[CH\9S5SJHFT]*8^(90*$XF'T M=?P;,4CR:)E+_"8;7^RP\Z2%<-%

/Z1(>'00\VDKODVU6Z%,:ST+XP%P/:(FF M]^1E?K^T#PQM8X,_AG87,PU:IC@9\/ #TWP9X/?7;:6MJQ^8*Z6//#¥?681[MPDSOA^ NVBP&VF9LNVW&BFX\]=;L2M62;X_P<-

UR7+\G)Y/KM[\.IKUYNGE MZ570L.%'_?:D=%]_;5Q=3Y\BAFTW4!+D>;&3]YO&EHHA= M!8?!Z1Z1#66) [1X]>=-

C)_(GX8\,6@">3!YM#3]:.9O_7'$I(T7ZGV)18%>%*$FFHZBN\Y,YA%4EB)(IT"/|(FT&ZI?4A'+.5HX^)TOV'56C:&&F">+=$%UAMB[4<:")?6V M5'V ;YCWD-O(T/'[@]/_*\1AF_.Y'+=)-

U;Y[]5K;&Q*7J"_OV*>Q+3/_"MW0@!S!,U,##LYV_5NSUWX26Z86/R.CJ>^8C.8=AO1 M\IO,,@P>. /L(. ICJ>[X@0S@'CB#(4906-?T; K33ZU%=)-%\^61\76K:'#

M#/$DL&OO77RW,`Q^N215@-M+TW*]:IAZI8)@/L1 `E*/%3E9TZ _5AB/RI%M1_5PZ/3YY]>UEU8WIW=PIEC!5:+!A\T+(HF/I-2D?<.(KTU MCO&T4G23.?';P#21W7?VK$!M88@_?

5;1P#U0',8B;_G0D+$3_7^P-";2.W-_W W0*32C3MN0&W9XY\N?\R]FUSLVL-^T/YZZMJ[MR\A7,N?8"@V8R\O&,<:R@R6$H4VFS>(KZ^>7)\>K^M2TA0Y9S QF/-87H]Z MYO,B2?

7SYOG=W;@#MXU\$?7;=#:.U_1;/)*MHI(=TLTS#5MRS-.\),.A$KK3-+_M1>T,VXZNZ8K]PD[NFIZC?GES/]XTLF/ND.[CH\9S5SJHFT]*8^(90*$XF'T M=?P;,4CR:)E+_"8;7^RP\Z2%<-%

/Z1(>'00\VDKODVU6Z%,:ST+XP%P/:(FF M]^1E?K^T#PQM8X,_AG87,PU:IC@9\/ #TWP9X/?7;:6MJQ^8*Z6//#¥?681[MPDSOA^ NVBP&VF9LNVW&BFX\]=;L2M62;X_P<-

UR7+\G)Y/KM[\.IKUYNGE MZ570L.%'_?:D=%]_;5Q=3Y\BAFTW4!+D>;&3]YO&EHHA= M!8?!Z1Z1#66) [1X]>=-

C)_(GX8\,6@">3!YM

4:WI*$YZ.IS5[X#UTGFZ]\<8Z'7/KSU#W>YCCIY.VZ:1?-<8T M_KHBX&TH?@U=A8!)B.83V1K[P2RH16(L8/OC3QV ZFQ(R){(^K M,W_PI$&UXA2!'O+(DP*5/*&0N!!3[S;)R,#Q5U-#GY](<,_:M)Z?:QGJGY1)3--%5=#905\^'!$4".V/^V04G@:J2G6"6S/JROFM M H(8T ?8X,:S]6^9R['>L8A6\5T \C#2J5C74#'¦B4ME6X;GL%!][+D'LZX! ML?6>=3^8LO<+5C[*G/M4+-%^QT2M8D^*?,_IRLB13G&0)2N!@%LS5H Z6$M\ M2^(TTEF$=U-]1#]ROL3CU:9\F8PPJA\;.)YIW_ [C|Q$A7S)N+GH*]LS$1 M,YE?UI R'/,3$(L\2X1^'(HLHFVB^35D(#W#!PDW1-% RNGD0TP3A6S&K MAE[H#-2<(TU 2[6]PZIB*~Z]$TF16H;]12C0UGJXPP_^P\#(>-S1QT+7L=*>/ MH6(C;)Z#+1_/ XK],C<2@8N(MB0335UA4(@-V4Y$PNJS0]MBOT-,BPC.NN] M26EC%.NVIV8,Y8DECAM=D[G* S&CV.\;/A'*%RZSR+"EDIZ6RHB;*GD9TLERWW./=M$\1ZF;_\K -&B+D^0]1G3VWLYU2Y#[E6=0@7Q",.!8;S9+FWTZU0IJTVBOP[E=T M*D%A(+3<#XI!EV7W?40RA*06>N* M>%;82/I9>VZ)7+W%|WQK)%X]2%=U^.[[]XMM]+"/;7^AE[R?3%.FQ(R9QRQA M7H)\WWCNP'S[|Z@LX2 E-C5+2AXUFV%;>D(D? D#>;6UD6N-GS[-]I:.I 7E*- M;PF<('$UD6N-CLO#NBGWAIS;/8PD+F4?XPXOR5"_[9\U%#EVTS*BS1.B#1$ M'O^O-;KX5);/:Y[T=E,.$Z02F7'B/R,Y+!XG" ODW+29S#P6_D-3NC$QD;. M)6K6R"!*(II)3(6P)H6=KT_75RTG,D9SR.YVWAHBL)3[357PWIC-K5N:8W&F$ MC\TX=]!"0Z?4591!]51W".S#UMMD.UIU6_JGP^53(?GYY;1D/,CQ:J&5,O; MJ7[O!Y=U$OT>>4,+.5>Z7.MD/O4RTB%9#P6XEMX,%!9FX+&733>9B!R?9"I&-M5,28{4'-0V?I3%@$ 8-MN1%&]+ZH3>F+8\7!U4V-_(=4^GY4#!)3KKO'BFV3356ZEXCUA]!H]97Z\@-UY[I#%N@EKE82_6@LZ7?"X7\D#$"?0_W9?6\. ^YKE8H=. M[ROX(>-_<&@4=VC]W@/O[TX.CWB6DRMLF30GG24XRM7+1CI+-07 ;O>P$TN\ M4!+Y6=B5N;2P]["R4&$Y7LP=[$=(-'(5FTGJ6*€!SBU2>9@VT!7R/7]M'E!_M49?MZM>3N^/VMVY67JBPI+&^(4^"\3'V>(#@YFPPYV;A);Z&+PO)-;P@E]F: MR,>=:N E%QH^X9I.3 H?@2U+ BOS7#[@$ZJ>Q2GUW#!)(]5EOV VS;MCN?NU MWWZX0->/VW/?4V1',#2=?&;4KLW-AIHING;Z/""9/A'N\.=/EB,?G\M2? MSCO;=8? 3WB[V1^N%3;PA1\5,MA;DC[DWO:VIN0X=V4[=4&BNH!?*KR5TG69)9 MD8NM\D,W[!1(M&*$>E3RSIB>U:]R7&T,QW;JID2W# 3G3XX56^2FWJCGB+I[%RH/2:V_!K>+3 MCJP& (Z4)$2@8)DNI@s$#KIJN::!2MX5E)R5?AHE1CY5!.'Z7B]SLTN<]4[Y6ZU\=MHM!+4J2;3;AF9D5I^-(/ 78RQDZXWD]!YOUL'(M0]@U=N?(LN0K-+"\8,23WTB+L=6;#7.G5+E5Y.+@H!2A/[^U>?XVQ-..[O*.-#A^-! -(T01IN2YQ\0"! M+/&2E6HT5JT(^0 ,5_XL"9LAK V%$^EAGX3[6E6G]MH^ W06I-DO;O6,NXB00* (ZNU,FY[/W:"[OC+ M.#[Y>6^.%8784150B46'3^B"CD]^"%L@79[S 9)0)4GQ('[&.OQ]>M>>G=/8TUO\,,,V MB86'@& <-19TX'5*H2:P80^HAJ.DM@V;ZQI*#U)+^7.KIFH;PP[$*%O3GMFU@ M-.0.CTIC>O*B'6LMI)-X4]2;3.ARD

*X82K6:G*Q>R&W,R4K38]*+T?$Y-'JF&A4W!N_M73.G8UB"N\EM0 EY)D2D;M0[;DQ*LO:/,|W*WD.UL\BH@?48O+A7":ZU%^T4 M)"0M@HYXQV[N^"Z,+9<$HPI%R]W2A&?*

BE&*Q=D#.%/!]+I'-Z,P89IL6,0(M+2TA*E61"R5E#8INCGJ$.,.#HL?7(+,]V^B?'A^>7S&7.(SMH-IGFG5N\).& M>9,LT&[Y4N^Jf*^RE]M&"S3W*

56YURSMf'!C'RT.7CYZ;.T,+012K;DN M\R86-#35@_NL%2TR@SZ5XRC1F/:!=/\XW_7G5Z/RK?OO?,;33@@KUBIY/8,,K+ M+PHYSN.FQ6RV\D)E!,*

*[%7.EDEPNIWGO#>6R&2[fPFPVPV$0/V,PZD3'H"Q7-MUL)8(7V.5^P?1^E+1W5QD-74(:*8U]+OV>Q4B[H!Q?-M0N.8(F=S9;E867\V-^6H6H'LOAJEL1>*)0SP2S(@26Z*3;!6/F]-U5^7SBL MJQKZP1/6^TXUVK\5=D_;9]}^W!TXVVBUBXU*C.\T%?)+%O))1El,SE>64+&C MR(5L52X4YIRE,KYK6:J&;*^LH1.LDHE+Y>4PMH9:JQX+TX5[R(IV=]G7=LU M)N?*

4OFO7C[I^W?OQM#W5"L'>X!#YYM+;MJ$;-\P\"PKUA=K)EE;.;FTEO;R M5+0OUX2?B[=FR?9E=)EA[<0Z1/N\YGMMKKC[A=K^:6":FB;XS,]EO:.);//_M'+]EQ}|HF3^H;*-*

*I'%ANWSO'R'[YZ6DEKZ*PM.3V.Y\3?%$DJ?)#=@,>]>$]f5HBCLES"|FQ;4!-4E^@SY.E7:E1>!+)0Z#6MDLAD:H+1I0 MK'$BB^5DI3(W=O;K1HA*4<7U*$7WZ"_,$7{0).'_X/_T]^.YJ_?*

],7Y"LN> MOQ)LG=8R(88TO+Z53WX13YLU[>6U;OMSUK""BNZ9)+N8FJDNHR,QK\#5G]OA M&#LKY[5.,.^7BU7/Q!)WV C;>1/%E%

[V>_OLPGRZZ0RTU_5XE]WI@"ZTC)G@^ZGFAI0/RMMOFDA[%!AS$S|SM!3O(NYPD#!7;K\,X9EK>-HS[MPO)L6-KKJXTV#;>8CC;=%FY.#V.##F.FVWRA]L4HNYKVUS<S]

/X,1<_@KWB8^K#B^W+^N#W<:OI/S@7=Y>-;2PGN? =K4TYPJ;4%?O'MDA)>2A(0(.7RE]CZ\S/:0DYL,;N$8M]<22[DTR:A|\9;T_W(8G8)F8)]7I%+ MU=S:66NL/BA'2< DH>V*

*S34&--=)-(XR*MI^JQ=ZT\??>AI#+#) ML.,"PTO#3&L\/U>Y1D0Y"KF#BD77,A8XA][TT+L)DZ//H"MZN*8 M70*MT5&8-+1!*,'I]^%_3'F:U4L;?*

*^J(9F;"Y6&\QEU99PHSL)]3/,8T%C_B1\OE>M MWOI9N\[^NMY*T,!1F6[AIFD5 G8D%=5+$M5Q=EI0."\/T21<^7")LT83,7S MFL1S>4O$\"'[JAGD"R<4:Y"?*

*-80M\DG0W[_=JO_>?.FU]*TNS8X*^R0WP MU/A>QCV6V-&WC@HRL?<@.NYP"DB, MDR"MKED?$-.<+G)N]MCR%.[HC?/*(7*P\)M(9VP#&A@6:EDY M4[B1*$KV(MT1+U*

>F' +K=[UR=6O\T60=;@)GB]1]%:?G$*4UB9O@N!8 M(\)DS#*\OZ*PL89J[:L51;$ MOSBE!;E0>G8+PQ)O(?VQC.A^5LI-#RZX;OV1ACY3%SD]CT-*

*MC+$6WWX<.L"VL#$H&H!CZ6'7Z,''.K%1#UEEMS[X7;IX?%(HWNJTB;9@"]I ME[*MG=#@.X[&E%EZ- LBG0.Q#'L8&'<,,2.F59VL/B,+/= 6$2ZX^./3L M\V/#/+CZM0CNR,8'2&G&*

*RV/MDY#(}B.$+6!S+&;TN753>I@;K" .$.?;Q:*D MQ6?TNB4JA,I&.P$PSQ M)9[2>?)&937795ZM8X-"&E!=P ':/Y'R$B'2;K_[=/^K?5Y47V^]Q5]TV9%J M<%T&C.35+QWK?*

*+I:${1MNUW:! G&-INRUFF?9FY)76P0A?M.=LF#+ =1P5[\&PC\L M@5?I.;*T;0$*_M(5P1,@97<,GY7=2=M"44M)<46AIH M >_<&H#$FJ5XLEA^>[;K)/&T>M!*#"]P0 Y:'$!3=!AFC:I)+V.&Z!<'"*1*

M,B4Z648+NL:7KL/TN&+IWCSV"WNG#[NMMYA#"KWDV"S#1+A-17>9G)=@Q&%?ZL#' M?(>ECLS:[^F,1MVI3+Z@SEE"8,.2EZOYG)PK;'9%7T?M_-=# MF^YK)O-O-_[D?

*R0%!/WTYWZ1,JK3,JP=S^[^(Y%>$+\(=(C(RW$1CV*ZP\Z MXG&- >,+'-E.=WMW\F_CZQ5C&573[X\LXH(^XK>3;!J8 (U#'Z[^~/!!NF M>O /,&A#F7__9V='\C28F]^\C7:@MN-Y7[*_/*

M+ V^7/XBW:JF#S_EI)T=(;!TXW&JK(B!L0UMM$1+H8L">S1-<6%)6^"_85E: M\._D&|"R,M6N"PL)?OIHJ0S=;^,&L_\9M^/)Y<5P$&.EPOBB)GX8B=?!9V-$

*M"\CU1;KN=^']-0=1)NV+= .*F9/TS$;JE>-.?^F_P+?)+$D",?+O?X"8^CM M./5AI% &<.CNW1:<>]:&@(GB!EPYC0BQ$F")"5VW-;;.(>L15]@6[;#GX0& MHWI?*

SV;+'P(04^MT3>,.:>W,$3A(75D"_.3S&Q&G%,G)7-O27]A-]N++Y###4 M)E=O49LF983'I%#]0=A&Q##9^O;]PW09SI'Q6EM"E(§\2TZG26R' MN O,G9HSOP/?T>9VLQCX2UW4.

{[/AIRN\]H?/"82X"NV$TI)* YGO^P^J#P_9U:7"GY§\.S \O M$E=T2-%_D\=U[[N>T>PO\[P^*I\RD90B8N0.ZH/KNZ?C^\>_V7[%_/#UW&FI MEB@/((X-"3%2#3L@+R,AU^;#$NU\5]*

[\6.5B?3Q__Z?2BZ7_1+^E?ZM?)%L MAVQ[)><]H@J(/WZ2>]H+W:A.UW9(7/L@N_@W3+7G\L"+)+KQ\'Z1A=55S+KL M,XD6X8Y+-R7[63]W)D\C

@AU+2IV^EY/IV^*EDJK[)0T'7A(NDB]>EAI[JM|& M#R7)GM5$K47-B35\D&M0 0OY\/6#IG67EVB>._C_;#N!&((UGC>OVBK\G2^U MWC7TNH;+RU:4?

*+T>_33M1;4GPZW7@[P<[<'#'<#Z3XD.]4'SON;VFH.2@^AM MGN'A2<<>@.0#68(QQ-AVX9<:E;(#;W!!-36LM1P*C(M^*;F=;&5'R4<_B6MC_#@D?DUP>-TX M)B[3NW7_PG=8G-U>QV1/[?;QX\]3NW]?"fDL6A#N]&6%.'%!+=N =.:8Z?C M,_V?RT#E>5-YQ$ BL+]3B_$2TAA[?B=RT7\" K%]5_5 JR&)(LX*.40(TYC$ M)#:5;@&#G0*#G*DU/2&HDY_@(L\%)S-*

\16OTQ\NQ4G9:+GE(C,79<)@A:O%<'8DWZC[@SF/OA@(F:7)EF^Z^5#M[!]9 M-@N/>B\F7^7XLFK1-8+Uf"$O!'WZ3<(6@3-3XA M$';FV.9GJ.::686I-?

*M<>GB..KF"5FAW86#6MRCB"DH(?P%/?02V9EQF"[,! MGMEK&R":AM48/D-GX%'KJ/@:C%XB'LK':Y.(=F2RXHGK>,(3W[,A=2KUX*H-*

M18%Q3=\#NCZ8B"YS/TO7&#GFV36IH9K@W .=VNHCDOJ.61F'P?91:4GS]-C33 MT0*F%<+FFB;3/'KOF(TN*R"2.A,+.1,ZPP%P\%%FP3H8ZBMD&TR!=\",=*6.*

MH3EV#\|9\PFV!88!G#_&>TR[)UFV@<>)CVL.^,7 (3DYJX7>AM=6/:G#F =, MK1N/ANXA#_'[#KK4[<=;1H:YU#0L%UX&/_7).L/"XP=@WFJTY=05EBV:;?Z MXG*B9P-D?3(Z?*

*D=J.CS.W)=:*MXHPVO#CBR4$;'*!,$-W8 E.?CB#-PQ_":Y M+:,#?F H7,5(@QOPO!%6K#1QLV%:'O)%!.40 TI&\FR>V5U]:Z\.S@! ^?D4# M@5$",,?*

&V#18$2T;;HC%L45E.)TFQM;XZ%$01&"848(&KJ]#8C*1/&M8_+E5 MB8)%Z.R"%)O*.6.HT"'SB\):2PL(2%\A4ROFF!-G8:W:T^XX\CXP34^Q=<.M)#JP/!&(W) /]-F)C$&

*<2*_E3W;>7!3QEJ/ MI#QD#<<='/:V4*1NB3!*4;N[25_ 7>0\"6!+Y=3X#]E=.#%3P/GSK_^\;C>'5<;H5]V M&:R/WD^K##VR*;D792>,VU'*T4]#3M5(KF6.A7_XJNS*

/=S)A=Z46$#H3)$9 N M_=@T=+C.8:HPP980G0%AD@M9+{)PL_?^X ,QRH+MY\8K#/P"'"X*8L))PJ- M.(]T6@,L13BE)KS6:LDC1Q&?.7]EFNR\2L9_-*Z77+[P/6=*$CQC'V/+'4=X(5AP

M/5SO$'>|+-"KR/FR(A=R$X$WZ"LN728KH@88.1H%-O|W^%25\:=Z@5^X8 Z] M-Q8D>>G196^5>^67[G5^MB<>71<5&K[W&:>76,_8&3%SGD_E67'4>%G]17!& MY<]30EBX.?

P6CQ.X(0^9P[0(.>]"@ >7.0D@.*8%#!H! '"'@"2(T.}3W M(*F:?Q6R/M72:UC\L97ABCD>&0)C'E.[M:/3_3WT.>#(:!#Z;>#ZR 9$\ZS% M$XB:X6@^7N/ 76(SK1H&(=:>%+& X^A*

M(^9K2"Y[']3#]@&_PX7''/PPZ2(!5"LNO)7QOS#C]3+.^ MR#K,EBZ#9ZW!BX/MKNNPF+:.JV!^0",C)+:,5' 'HZX@XMHL&3^ETBG2@W'5M'6 MXF\%H@M;/M-K&R.&[IXV_':

[2%KB#BD,(>EP6;=':>,^4$4IME? ^W?@F"7\ M!APKG*?&P+/@AE7@3R 9{[,>'U8\2EKW;B:PZ_&M%",!RF$$A4L4>(T3#Y\C$ MST]&/]3N"6]$# _[A^OW@-X*9S1D$SHPE8[9(?*

^:!%@CA@AF1XB MA-M8R). 5;UH+,86_ 1N_/6_ V2RT#E>5-YQ$ BL+]3B_$2TAA[?B=RT7\" K%]5_5 JR&)(LX*.40(TYC$ M)#:5;@&#G0#G*DU/2&HDY_@(L\%)S-*

[CM_)7"6,^%.X)@Y<&'=,!0_F)HQ8/63P^ZO3)G2 M]1T7S6FT%;2[5+/|D%LB@0:!;8]^'2|S.QG,)61S.C$;S##3QI8_-$R[0:Z*+[7MAUXN4YY:,=H^/@N=*Q#+SLCO.SP MO3$7FI19*

>@Z.!3A1R56#AX.NIXBN]^G%)]G>_TNA4\[CJ#.$WS" T+N%)PD M4DWX3#I"64DZE>(,P*2UH^NCJZM/B,AW#< M-#*$]QBMT,"+!@D-_!%\WE$7"_PI9D$HCX/GE[4S_B$#A>?

YSN5-N(B/EZIN MV-(-!G4_$0^"}Z_95&(212&""@ARO%4-HP D,972%|!%46S#%< _%8 /N(EBB MFSE5+,#CHWW'G>]CQ+QBFN\8'C#WGFG|_ OJYXJ76D&H|HEW,@8(>-

%\>B3T"HB!^[2 MUG76->T^]77P?V= MTVI^V)8C I?A8VZT-#624"S&$HH(R3U\]]RZ M<5;O6@6K5<-2BD6LDI6H.QP(5O-9^N#SE7[T??*QEY;"9.$US-6.RM7.'8I

*MBR'85.:MFMXIA)T6.)H(^_%^-XQED_^<+*T[,%@*#F\C6FRB2;/##3@#,4-4&8 M2D0+Q%%]W3=A5V.?S &-FR-8=D)!^)'C)4]0Y0%X'2P/4*YV)\$NXD6410*M*

M_0@LK8UTZ+GB\ZH%V\'K<1F(/8 B3 M5NP'_EX33"A7Z'\;+LZ"]UV7#6?D)2E)M.1?^4QI.&FVH:,_&>C<44. M&M?2#&&>B$<.[_2]:ZJ[<&Q05:P6DX3D)RP[LGRQ_H5

*VYEE"Y#PPJ,)6'< 84I M'Q-4:Q$BB.%2'2!G,# P>*EVE_? C-W6()*PN\]BXLF%A[<@9/$=':=[!H4>2*A!]/&6[Z38\L)ZI908^C"S6F3R-#4#N6PE+,CYQ05]X\5?_U#Pl.!F40VUW*

*M,O>2IO:%S5C/@NKO&9-%AU2=G"M4Y*HR$;T>Y"6O8)YPB@[K@!K'TO=-,_CA M)#V(P4,.Z# ^3 4E4L(>,18'0\?A=:SN6:URT"D_Q H%1]YKQ4JE9!4S9PL,*

*MK6%LQ=)XZ1!;/S9_ 8DU2=LJ?*2A4,V94J^F*?7EI=2K;4H(5 M*$B:67_?F?4IUW75$=VI,M(Y 9NDRD_+]X5]U!? B.C53PKIQ|%YGM-?7#D M_3@M7RH_V0G;JHAN?*

*C2B6Z@/2AVWU]/SRLU/]L]^$SD_R ?0*'5UOBM3]PYO03)"O<]T> D1^!@9R!'*!,=&NBJ5-OAO$<^"I MCD]@ G#F%!T*SWQ;G=1U9$:KQ6$)%9EOB$@U52XI">2X;H&VF^OG'9>?, -*

H<):W=(V,5APi(?K ^N\H.'TZO 9!..!A6DYZF6SW_UT\;14+RWT59&B?P)W'_H4,+ M8%W*4(XC1O#|<4M"D K+%XM@?)0SK ;EQ#T<@ZVI00*?Z8A)AQ](3Z6AH7M M&=W*

*7NT@96>[.4*EXOL9XKLZ8KFJ;KMFZ?A_")WQJ&+RV9UNPN82@|KF^'Y] MT+S[?MCO0MCOU@??#A\.|fJ]W.M:A^>$KTH=N-/X@O2B52OU-6#Q* M_0A#TW(-PL+509RY.'^2Z-*

7@70UJ^=XEJ <=-8A*6W%JW^'CG)LSZ9$fLMK MO(V@HHR,4MLQ8)\@YT"&/!7^UFQD32\OA4U:B]%"6>FWTZ$7;D2Z+KG@-F8E%*

MS#0YOS\>EQI_3FA]0_)4&F1V#ZWF)NV\|2$/Y:4&Q['"'7A+ GAK%A_CV AI MDJ0NE0?:4M=$@ 'DWHG'S,T6 I/X"RJ7VA ZZKT=/(^@D;R?.'=^"7A4W$](" M5@VNB$&U=61}?

*XBBX2:0^"48_F(,"K@W[Z L<2''O):1&F?LZ)TC'^F I%Q M^(.'^U&+4<;OXOI&*E6&=1=^YYB_M$8{2):KU%W\'V]FYQ&X"#KI#_S[E@)TA M_'3^PC[?+Q[>W&AA20L^-*

*P3VY+29B48\;CG3*E=B*,z?7$6A+,O11|QOCA9"U+ MKC@5*)K[+BYNQ^E5R7X$'GG MQ>(>G>E<*LGY;G5B63+2<7',S2OP'[_*M;>_=/AWOG=*Q$IOZ/D=O+*$)'F M+>8>4\VFE+-*

R<0K6$Y^1@!H3I YM+1 ?));H=C:"TQM%P@T]@!V#@^SA[WGM M;PA|&X26WI*.6[&3413Q>-/E+]<%3_\>9ZA[72N[# MNW G#NN#UL5=EK"M#6[=YH>O@4;-1$1'8E-*

6'QX,$YX, &Z'$50'.P0BOZ& MP%R\R8 B&\)RH+'B%C'B%5M#6R.,H4&588F1'|&J{] L/Y?&%<./+V!IH<0-\@*[)VM2== MVUT0(/E<20[P!(#GPV*F#&@0[$\GRY-

L5N6+M,3)$;,SR/LI]N&C+6 GVSU_2LQVOS:>+ M(3R@[R1AI]FC:E'C,)#:LCM#U<6<,,J:UO$" ,A/U^]BF 5_C#5^]U1'MWS%M^X%/Q.'\HVE);9F\34K&UV%<=!T(<<#

<6O#)0]O9M_V&U_3-0 !$@GG(.M=KW4^O,);T>[/BY$$[@2M7\'GOK'G\,J(=D/^+P%"3O1N[ZP|[6] SN8ICI@DC,N[>=WSQ)&\|;>MVY?

@_BG9M$MA>5T*2C9M4TC,%,:Z/P$!EEM/F+8H&T;|)-80T!BDDW=-4A M(V6DYOLX&/8S?\!HTE? YC8ZO^S]O}'EW?,|"|?EZ@/CM'G1+OJG^WX1(;DX M98RTRF@S%A|*

*[$#G#0>;"*%'7 CL&K)+_A/@65!'' M*0/.GL 5_XBQO3#&- 9M8C&LB?WH|HL#V+ A^5:AL#THY^N !B%SH9C_*N6 M-0@1*T=$SBV9:B*PK@N4@(K]#8X%M\$+AAPJ}-*

UY3942CL(B+$):M8S|*G,;_MW0#E#U_Y+-6L:!H;^H^$R6>XD0^Z[NB9X9OTD7I0OS9 5,[: K:HO916T@ M-J,HJ,V#I\3?&1KI(84T&5YS[$7!HR*

*M#]^(8':/@>.%*V9))3l;$^^4Q#O#C;AM;$MP,N'* [@I>H>$%]-DS[/G^$]V M572_0@[_*;\I-UH-[2W?-\&-2=V5>U@?V+W?M=H=ZSWTB^'AZ8;;-=4^-M6C*

*MQKK2V@Q!$SFT>6P*>,@;D:QC>D.40XIGC.;SBDIFY:E:+$U-,'3/K$\DOS M/W\).NJ#R"!%R:=9:"UWSE17J93,BOB>*(^[MQ$L,P@*HP*?!H\"PQ7>DNI;AL=';/>]lEDF !V;3T!BM)-*

))X\YXE7RSCHIV/ MP:2=[3KR:X@W$&,>NO<[WE8[#6]MBZ]ROEMNU!27O44DUU&M WYWB*$S.7=8GG'"*$K[!W5AQLUK5,\RZA3D\(C?NX7/=-1XB>[EL//CMU1YI M^C?*

GYG5EUB/_\SFAX^@$7D4\HC"!)=^Q*7"]:E@3 M]_3_Z(;M;FH2)+(?KZI,PI.(? (YAL%W? ?@W&@?]P_5Y:N4.:M;V#R8/P.P MCV*99!ZLS=8#|YN]?)^G%_U"\O3}?P%=9G+7!1 R*_*

*MF&>J/_ J&[7N29M"'"_K*B>-[_FE=9SKHN8$2/(.VG$85E"2EFC%3$O8P|V M6SVU!A6-2EE=OB$Q' ,-60UM256ID=O6=O0$!YZ4O9P$V!IF0!@ 1MUY M89 ;7-KF8ZVP?*

*(6F)%.M,)H$6:]6F,J@Q_OV9>'HX<@[,JY.14QE MU 0_KB=%*8 G1GLU8D6WM5)\//#GFZ\|AS?M[%;U3:.^KB[IPDI&(],YXTE0RTINXD6JAG?K0]^{?153O;ZQ[6K+9JJ]X)>%&:)*

MX_;LDO5/M-]$SMC Q)E.(W2-11-6/P^,Q*OI[#OA)XQPE,*>D7X![_JM15(M>KR;!'"$VD;7%.C3'C--OJ=!=,,Z;NQ+]AOW- 7#1@S,L&D$NX*'WT0]T?PS ML)*@(<1POO5Y-*

&GLN#K42T=\9^E,4;,H^BYCK4#N<@H.XFEO7CGO0$.:51HU&E M.!(FB(G980D<[U ZX)-,IK:M%&+2_'6/K0^^?6]<=Q_/>X5*:VL$?4PXC[N, M;[UWI5P?7-6D!Q!TOJRV#T9D8-*

*Y5./(:L;QI(6A C(U!KG-YFQG%C*S935O99M+K M[+^U|W!/|H2+2&M)N(F;=EB;R4:+#,=K27%0)?)F#*5[-;O)41TGMF6W|#P5H*

M@Q,|C!_F%@T)'96$0ERJ8.EDPMS!M38N6F15'VMCFH?>4LN9)-MA6;-AYILMSLNJG\!=6F.V:3)C.R19\?GQ M%6ZZSD@W+?*#+K?C3_'WP]#BZ<5]L1-*

6<$0%X_423Z+?,_//+U'N^4X%K^F M]00Q[$V[5MMQV6MKUW^Q PTRM<'!/JA6?I0&NP>UJKDL]37Y=?/JJ!%TY#+, MCU1?K=CR?BU!-8V=?QNG|_ZO@^) ^]7YUZFH:@\?

YN+1HCF8VYJN8HE\?#Z M]_"G-S5'2L3E+')NCI&-S-3114CC1+N46#W M3M02+O^X^F"7W3_M'S'UW=N>]L7i.73EE^/-]\=?ZU\)LT/T2.L+-VC@

*MUVV6"08#,^S18#V7#^U5':>/A7=&Y1+6$<6U>6'/(1 M[:..[S+!HYA@?'E^(R82?Q(X3-]|5DUCC1Y(KQV4J_-+(;EA^R18*QORG(; M0^(TVUDS',WON!X.(,5?Z*

*8B&?.I)HFIJ1V<2!H,;<8WP2GT]?JOP:<|PSO0 M//HL[26>&0P9\L%D)&"G+5B**N@GZC&9+#5\+ZPF-(V.P8L4OT@N'*,1A$7!*

MN^$R.02;+692BX%!71"%2/5,6.R8 -)[P\K@6[%=XR>_#=;29E))1+&9"W0 MHTT0CK,C?@FG,8MBRK X$C^*)PD7&Z&\-)21HS>XTL!0S(T:|\('0?&-7@T]RX&+UL7Y,K230#2I)HW

*=ML,7L@'!N'@C&#U<80 M-Q-;F$DRSG:YC9V)$?#"/+864VE\I*KMNSGSEK/&*-'F# QWY(.7KG; M.Y*@.K)M'>VEFC42V!_]=V"'"3VZGB_=(O_3I]<'W(^WQ0"DXV?.MZH93C-*

>,K^25=H:4"/ZNFV0_>WQ+<)D:)AB8BF5]BS4]X6XYJN4WFX'+B9F'L M%3OT6EQ-)K03<!TF!6%(AM<_M"]D<^%(:.^2Q>@Z. X<&]\ '#\R'$=%\8(XQVQVXXW

M7+A+-'!0TN^18VV^P#:@<FQ96DRN^G%PH>BMZH4/N%G>5XAOB>T1]H_\#CA.Z M?L"-&(6+PDOO59%H&@<+#K?#<Z$% G>(2% G,/'8H(E\:S@VF>CL>&]0C*

M0\$5IH3@662A D=\SEP/G0@S1<]NH]]5:8>&.V$CQ<6NW:$H&;Y"1(.2A"8N MM/FI3:9K)B;$7RQ']8!=JB_);&!=5RE]FR#4ILN,4(4F0O\,)=^%)DJ&3QXN&VFYIL\)IT(N*

3;.63:!#+++@ M^%?&.(!'O%A"L=O"?!BYV2(^E0SS#(N7\1)Q)%@T^GPYN?!)#QMNMP^L$;'-MT9=)L;1H!N3<;^%K%DN.MK[0.J.59G@L+%@0%UASA.F"8!:-)EA:6)GRAB[[*

*M_"5/N;3D:8DE3[FTY"DM>9I3 ;>U3FFM4UKKE%[\/*051)C&V(6V!XSX0W:_ MP*&/0!|-//T8/3@6U1K,=`ZF^?$1+7QF R@DYUO;@#*X"&Z5?B':*M= M4[5P +5.OP>?A0/Q.UW^65&*

<$19LP+9:CMWSVA(F;H%/HH,)LM$9\148Z\WH9Z>*87%&4MSP!OWAB^MG.]93, M_|;(7T?-G<$C8I[5:,8Y_ <_(1]++>YWL\9WU|[JSVYCQSJF9V?%O72Q]7%96

ME#Y^QB)GY(K+ ^5?,%4M#N>+9P;BW)&E6G3PNCW3B'UN/(,R1W-,+H_<3(^L3 MOE,?^/XJ/?SZ>:%9U>:[2/>6Z@.K53D;F#V[V"EB_W) F@RGS#;; $/A3

MFMQ=\1B<$1NA@PV7M *]VR'<$5MTZ0,QE\?TT=&|&G,\G0=XY%7OE%](D5D M+0.KP>(9"LI.\#AD8$KR!)E)9AU/'?'@(!::Q5Z!E;.V[X$QKNJPNS"K1"9R MK/J,5#*

<^(JK\'UZNV_!G$6K%W6!B@[)F%8663$TA9^8HQEN+#&,,M6PFB:/ M!'N:]*TCB5GD+F#?5-9<{0'0]$4P@I'>#U=O&$!FJ/2Z)-EFX2'\J, ^Q'/ MX^))<;.9J"(.*K026#^4.J?*

*HK>HX!B\ZI'=2'@S)$X_1JSKREUBDW7"9\)TB/ MY&79PG7(4'4Q\)K{)+8HHM,NB%-P5%R?.9^EP)BK,O@AQ!R@X,"3/-44IA4/ MD(?Y=$5++#Q>]9T:*WBF+B/EPZ-*

C&UG;&7AD1FFIJD8H'+;N"3Q?3 0 M,;.}J\D$})>%-WAG -\U8=!F"O0LG)*P-U>+QD&2A*&XR_EG! S'$5\L8=OU^^7_'KMQVX7'AV%J6N4?$ DA @%8> 53]33XIEF

*M[^=*RW$OQLL1?:\)L?(&)NJREC[=|JXLN/5^HR+EB]MGV+|F\BR@$;Y*\-\;EBTJ: MS?YGZ,/+6 ,CEU+UTR2!*K_+/$!NXC_VK+O-[V5@0*(X]4=6#>]FXV2,/H* MW-?*

4,YC?.Z@HB<$;D:%T:.T;+<-3S7C/XY"#D(VFF.SX8GWP=/&HE!ZQ_WB/-MRKOP$LKU@?Of[|H#[[_&+\|_> EPG02)MKH"=,M|@CN6$58FF6E8);2+4PDJ M MQY@N%PFO@<1R?

*Q1VUPM:L]*5_,RK%:7Y=LK-R7HWBMR3D*U62ADXBFN\-K MB?7?-.&BAV5+(W5LO"J4P\8//2,2VR)9%1?@F3$"?(0@SFC]:IC@W'SOA MAD5_Z .))B[Q.9DJ2JEI*FZ:BYY"N!V\T \,*

*<%0.O/YU2SEMVZ>)2&I0SO3\ M1S7[KA&5WSD>>A:A%|,/*R%G- _#*Z'5F!$0QR8QAC'TE%14K*FTV@.E?R$0YUO;#*X%Z5?B':*M= M4[5P +5.OP>?A0/Q.UW^65&*

A^T+=']:#X>P|_"/)-HPW>ZM"+ M)S0%Q@;T,!7%$3I.!23QB8O#[-=D>DASA54<7&L')3U++%[J6D M!O-ZC.\[7H(6"X'P!"/R1&S!GS-'JF%%-6>A<,(H@HFFM$GU67X72UM5DWUT

M^|DHD7@PI6L;O&2>#\Z)6ARGB:JPV(OB 8FC<4=X"3_74I$&5%@6*QD+ES2F M@\' |8>C3KN PJA(%$ND.WFRE V5[=$7P2,X),@F\G Y6A(X[Z[4

*FN'7&A4S96A0\,%*D6%KHR.^=D\5L 27Q@A*#6T]EW<,ITU5 T3-M;3LZ1,3#HA-$*AIH9F@8[#B)V&%9G#KX_,8[UB]2V>]B9*0.C\'|&&$5T M&\\M@[.T#2*0.CZ%%"X"ERR-6AKTW{[<'?"#+8H_-1X+0/0$^QHQ^[AR=%V MX@N/MA,L/A6"1L63Z@1LP,40;,E7P ^ZJ"7P1/5UY2[GOA.CM'#?Z;$&>P. MPRP|\"GISYC "\(:".SD@A61WTU/XL-KR0'PL*

&5PRL17E\|+"TENH-F7|6- M71I^]8-]XUC;]^08[L/6%]>|"16(Z&&3;.7FQ$B-VB5&#WUVR<,DR#CS@WC. M_&Y],"AYU^5?W_6:DG\7IL5!?7 T."P=W'!3]HJN */AY';#HRAL6(;6Q$UT

M#%0#V&4|U#J2A"?L8'#)\!5F$$(%6% /!-54I&S4%.0S:+4>13&4 M]BDU>)QN%.8F)!@QR)+E!'G[V%)3 0>&G 2BL/-FM*

M$S%.8T^&&UA@'XU/Q#$(N=QX@_4RBVX###O).>$J&;,*\,(^*.4!UJX7U<,1 MTBUR?%MU0N0+SL@\C!^"U(E#XS!N1 A+2%CZPH8728^ C>7,1P,VD*'&N)D M%#D4H,&$JAX2P?_

M8S"+8lL*SNF$&24FO=A$AN+88QNEP0_2? P5;PU&?IA&-_9WJJXZ"L%97H MP@$*6,BTU%96W$D:8,^76?HMVD/05L5AU"A$(%H MSJ(21.YL78A8AQA4$49J#"'"U?"8,8?*

*Y;A'9I&D|89VQL/D' <$HSD!)@O1C,(M;@1A!8H_JJZ-F.P^9D-[*MP|PR);D0N+/#Z5+/8QO(4?4:G.54W8;Z+9%>S]*

M,+4Y$OH,2MZI98F)*$,&.'"$+O1_XE&X2.^91=8P@'!6+PU">277#J(6P(3&'V M>#H+$&+8!-Y:U8U,=*,H&GS,)W92;_"WV3,)+#)_Y0$"0X!HQ_. 8C()K8*

*MGX55!Q#:CS2&1'UB;L"SV "_O1IAS"%#7JF #T]$[<34%' F18"PA>$%2V1 M5=|KV|%&9V&!B,>+_6ZMW!#,5,0B0CC73M+4 7VI$.-)1/R=H=1>/$L0=S9D1 M*FS3|)W,Y%CI?>Q2A-*

>$RL^#L&|PAP+F%!=R). .)'C4Z-IS&'|JXN8|&JCA MOZ6GNNTL>1F<?$NF(1%!RN^,HGY M2"SS-@ID:U@BYRP>S,I@((U4#,YPXQ&Y$>=^GA&FNCH-@51-\K-*

*3$X73;*==;'(>HSX2)G)7ZH/&N>_^_9O(|)OZ^^B M$N.P/KBLG>_+*E>-TW+|EPU>D#5IL1)TW4X/Q%AR?,T3&XF(LLV4W7^63GX*LY6"*X>_Z-!)$RA&^Z'MH80+G!";W*

M^&K&];M=TQ ME+NCPS';95FZRPVJR8@#ZY$BJ=FZ=^_Z@@$-5VR52+4@]G? MK0\TOW?D7CWF?OTPWH6 ,Z@/5#|WZBEGA_OMPH>O 8UH(DU 1530;= >$B?4*

M%B+0@#+A$TZY0,&H<[F-A90J)6MZ9WZX/S76(ETC#+^$F:VC(JGT$NY0)·M!=,WL3[0C4Q/X2ES"1J8G&I)·^FW-XB?R##_.0/G-#9G&(>_(C6T$.[$XK[@=
M#^I]VMO[<>NVCKI5,X0EO)S C;/0_;:^?C&P[6I^430_1[·M&R&G\BQRQO#*.3E_UUSKI,+*M3_E-9 S#@L^CIC%Q8E9*N3E0K$RB9A# (5;·M>F^740-53&N@EE@#54QKH-
YA#52*1]0Q.TJKG=YQM=/*PPXCB2]X+W;'7;M/·MTX.Y>XD9%^._4A]_X>O8\D5:4^N#);1T^'EW>]$P*O1@.A!X?!_%1)OH/(U1$-PZ+I(EF583K·M&1XP+_" DX;T-
54PT$"5HJG+Z0J>RW%R:@AO#YJ=]2BV:CX;:#=O#$|#[8D]^QS+CMB54'<* Q·MRA \)L?EX-1|/&5L5-<& [2QK)UF@08'IWB>? %WPl'KXQE·MD/BSA#] +?:XY[fMBK>1#
[R09FC!_/?(13'NCZ^>6KN·QKY!-2X(9ZNSG=C+ M92EY6'($;<)'SUNJB<'7@Q!'%!A@K[%&(;EDZ##["X^D]L =]>#M?@>7!)*AW@J98TS?#Z)P(;@K=[2
MOF'Z'F%DS[U,7JT?;-9G+RD36U)HPNFX#$(,)S-$YG#E?7ED/XA2]ZB;O%5@ M;\)?0'DC/ILP:3A\5H/1W-J=X$V9 %T[;@CJLZB1Q)A#?#9>V^F0HNV+I8@A·M1M2P';%:C-DE65?
4^=%A 7H;@5M,V%=DO@:3S\+BA08#%B=T[f#LF4Y8%!^M=UA&_M<'A*$KN.,YY\#PW0XF58)"PPI^·HI41+6P2@S43RE6I*& &5-ZXI@2.
MO.##·)&@S)/=+9DQ"1]O\AC7@YC6J.$A!W2.1BL=B"X#U&JX5-\C<7O>'%8R·M8EK5V.S07=7X5?]F=_CM-A^F,RYL;._@N"3A\7)2S'?QN;?4K3·M\U/E[+S)ODEGE"N4Y6HA-
U^22@:W0- HO-\D_N/BA^2%N/8"<3+1OI,)A1S\·M@B8K1&HD1,H490!\)D+@=;I)X;RMEO<;]I3*V1&\P7!:W&GD_G'C>?X9N7,__MHSY@A;M\K^,·^%K]7WH49OEl?
7%_<')>L:U,_+GWXBJ3*$*VD&+'2V.)&+!YC·MB\EQHFHLN&18+EPH"H\(*%81PA$89,)P% !^8KQ),+2$SU(14VC·CNVJ!L=# M"_K/U# BA;6F&15C+E^)XW,H-7)YS;*,$4F_U#
M3^1'"·8-30T]S86(LLDO\1H7B*H-@8R\?·9]*IX,]>1@+D;NM@%F(-B/·MU.LVPB&+AY-<(;C=X0F15QR9(@CL I&G!HP^\ MT]A9%01W)RPIB,1F8B./3*PNX6B\H-9%XZZ;Z.
(*@I1CB<1=A$EOY·]I4=0Y M1'!+$T|_+;&(++ 5U7;?B3_#L,\H_THT5SE9.3.Z*$+8CZ&X(Y3%5PD$AD]·M\5@#O512Y BC;=>F?T,.H\5_"OEA[7Q0S()#K\UR=O<3%·MU(D-WJ1A-[*&
MY)&RV!>$=D>D":'IFB9A\[4YJCX-;8]>·![JM46SSM=>_K+=(K6TK,%\TS*Z7U·M@TNL'RRE]8-I_>#V%9^E]8-I_>,T'K;L_@]U>7=.AK\$(\·RR(4@L*1D$ZP
MJHK<500'8!0!$5VH46V'BYU;?(00_,;Q6>(S!+HEX-5T1K4I+!]#BDDK%_^^]^C$]8@MO6(·W CA4$^U0[,5$1_060.S M;ZX=?[L;<^0S?
(@QA[N/(D=8MJ4Z@8'G!·AI0<'+&S+;MF?Q-7*Y,\-%8;'S'M'A_C'H\,8LF396,]D.]0C1*/4A(W.##$P78,CNU&C&-25# 855]F@CVL((.P M0 C.%B#JX0)BD^1# #>W%HR*&.0
M@3HHH"B.>,F13A#;9@9,4"$!$S37$^J#\Y*9:P^Z#VI9?1?9DT)[<'"D>1]f·M.U ?C]?KS"=N+.+@=A,G&AI^F03%&\KS1: H2V/ ._PT+D6.[%QP&=8+U16 M*K(4/]H=.O/$KSY+-
=.,IQ.H)G+2X)5R0OO-!PEY&92V&6)B@J,ES7Y]AN·M3B*·T3J6V*9XG(317PI49B=5!J-O"X3ODZ\;?3S(^^D%>$D!=M8D28_6
MI!!048%]X7H!+97/TL'HHOD3:+X+>$5VGS&NYH(I+\&[0U]%RU1=:11 -5*$ M%),*RV!G4&*4FAFQ.!J;X\0!2Z-1G>&*X;_P 'QM@&<7P)T(S%DWAM)"V*6,
M%YQM]X"2]=7EEK,C=;G@;Z*GQWGATG ?]N \#]_&E)K!PFU-O%,]<%>_K:7 M_W9U\]>]K525?0'VU!Y;#MQ<'<-&MO,/,H[·D?'5>N=#HF\7__RIG9]>:XB+
M%Z;·0O%PJDE(MK7JN5>AY*LKP%?951BBR<3%,WD8W5BU63B#)U8C"<):BW.$ MU51RCL"AJUQ.NUL4W5ZO]P#I'3CUR;GKB2HCXX85:EP2!QXYU+_JO\!F^RU M*ON*)B2!AO?
\QCT M8/%@">XY1!;G>S0L/G\SUJ.%-EJL3)$_"NL,WQ:RSZJ· 64$UPS66PL,L2X< MV[)],<+!:G:=P,!>S$)[[J/K@\|=?O?%8_;#TH[P/Q+ L>|\$53N?WV_;AIE!$?
M"55!)]*;E"3;IGG"_T@65F29<[QIRZ7SL94)>PFC/L+#VM5NX(?5KFXD4%S$SY>VUVXK>5"!M,_TG$'FR9%#1T(V.B3TGI8X>@&[@^SVES>A2#|·M715[5_L"04LS7%$-U_1-
B[DBWDR/Q/!%]&G2Q2H$[FP!7WV1/BJ?·NN"!Q·.MU:D&EH.EPH_;+[::N&@V, ZB12A&;Q:CF;6HV<'[L44^+_KL2H^1Z#U"V7-W0N/=_+"!44]Z"V7-W0N/-_+"!HI@9S
>5|*CI^,0+ MRD*X++YHBE=0:RTA?%(]D!VOO:<'.LR+?AM@@0X_^X[QWFD^IP1,PT"36BTB M"!""QI9@BSIU6:D.S@·Q3=X[9%O!6)DH<#RND3A.NRV]O"^J.RFG=2=+K#LI
MIW4GVUAWLIY@^#.G]O'CAX^/7#KZW?;.\%OKQM9?H[+Nl.<5*]NT>+#4S]# MGL=2+^-CJ*16NB28=+,3UA+F>]XPSU_G'2+<$WQQCMHNDAIM1L!?·.--PD"%·M1_$^84\·#_-
I1=C)KC#"N<4;_.D 3G.I+@'_8_EA$(?CI/#R!,K_V.'(!0A'·M)2-P5*BI/.X5] W;]P1(O(@CT?M^'^5X5M.@KB9]XZ18HH"Z"6HH(A,TS.;P M%9K]N+E=SKS,W,[+B1T'.Q+-/?,_BM!AXI.[-
,%RC\)N?SF$YK\[E]D5?. MX6MMH"76?G, '1XQ"QX+)T{FKQMAS7#C/"!,,<#@(W^2(UR%'MARSQD.<'@3(·MQCA@T[1[;\|@·WY[%@W21^2CXU?D59 CR[BR!;Z(T"
(S7@,"G(21DR')0]6+[&>V=|! M;QW6=4^O>Q20\ZBR#3D?/R5D|_8P1H$G]*X],1&/T*9TPB()]IDXQZ*K*0]0 MDB\P^ K#)#:!.DU\W&CM%6^(""(.O-
$Q1MH1OSV#8BVYA&9$4KKJZM·#)7Z= MN'SXKH*XA*+B9U0L!O/D+1\4B+8(6@S'·O(1+$ MZ55B <.!ZEA,N%BM#WX;M^K-MUSUL-,8FL#N6N+Q^=$Y(S3>CZ-+\$&!=\!*
M>R)%,B$.G\TEX-KG>T1+M#A!*·#07ZT=%Q>VN."0STCX5/F;'0>NZP/F@-2!\4 M#A!*Y,,=+9\01*(G]1 "CXO"D(>HU&XP0NK%9B7#C7]^N#
MRQOKSWW!X/N!7=P:%B1D@:A|FTIMPM$EJ!G$7.EDU#NHJ6HQN^6H75#=#!M·M'\#%BLK6]!.D&IX_$*]KJGW.-F$6 M[4IK.]TW&9,/[^2H*G@J29IG10+G)!\|\
<,/&+J+10D36_DB#0<->6#C@XCW·M1:%"(B/'5^-AL>6U@&' <0)PK5 M70Z[54X"W3G:#CSB_04>,;8/,E(S$L'!YR_Q5VAB6N28T·M%UQ@7'UO&MLDE%2JE2:(K
UAJ531O(E3VSC=,8<0&%?'Z[0:'W/9@IS+5^1< ML?AI#D$OH49XN>P1I6IQ.9B/)5?]HM3RDVO+YT:FF/WU$QP\E%6]:"PGO]8NTI/;OM.+B:'0/*%=IE^K
M3_6VSHR=G1/64LT#2L/6G@RW7@^FW9.8\$!,@(0_^1'*AU·ZG%+]L?VW%'6]G·M)ZQP. I#-ZJ9?. ^K 0$FG.%D1_QY8%U/;C1'?Y_K.0SQ/EO$WO%6B6&6$X&& M$M8F+3-N\·^%KL
<>OIK (,+UN?^L]%X%T93_+)7Y_G?ZGI32T.M>>M-FC31] M-EM/@OLN,53%F?E\G%Q\>P\%!\N+5HR·1B+B=7E8G39R>=QW)/?ZK< M2]EZT]@Z'DU?L5L75E\$C
L3RZ6)TX~7AMCC]6IU2W3]_L·I<G2&_'V!L=RU+X<]Z_>6?@C·R.0BDK%_+%#;X=8]_M83.T_Z"6;>NW5P?5AJ,NSRE>KB-\;T=3=/*6Q)(E>03;)Q1>]C*!+OV\0Y5&
M+GVYI,B5RMP>[*JU0,J'6Z:S>'\9*+/;!:#$*X MHDM)O?8ZV=-?U=[?;P7]M2+$J\]\;LFU>#NV_D2?VGO+@Y?N>BO+AP#E^1G/W\U6BOQ!6>2=949R7<@8R99\V]/O,RI8X?$
M1V[A.A\9-+!UCK[U')^%W;%B.4\9$$4%[>1·M*_F"7%1R&VQ!+S\IGAYQ$8>XN6%TXEY.5\IRTH[C+6-2HR,0IAFV#N_FV$ M&V1$%'W>Y)%*.GEDB9-'*NGDD6V
M!O+Z&WYW\$\F*Z\W ·8Z3K<\&BC:7"]?.RGCD.M*DG0U4;S;I%K:3__[C[_MC;JV:F+/C84W.B'KQ9PLJF^)NKRZ@KKP(KFW\!·M_F95
3NA.C<65PHLFS(V)M655P&6S2_[7F#9\I9IUP^UN_^FP,C"VM> M[GM>'NW M8UD*?\[L7 [5K5:,O*HEL&A?>F;WH&?RZ; LBFPRJI5YM"E7QC0
M,R<72T4YFYN[B3N%^'ECG/A2]33$B0MW.A2($\N; G*<0LN^IP1!*M7>S6&D MT+(IQZ77_]T>QDHZE5\36G; YG#7>^@\/.FO·GQL5=G7+,D6;\?6G^AU+@CG
M65@8SC./EKZL*,IF6/L1+VZ.W[DH+RZGD!.9G3DOQ9;=0RKP?9*$Y]>R0 %D8?;,H M9ZM9.5=*"WY2#M\L%3K$X0MG[\MR-EN2F]\60+!OD1NX45?US87XWY6@34]O M0[,V@V)?
WV^Z^8=\O[*M?:IY?PN[IA.7OV)(39XL*HG&6Y5"S*N4IJ):?< MO"XK>8B7%Q\2J,A%'"E2W2Z(6;'6,Q^(:&A?_^V&2]Y2]4'7?=.-K_5,I:ACBVBO6PB36)>O:H-JMUKIA;J;M
M^@ZIAE?MFK,V\"%/\^QAS+"8X]OUP5W9OSJUK(-RT=B2.QIGT/2XMP6'I[^X M*2 M$WQ6.BPNGE%#] W;)R2|RI[#V$?[F\B>[$OX-%N0:+MY[^=#V?IWI@;Z0$-ET MS^[
KOOX7J7\Q85G4C;!E&RGI5K&(,S PA77/+ANDNI*/6::^/^C"VC%4M22 MZC 5J-3P7<,"112M"4%S.NJ][60TH;/P65(SA(]U0_A8VK+./-4P:2_CUCSR M@L_2=?0QJ0TK]7JV(!RAF 8?
E/%Y&3A2OZGB[!:RN#AF =,9:FT) MZ,BIS'2IT9=2"I<$#·_T'|P[3H<@&R,T^9)W&9H4<'L2]^F[D6*@H;L-MT)4ZP;OAV#M=V^+;G;8,W)[:.9EV TX@_
_"0WVX26[3XRC3#T7P#3]8+7*ZV M&#],,(&&R·YU[$=##AS^WF 6;,F$=3A=+*H=SHA[NAO,"R"P8:5N,#Z(JQ
MJZ8!D1_I_(!8_+@%H^,Y@E7T:'B&H&+7ASNOT8DA"?'_38/6NI62<+P87[:I M45)&3 VMS73?9.?-8:/A.))8NWWQOPGF1S5A?BSV1# .G]KGQ^7[PS.K\%%RC1M^X.C67L5T'+A=*
<-?OP#[ZG'6T\XBVXD2C@421Y,8>Q M)2F_]R_8_T)BV"TJ;,+<·'K>S?:/NV:_XYB6)@"9!KL/0$#V9 'D^Y^C8/ MJWOSL&VW"TCR!4L[/C1L·M"K4,@>1X;_F KW'L]B/E5PV5^-
[*IEM+\U6A. MV9!UT7NU'<-"SQ4*2P=(%%'=]P @%U@^U4IN-?HUC6:.U%.3*"HI2Y8X$!O8 M%6Z_L(7<9'E>0O75++#VF](**O?;OXH_'XV]%9NL?),_P<%]B$1^&*3(;B/D]
M$?[W>>/!9VYYR&]:N*(+7"ZY,C]"0(]WN*SK4EG9=8E;)\'|V&OL>X=-]YN[·MR][$_1C=X]"%>,%XT"SFNQ"4/;T2DS?VOV-8>DSUR))8.K3\PF:H5FWO*'_< MW7-
S:V#H^!=W7*:M&$\[.4/7&3P<2)$SGAJ."4O8_O!\)Z1PRCPKE:=S,]_@·M=^.TD#N_.KG5MEH4#@FA:%IGST/>1W0M"NLS!W_<_/G37^__+71+X:4=I?Z'<;19!9U-D&.E M-
GYYX;:O0T=OKT]=M·M\97OPfJNPBQ3OK*P!UL5V6E/'>$*C6VYN+ZO=5R_;@I?W]5ZQ:I,_U(R;\9 M^3^\RR&6?X,W.D'6,$WH-!E3PXOA]K+GGS1>[#I67-/%6*GFYF$US
MSJ9?"\>,\A3_E MO\;I52SGOE>WC\=G^@0+YZV5HERL9.5-8WPKRX&NQ2F'G4$#@_VSO^>_,32^ M;P ;Q]+3+?
[]PDVN19&K;PGJO&5FSLY@YL%MOMMCVU3W3M0>MQ@RL.I_E=S"=<·M62X62G*^D(X=]P>YPWC)QO?5X!MGNT'!5?_L&:9C[K;>FCR=G#,H+,S=YBL5N5B=
MNW]Q<_V.%)EY=;5),Q!·5^]1%/?9[OVM/2]7*F\[D.)2O(CBXDCL9;E02NVD MU3D1JTKXSR(,O;F^Z_OOKMWU=Y<:.9B6IN])&937HW91BWR2NM[I>[6/[AQ
M]V13+#D]/(A07=D^K12,:>3UB·X1F'O(3]K6BSY3>WU^=XEM@Y_8-6WM MX4."/;*YA B9_+7ZX/RQ9AG[Y?VCA^UAHL;7CZ5/&?[<,·Y_?H@U[CK?/M^·M5"LX%71^;X-%E7
O2GLUV55?3D9YK@KKY>U<9$5/'#=9$8Z&@DB 80(U^^F>MQ8R @*"83=>1·MN[,3A35<|_"[("RM#6O+:E@ *^$)WS=^2Z#?4K]^(6Z>?,8]*O;YWL_NT5+ MDVO"NEY.4"NEZ[3#
#T^7@P'=_1C^XW:#3BEQ6AHT2:S_:'HH/8='<,[H@CP7W=Y M_S7@N>>>E>',](ZA<0^CI-V0(OKSCB6;&Q0%D308Z7^X?OWD%ZW&]/ZV^X/[/R& M!4PG)
<6EA1.)N5)N3MF+\Z64Y+]+M\7CQ?#WG>9;#$'X62\$2PNXP4NV] / M!MQ"K'W]"!J?(,DY3D6.&!9+A'T%P MU"%!'L(>5A?!T9L37+U2QYGH$]AV@4!HB_Z]G^A_D97/"^E.D?
N\ZBOI[HE MGGWT/Q<KOS@!@;@F2H(YX#D%_^0EB1JX<·M4[7^3)AD8H-IS^%?+%W?V-R?CFVVZRA&@KA$E@:P.9QU;8F 7/<;0 "&V@8P MAA6GZ7_0:J9,=33O"
QS_90D:CT_ +S4/0V+0!?G;.V K1 W154"5W)R=:GB5(<&DDI->WH)JTJ0:?R<&>0ORObC,0&J;. MDU+MZ%&8!@=SYJB;M"O<7L#ZN[%JB-SERJ/%P_EKO?/1$_?2\K\&'N O{(%7
M>67&HZFZ[1ZP%7BU#V>[%U;5SJRJ-;!L?M0090PLD1WC"'"8;&P3/R8DIYX0,+ M&MT_&O77.3'"E2LT2C/Y1=$4>P+_3#MJ;^'4R"_Z@XW:/^$RHA=KP/X,Z)D# M5]PP$._(P87 T[?
T8I2)@>B57>1192-%/*V1 'Z;O2JA5T6LQ3IF[V1'XK*?28·M]!B2#[?2/Q-]=62C_*KT+4XWKXOE>PNY%10:1Z)U-_D2PSZP_5]AHGN+_3
M(HW7Z$5UCFL5ZL:7_3_/XT>OGTJV2VI#156VEAN5/D"5"TBSN1E32(0/·U M%2.0"5G?1%5VZ/8XC^DNJV?+"W+QTI'(VM[<&.RJJJVY536[2[9_WQM6A^4.,ZKY"(Q
ML[N*YXKV*F![5.V[!US=S5A.?L6AE'.J].P*@J@*IPD2KU.\=C:JYK+9S+7X0$54 MI%6WJV3"2,K#VC%25('[:60=KT:O^2QR^'M.,![M$8/84FB%R16Q^.J.T^Q5
MASWT:@IN0.X)H@VN*HCTQZA:K=:>TZU]2'YPCD46K+H;O6 \HKM"+VX&K<>9 M:AU83J<8K*VY#3R;+=X]7 MPJ+))Y M)O.!?N2#C"U-BC/-#FK.+M@2C8>,MZ(H"N/;R<
EX,+]OUG'"S@6A M;5U?1".T%&*B1!T9M?D@M+4@&%GKC6N>5G?3&/C[>J,KQB6RH2)UOUN84,]OLR8?:E4W'"%9R]_I&=O,5ZS@QE0 MA*LWZL]/#V]UAY^:+.I:V$-UP*49]
{AEN^R2.3KF<4^1L<1WURV_T:LP'IUV! M8;___7SO7/E;RNVIVP?)O*!=O!{#6Z[DY7PVA:M:7=O5"KA^U*K_Y1LGZGVO M\U5^6>XLA/$?4$N/(>74E#FE;BSLQE_<-
/ZH9X.RC^S2G-+ MV7:RPY%_.69X62Z /:(HZX@VIK#,&W:UU@'+_*MW;V5_/YY;WXWM055_-A"]/$99O_"GFZ*R[P"9L[-PF5^O/ES;_YV[\Z.U.UAQ23+%19/FJ:X MS(MW%
[T_7:,]9^$8KCJ?>TCLVU@L^^SF69Y784%O:E*V50EVEUW18KEC')B5RO M>_2KIU9+E38?E[E2**?51·

*M+=\IO@@@P1*G\2MEO!P,XXV7)7TP"&P B09\)*I@FG@/LC7CW"O'?LG#-R M^C45(% 3E!&VB&@ 4Q2^@!4O)'W%L''9N.%R'55G9W"7U[>?XL.Y,%J*UEWK*

*M"P2WBJ288"T18ZTU@M]:BXP"8H5NK%R/=W M$1T)2*V2+JFQCQVJK5Z?2IH]2@"IRU5"\ST?:\%IR1;[''RE#(DHM1*%4J.Z*

MK[>W+:LKX9!TB!QXJL"\K1\%@E#XDN$1JE<5.$"'#TA!0EJ#;M(:7G-I-!CXA MDE4KZH>PR:=M? B<5F?$!^N<#(AC6.Y/FU\/3R]+FSC,Y5B]1W"US+K\;'KM

MR5/=>+42J%K"MHM$%\0+ZK2CHC`35P V2"~U-%Y;DCK"IX=M(P. MR5*'I&#SG9]Y4O:UY@<AS5.@<4:8OF^K-.;4K5HP?'F]>W_]D?#P$XC7''!R

*M3!D:QE/"KWA5DI_8K @%HU?1Q1;B&=S->;]U_/19/26OJ R%>-S=;WC/1%0K M,77Y{?2D[L>1"G8&HW>8D46'68H=9F31859TF,6+T:\1L--.)H PS)!{6*WNS*

*MQOO5=K;3C>Y^"6W7V!]Y2]JN#V WD7U@]*R$5ZYY5>7Y-K#16 U(\FL>>,[J M4)#?62 4_L7N\NOY5!Q7^8E<'^U5O)\HKP,\Z>ZRV?K^.N.YM\DG>_:,W^S^ M!_BS[Y0$)$<'=4JV!J*

SE24HW-J#:U[=2n?0X3K\=#6R!.?ULA$SP4W7&I M1.^]I_N#\059\27[/Y&& M^0+8B+BFG"\'2/%5EH%:HCGM=@.Z1OH"'C MYL@"NA"_ MA/OJM3"X _JJ;:|*

^;4&'7NSIG;KN]Q@>XT_;@2=5K&F%68WF]N+MH MG#Z>W%0]9 HPX.V.W_ P'MI/F&QN3A>=!AK)#X0?"'']_-= _&,!5Y(02FIHM,(M G%V.%_@"AG8&\357_K[JH!3WEF9{\P13< MN

*MTT5SJBC ==1,V=K7U\LJ0W>7PQ/V[NY$5"HG,"X;MXU58Q/8$;7#;7GL@/VD MU-TWOX2320S%GKBNAZ;K>*7"Y*OUQ=L]NHZM;F6I[\M9HX?AV17QW+M<).&L*

M>]W:FP91';$)G;EP3.)1!5O?S7\%LZ7;#;Q1.2R4Z%V5%E/7CNDVF(U9P-VS97/%IQW^VOW#): M#/9*#(9 X]4RB3/U_"FT%+5/X:?^ 7Y%JD)T)ZD6H\XK+-52D-Z/(+TMATB*

*M%,G>D)=_M:= 1N-6D#C8!CE!G8\2H-WB_0?8Q*N1TC04|@$V1? M0((-?-4[(7?,WMTU3AM+OOK>77ZW[#N),S&?Z'CFF. Z%=X\$!P,PC'2*

M^TGKN[=$MT:H,.S:Q@#A)$7C92I_-JW-W8W-N3L]7]]>=#FA.U8=O#V27Y{N M^>FRMNQM!8O94?4.;_;_EPI-(2N47MQ!]_1+8Y<>P&#+5DN7_E1.OZ>CD[H;O+ M.47>+

*(;GXGLK]PC^K^)4-1 F(P?,U5S' M7-[Z"8N_/E^F5Y=77W?]^WQ:V2TW!Q45$UO@K"3U$E3BA"Y9QBF2R#%ST>N8 MRT*X-GCJZ949]R^FY[^G_#X&J_2J"8_J*JHF,I*V&"RVR;S :C*

*NZ(!4K\1-MKZO=4Y94CVI?LL:G'*A6$2NFZ-3@)N"KBI%,&FJ)NJH";B@BS$!-G:LL; MR!)9:OO07SOO&DMK^AG>.'14'E). T87HWYL)QFECZ/R@>>:^@P,@_F/&UD*

MA'5X9=R0.,]G3@2U#POR[0&06RAZCP/%.J,7=I=$8W17]S[SG?GGWA@_$-9G M:FP18_4]VI/,#7\"_-98AP;V?I(SC@-3$)ZYYLL7"NQ,OG3P(+7__G)^#_E

MI(DOL^T]\OI"'^&&_S$9"3,X";/8S4 &ZIA4MO))D^DPR'5_)%105#!BI89X M X?PQ;KV?"((1FB7, M# G#)>#KKNR%NI-HK3%%P'0&I[TYL..7]4>]VKN0OZ|./BV\=Z_<"94YWHXQ

M&[|?SV#UANP<(,1#E__Xj8?*5'7EV9419WXP>_,T=$+6'HRP^"L,@^]2G M\>SMC4WVL4M0/B01LU+<)<7?;T>3!M) ^063V]@>R8E2Y[H?7]M@[^DT=D/IZK*

MYI<_(]8"96F@=#HB]0#OWZYT1.]=-1:BC6S M?9@CF@Q.^F;M=O[:HL8IC,.\,'1$XS F.PO\S?*5J/:.7SZBLG.@61BA."-5 M9DYIT")]O(2,+|\.,T<;8 [NK\D\/+XTCQ?,=W]OLAB[",*

[K!"ABPJ1%"M$ MZ)"I*@0R:9"I)A$]C.K1W.]_9W7DNST 'Y. ^CP8PLDYS\(SMVLOM[W?=|:6 M2C9?$23D*Z*.K\Q$;CK&D[N"'(VAPB,9=,*K?468H,;W/GQ(N4Z0W:[UT|+_*

*M>%V^>#_KUYZ&]FQQ+S*_^33@1%B/"XU^Z|551\WZ*01I_^3Q6-RU5.NW%,E\U&2:TOYWI\U+|_OU9LSKO?"!E\5#%Q7@!'Q2GZ;Z(-MZ(ZZSB16FG<@:L!?|G8!=_!L?*

*X2ITWZ?5U7 $\),0,; >CR0BRA5!CX' MM#T1D'8Z*GFOM&I?*5A,?P0>V4;LO598\SA^K%O79CX"\#ZZB'1% M5(5TB:C],):1$LR@8] 26"L"(B>WG2!0=$U,.$\N*D"CP[^,B*

*H*I!//]]'LAFN$OX%/9?% M'E%7(-R!108 P6ES'FS=]0+@ZD3P/R+P78^P!CAUL'EU*FHX^&G(PMF.DO5& MO56ZA*

1A_+@<]NQ.+15A$@'TEH(TY7_E|;)/O&7C#M:RJ;:ECOP..TF2= MT"&6/#"C4292#IFRCU.IL.%G82A3XL+4\WZLAKC1(8R|"CP1!|@$!\"((@]f[' M0#\M-*

*.E_6ZN\/# QC*T@3#T.96D42\GSI@ U31"'9-7^R<,%R:8.5E6!^D6:"\M\ MO%GQ52"A&GZ*KGX5?B1#.6]Y+8]@K9,>P\#I"3KO^A^@G+I"/=<0H_BI3) M"5#K1)?CD*(K@_]T16?*

*\9'T+AL?;@X.BL-(0L:CQ+.C=KM7B.@$K5,:C1WXL MP"U; ^YJLW(!"*P+@&;=S>(/.N:O\>NG4EC7N:=JK68Q_;6TI@B%(E@_+)-!L M]D_&>KKQE^/F?1@?1,*.8O?*

0PN,ECZQ8J=#T.]6#WY>LA[-8.Y*@"F'FP*V MA\R$(-':"A>MV[V]#XFY;2S>'Q=3RKJ]8W/Y*8CK="_7>7E,8J@7$I89T(&^ M,)0!MG= D*6Q'G2% L'TT%2L!X3)!#@5W^*

*M&@^TJ4^P86/W>;NT4'UZH$^; MUS89E%*93@A3CT_XX'H@.(^6AV'(K18_9.)0!-"W!D*+H/C@#\ M8+]J#B4!C#LOK94C*@;@]#>RE2Y[Y57>O7!3OV&"54#,C-*

*7=D_;0M MQ<4#0T12#9?.5R#)5#E +V'P$C6\8&-",$F=XH^%*XGB-DMC]35X-3N]?EA?C MQWXV.B+5>W;=8V)G8(V.R"I>NMU[??[21.JBO;Q;5'(F\+.CB*@1],VCN+K;*

MB^*X&P+F![\'N+8%L[A;IS#-B"68-_0CJC ?)8=!&97./W4YG3P?D1T0+P! M$M.APJ:/]ZT.XF:"*!,5Q,WZ3\O^\.R=ZUP^:&.[;^W6],:!\910WO)Y]R\; M$8=$^9"HV# ^YF:$:*Z5A<0#*

<'L]T"LJHJ5]3Y_ D&7-VA:,G1.5"H:PGV&7 MMC0%?00YU.V.D0_ B\XDU6/G'CX'&A 'O ?42MP!Y159YW20F81'FN: MX+)@>U:E!&TNNIDUNSH[E+^+#89?

*AZS$I)&!!9$(C2=%Z3NR3MJG[V@N*YSJ M-3;]Y*]QL6Y+!]!58%=*>MXBR.Y *8NYK,?!5!C#TA-(P%B)-S[IH-<;'"EEK M2_+\M:!\R1TVT^#?6D).#!I&,S@97${/]2-6/%&T=" B9-*

*5H*5JF32<,06#GC MQU>^(=W-6@]*/V?*>MVE1#7"UJA<\]@:..+C^+[A10\W*>H(4Y6\L-YZ5) $X M8BJK+$KZ69E%!7IU!8(A@2#_?NH:<8Z=+#3B >#F 1L!(8#X2">0'GA*#V78*

M=-@2T|AWO4S/R,%7'F$7^B(A,VNZHV?DU-"Y<$##@?VH/]BT,XGI5ESZ]T?L MC$>_MO)3^HKEP0!'IS(QTI5F\L]\VE'I:0(.2S\6_AL0+SQ:]SM@P'MU\X8, M@5XK6&1_]D

AS_$3614T=)RRQ.O?^)__]I%$!5]5_X(&X2?AV:R(GJ|#]#P: M3SS1'^@1X_$1CWB6@]H6$]J:UHC%6PDA_?49-MK>]+-+ MV?4U-HNG!{.DRC7PG:]UTW(Y^*#Z)X_*>%Q;9I?$]\0@]<-*

R#;A9]D]N8J^M M]$:O63\RMAO3(3A4K&X7(T1,7]+"B[@>?#IUNJAL0#%1V'F,*L9UNZM?80 M-P%/KM6'#>W,<[VKAZK<]XXO'R9GSY?VH=ZX7[2V%RN*M,?N2!-,>TPYT)((*

*M*M/94RFTUR(42!$<6]:X{'20'-& Z!%YA!SOE!=-!>$=P'X=!-T0-YXN3%X8M MKO>T?)A>)2],%Z/G5]L6UX]2UY/W?W=P 1 RLXV?/-P0N!SV.;,$7H_KRP,+*

MNR&/+Q%_IM5'1Z[GT]$)O+8C>,.^[=#G@BB2]U=B%AZ[=9Q1/?::3]YXO<<. M2YM+>]&ARS0.*0R,Z*^3:Y,%'OH]%1[/3A_'D-DUD:V_OH9FZKESN!4*9X+=*

MP5CN>C6=N+WGB+_5LXOJEW1\\\7DS%U?=RZ&^10]Q^'[7-;8PVB=6R3M5Q/\]#+:J]''1_IKN41L_C^HALO5R+!,GC_EDY'-P8=

MV2ZR7BIJ^K8!0^-^/9F!YETBPL%+/@IF6VQZT!!BR>,.9!8'13OK^^6@^9Q=_GP\=#^/IE_53\^,YGL:./9;X#5AM2,!9E<@-9O8!C5H,HM1I.D2&HH+L'C/>?:ASI@$^F_"U89F?.BS-

*>-Y #&)DX M.]TR#]QH]87(Y=ACO9/,=2<%]FCJ#.E#+Y'9$6CVS=FQ2@)-$)R_S\'PXR0\ M",5:9RX1%Z_7YU2BVF+ACY8OK& P=4S!1=N@0L-BHG!?#$]9@*9CZ9PJ!SG*

MR>.1(PK>HQPI/|_ ?N,.Y?IZ9>?BB,ZKYJL6/+F"+5 ZX[B0AU[?D:9#?>\;ZN+UI3;Y.O[+Q&]/EOUK!?UOB/T@R,=@O1L=J M(/M5ZSA%Y%GIM>R2FZA'V8"U'6M8\/M16.

]0W^,SLI^>WDMWGE#'JE/)R?BB M=44 VV+>..O(AKE1954B;Z^D$2KYL7U_=>X_LG024ST;G2V)%.(%;Q>J>'U&I-C MO1LYTO,DV0G;TV^(0=L8PW]UA5N3'3D!-*

*PW!NWB9DY_?'YDYVBF/5D0:AP3 MQLHC?7 86L:H4VWIDV_GL#-@^BTQBLGT*4B0!*A,')>N0@;]8.^9_UHH) M;*BS#M>A>Y7^9D)_4GNF2OOZ?D)XK=*FN=&FX309@Y]3*

MB%/1=!6O5")S!AJKERG6(:N:],5)&1W!%J.DZ<]D4^57/X[#K,'KV(G>MLFTA@.Y@E?6Z-/PV;=P.LKG=>M:/!6?+WLYK^K>;SR R//4K'/^CPU

*MK)BGEB<8'#/UXQS''#0V;75HR\79P^W=V6.;N[;'IAE/VG!HVMH1*P19=LTD M6K/$P-A6'Y@*:"P-VX/4+BOZ^!UC4`_ M-14F\#M'04"*

*#15.DAJ\'Y71*2^$3LI&:#G$$%!8255E\]]WKSL&;/|@WII MT^XY(D@+#RU%5M%\F]L.4%=N6O627!9L]0F8]Q+K.(_#(P\.-GME=5L7!V?U7 M|^.Z3F^FJ;9XOM|2DY;*

*(7Y_4NOZ^NYDV3]_MZBY?G[3KX3-UR\]RJ17]2T9]D^_KQ*2RZ\T^F$+ZOX$RMNA]=2;6HC+NF&\G! MMM?,PZS]HHA?_0SC^T4WTNY29"I) ;S!!:K)VHX40\!O=QYXHR,P7(^S4<.*

M3JO/WT:+WA4S723AM+YZ"RF(S*-!EP"K]XTRAZC7X&B\'7K,;)2*++>D\'H]<#[7GO&8]\C9P5NW2OGR2_EB*

MZ8]8=TU6%#EOZ>UB<%L%8Y4'];5:CEFM\0Z=HM8TZ2$!N3S\%VKEC-49T5% M\Q]=-Q6+/F/P>0HQ&A(GHK-Y#@]RUK*]HPA+NB4I4KM|&@\&^Z1-BQ+F#!5] M#.Y*(0A#5?*

*%f\)B%'&C1TW7LY%^[7:!\]CM^;9_//D_]>*KV-LW|+E*_7LF:_I;/OW#?91]]/WA.M&51>O&.%F:1R MFXAW.6<8K,&:1%O/K@!F"D*UE=+"_]RM/^5%WY%0]YMYEV^1R],@KYA.H*

M)\ Q$F5U]@05QY7+#O$6\(WN\H-4N!9Q/+LX87)>I/V?WN^_">?DJ=2B:QW ME],!^5PY?ZWUYKT#'1,?EB-!.K1NJI=JG?,V-FN2VOZM(/)%^AW@!T%59651 M@K?*

VJ[BM;:^\+97LRDZ"A)6=1!W'K-D8F&,V!L,YOZ8\-9^Q/0]#P#-G78-UZ53SZT1S,K.^X,LN[@POI&.WOZM\!%2C'58'C=2K6YUK-675U*

*M')6SO.UXJ@(Z5]6F/.X!NP%^L^E\3 =6E0]X8#EP!*SK)\#7"537CWXBNUV7 M +^05* =X*X,WX+:[9HM S8;02ZZ01OI+IG[VF)P\= B'@;V.,: K:RS>N)L*

*MQ&^\&E&':@ZV"A@_D<;BNWYK]ZB_Y(.S<(*F<(8*Q-S#]:-0$;2^WPS!4}\9 M@AVYH?.|>2B|>LMK]4&354?&?{C4+_-FTF=Z=^>OPKM@729\H4Z(@,L0;ZJ" M/H$-*

#OR$XQ[A!TRF77?%<;-7^A7"'"-Y9M8RM; +AB>CGP(4$]OWZ_0 P3+[M/,^I<#Q(AC!,B/09LW?4}>^D OC]P_@FV@&X$N<86 F=-M>L_,RA3NMT,Q5)-

]IXCCBG6_YC+T>9OK!UHZ+?UHF_'S/.;?;26J5[IFSF5@-M__I?1RN71P5>GJ?M+54N_!R^-U{4%_)QSE]W!)\"B,U\#!ZS56X3IJKX.GF^ M1W'P^Q@.!X4UY-BM/#-L-]-T<\PT!Y.9U!@'$

*MS4 8:(M#"'<[8^KM2_|<{)1VV 97^NXZ3!&7.48==1;+U1OBX=E^3K>60-%*J MX"ME*J +[PBVX?FV%^E]>3U61(TDX";;2%!?)82?"'>;L,G%)KF5/!\ZO-*

:9^+XEM'1(O4\&CN.=@TJ=OTT5<\XR$KW&H&0^8+OA MAA,]S;IERDF!8XJ91'W9B3GLJLH$T M<0%S0@[AE6:.X2^!W&#?L-<3",945!8"Q-%MHV>I6M?5W+S]O^K7#_]MS,

*M/M=?TEA_)@2PT!^*]8VG)KFNH!6&0O0P]MQ6C7<+3X%X.O:VC4L<4OZ1O&2;H MABR,Q2&66KE)%@#-0/];9?'OA7EYQCLHNBSKZ*WQL M[P,*

(^,$E7FWYB*P(TL'__D[A(:E>6YVIUH/]0:,O,'NMA,7XOOMV@1$T,LG M;MUE<>&*,*P$Y,R@);*B&%&Y?"$H%"_"/|&.&%%CSBK<"!;!QW>$AL PX,4;C M>:DSESLC>;H"'^[A<9TY$-*

*+(UYD/P;6-<*R1AAR@FZO_C3'G\%*#)O(B@V> MS/O/3Y3\-*\[8H/ZZK$!6#XFPF_%R;&AU_@&G,]'YKICH\G2KO594(RBZM&&*]%:'=*$9MGLU.*3-Q.+M&! =-_M6N!-*

UFI?X&NR9#$O_;4*&]YU=\"N&]^WYU\]NWS(7CS< M/@?6M(YNO-N-F$P]OOI8),2FDYIB]S'%$8FCR"*F19ED.5:*(B+*0T2[$'O*

*MS\\OI.U+E1$&.TFO4A9E4>XT7KH2]D)K8U:5P<%O\VLM9@Q&6@FVN2<'FD39N M;\5ZX^/]HC|S#25NRT;2&Q9AQ" G?,U<*57$[ZQ)-"*QJ*@7A-4Y,D@Y646*

*M$@ZFJ#X:.TP40=0_N=*[8S?N%!&4(II)21% B_M_E%+ P48X70]$CA%*8E77IR77KOC6?GMW5QTMM*V(0!4MW\B;"$>_#F(@OTQ XI*

M3>+#E$))!T5Z$2(F&H)!]D]?:ZD!L+80IU7<];>"0S"DQ<24;@)!%8GQDU'*2 M9E!DEZ1#O5Y13QS_47[VL32W'@A)ET9[*57??TT=D(%Y1C.!''+&FU{J'(Y(&2*

*M[5+4W8*Y&5;5^5+!V'YP)#W:2>RV!@=$H@8Y3K<4Y,B((@7_KWUTB@)"72?O(0C4 M%N%!BU@*{J"B?6W0 N;H?Y+((N=++J!6^!M6Z8_,$@*!=]".!%8.C7BG257 M[HJF -?*

%9&9GL5)3E<06*0l.#6?9C9L466*H+M+IC]_^>[WZT2/"ZB@PN&B MT%/@[ZQ5!3$NFE>W9@V^EA_@7>H03N[V\5]B"W]-C11NU*V-6)]8PJG_;5KK*

M55V'V.EK%'<]OGZ|%6A6<<6Z-OG)O|MNC'5$_@-V-;M&= M +B.IV83&PB M^-?'#&]FV[_A%^Z /!J.H5TTY1538-_D999 GZGB AFB;Y 1^[!U.2R ME3_K7-XOLNRR%5M,]-

*A5]MP*9A@K 7PD1K,@5[4!K^-^-H?I&5_H)_ UDS[M8]T&/-R;V-VH$W@U>.@*#BNFQ06L]63!4R:R&J!%RC[7V9*5$_TKV=TB.[[FE*

MAB|GUQ>BN']+D/",14>^.L>BL[VQ31]$:-%Y37N\|*=I._3:K('$?HY!%G?7 MOF>>:F5]+_VK;N|L:6&#NW'X>8&HF$!K]X_VVM,7EI%XDQ((!&%KWVNRSS?*

*MVRE<3'M@TFUFM_3(D,.+Z3?+36T.TU^.0 V.UT?8TCO$&NN"DSCX3=(E M>|Z#_[CA!<=I4^2;[-/?VSX?-*IDI?N,N!=W%PF-:/;IASW1S:G<\&"+7N0N)'LM9?2/!19"_N*

*MWU56H+.^D.# 5,P+20[75L;I>B!^-_Y\-'7"@]_-> "A%YHN^=D;U;1A29)? MIB2]_;?SH7/_3>4+GB3N#2>V0&*R'+FMM,+ZN[NYIHB?BXT7CZ:J:LQ1!S+M+ M'*.B"!P8%)LG!,C$*

*#/);T^9#JO:Y3'|71GM!F@FYBT1&83&?#FLE7IV9OUE M\"*3[\K)YG0WU&F)>9E)*\'K@>V(S0!!@TS&CW:<*_">7L8@6O+1')Q@5U?-V'2"SZ>1:.N8E9_:KES1EN)MI=E:0 ,<86I-*

*@!9D(17*BC T)*Q >^O 8/Q+EO\=NY.)>[)1>55IBDI_MD=9VKSSF[?=9?UYBFY-D0LB*=P6\B"K_SF#EU;NW]@5TKFK!$QZ8[5R?& M5^\4?BQ,Q\YKS.Y"M8_+Q?*

2]>35WU%.V_;>T[F+7[BC(\H%7G-)E)P<8+E.A M8!,H,H/$LF!!=2)1#$1NE0%*F?^$>3]%G@Y'&%7#>L(A_)VX(76/_FEEEJR M8I=S9TX 'TM)*

[IPI>_+BPS>W%$4@>U>>_463B>UK;A& ##-@N?463H/.RO7K90E4R" []@U!3 "_MY>R#0(DOE^4W%W28Y:EJP#_-9>73@/(1- ..5N7&B0(X<(1N W_1A_U Z%O*

M:6)|R:5DW(8PH)F]LO)WTQ-1 M\R;C:@Z3I,A(4\IX%PB5^8F;#_.G B>[L3EIW_KLU[^8J%)B*!Y,8I<"7+ M:W+KH&XJ A)N336@MRT6!S1@TI,UQ@::]@&3}>I-NZHA M^3.*

*jR\|F_VEPV10^3ZHYGYVG[ZFT\5$:L.H#$BC]5311T#>KI#,E<*WP@_MX_M^MDFW.E>QZ$K)B(+G@(8C3<~O-F#+;8X)KI+M54AYRH_&I^3!{]-WH")59V"*

M'&8'5$V6T+^SBE_0N7H.>0N-^M%PQ__&<"A8WOMD;P938_>VM1L< CPM_]WM-M8\YHK"|};)M&BS;'880;E_XMCCT8K)'&FZ](9#TP6\/Y6S[]/P'05N+L& O M4.*!'[,"A&8&RD2 ?*

*NL;SRKVY.@Q>]TY63Z-YMWE M|&M*3ZG+EUIKD,D,.8/F:VA:0-+30K)>07L"5Q!P0<:,R$U>M'Z$M.G#?Z4Z M(CQHFK3Y-L,SNFPG2V|*:)%'3Y-4C(QFX.CI:@TO,X'QEZ C3?*

<"H_)S.QD_ M7TBW8%=_2_>!W/WI>9E='L1#K^.OZ^9A,P\|M(@$&|#(>Z'F S*HI.>X]U M.MFDO.7"69&&P9(Y(AQ)8#3C"5,+R(W0R@%=W9C+2DW0BG7FZ)WS4' -P1,X9!04YSDS*

*M%MX5;DV.X83N6+68Y]/6?VS-[F_O85-)6IHK79/=W,.N7:DsOE&6S!9G'9L] MQ[_C1.%]R"\&S\:(T0;Q+ 5S*O7 0M4(!)3]+?Z37!IVA8ZEZ#2+9X=ORD)3*

*MWN|GCY];473_8NGRF#Z"WG(KK4CDG\?@0>[G-GD[NH:.SL5TC*J.$#N6KN&5 MX#[A;?-QB&*V44B\K7^.G$/CM+MU M&-^9XOC..C&^,Z?C.PU*

8,B57DC@K8Q=#0KAG,=2RB0L0M?+CG3MG,+VOL M5?9I%$_0Y(''$,0+R/ Q|RB0E0E#8TMAVZ6$/4JH!#]<|<P|C/Z'Z?;KAO MZNKCY,HS2--U*

*F/*8*B(L*)7AN56@BC"+_H4Q9KE/X[G-_1G P'^B%8" ML91XSN[$0?GR^LTE;T2G/D'=SQ"GJSYYQK_<=+LO9!51P8,/I3=.K 37*Q5K#.EXVPAAB'M'36XC*

*j;Z=K>F>=%QG$K!@55#UXM^P3FO'M[O4%-*PG>D^>O-*89KL\EJOA)V^O*<,1>U\>X\AC#0;S(>MR(%F[J1HA(3HV MC*R9,%B).X4?\ H0.E&.=_K>:?*@0K\?RHZ-1QWQ*

XA,.7T+T02[$PL=9.>1@ MR;ZQ#V1E0#!CGAPPA-S^25T /M?')OFDE.WEYQ/"ALM;Q%5'5&5;SG?'WXW M&;;%Z@#V1E0#%ZRS8F@\'U-

5E2S5M=L0K<&S;..%B+4YP8DA<2A'BA@ M,Z'&^4OT[YM6<>V0Z+MI(81Q_+[MW0%)-;B_WI[.[4VZWQDP9D 4@#@|E M)#/2XQHS^+H1Z3$XSSS8=^&1/U?*

N3DEV_<%N@?,"SC>919Z$_9*@^^GT;$B MV&3@=_H(-BB$X)!41SC-=[OF MI299"Q0)UD'J,/9]QIE,_(5'%:[_XF.(SR%F"V>T;,L%#K.9=TKKD;T(5!8/ M%D#)Z.IZJF0QW M 8P@\"=*

*1H0.RSUV@,B0=,_@!9I"B2/^86VPO9'5SJ78@&UI_H&3U+@5XR MA\&LGM75R_&P;5*P99=K$7[+5Z=@%?KZ.5G!.6& 2;+ ^6^<+/!M%?:R!74$ M$PG#^0[6_R%0<&8Z*

M"=K6(WRB>]W@!QJLJIGH&)ZSC7")?YK"BA!OW_OJ^ O@?TL#WDHE77 #OTO M,OS%7%#YU):CAS!T?ACSO'9(0SA517\S>.!,4+0I;RN M4M&U&K)9GP)SR\!8CL5$=@Z7-A.*

*$$M8#+&,.5@6=8ZACN#!&>@CE(HH1 MQ^FYF-Y+LWMO>D4O6*H5!4LI%BS5BH*EG!8LY2TY750F%95)^UR9]#.B"CM+ M, ^G98=U ^U4DF;96?*

V/Z1B;TJ;AP!!!#Q@RVK2]$KRJX(>K]\X8V?+[]^585 M6+'4]6%B%)N(M(;H>6]FT_Q-TMH"'3?8D<59!^(6OY2F+M#RZ7UE-&SW PHZ M=E-#PV2[&Y!ZBMH\F-)T%3_#(H[

*^Q'B/6.OGQ MQ&12YE'.C2Y7B'IW2=Y(WTSOXJ-_*6S*&'G+,0AP.Y5#HNZYG228=C'X84T:M*L8IDH#&-5FXN'K^_*IWFV>(NFE\22@<._[DMD^<7W%#1[E-!3*

M(P2.6=X!AKP#Y!S@JT5C.^H ;?);D(EB MQ9%5%GS+L5]!IE)"/+ 0M1/+)G$?H+!R^D#])E1=7)CF0+ENPH+"GZ+" M@MK'86[7BPC.514-/.,*W?;@0N*$FBXQQ!$,!H'?

OG_V1GI]9MV5A#U[TIM_2O;EI-23%UG[Y 5"X MC$HG1>I?MJ@P0IXGM(;H-+'IF0<*8!]5I/.-TF-:SLU?5,GK&3N2F33N615 M7N@9$_N?$T6(-*

*C7R85W\!LY18]G@CJ|OL?^/JZ'3A3]/F_O>*T, "MK]%]DA M#4>]2I4#P=ST3"%L$$/FABY29.!<'>C?:,)>7&H6<)PE2TZK3W 3JG6-/X,!XZ9LDU?U5"1514FPG0H?]!.&*

MSLK[@8ROI5:B)*/TF/?X% T8%&M=]ZB5J_ZIH<5"V'"'60&8_KV38Y^.1S3 M4T_@B=RTKYG3S2W),QZ+ MSS7WRW>;*>DS:.;P@.SK:/#]KX3 MDDP,+D\"05FK!L*<'$$/!&*

f,@]>=3GF&$P@\%53/*HU4SBP4_ M:,O.:I:A7'-MV)76\.'3R40TS@#6!((EP7=298QC%X"/!YKAL3M5CZ7,2N#CL$Z+!2P+ULV; MLV4N)*

*SFH#4D/8)OA4>!2;1IV\6XIX75/X0$@WWNVSAHX^-'2Y7%&9I+4WIF M%0%]'@X*PAQ^%?8W%4*@\.@D$PEK .;%'@]H,\6I*E;^0BC*.H0,#13[?!CLD$>-M'*

*\161E3TQK!C>H\D!X:T&N6K'N#BN/4N!CXP3&X<[A:!%\# M&-TB1!"F004_"B2*R,*Z)MZ*<.5N?A)}!\R20@6290F@EK(,QG#R@9X17PB3V M4I^,'H\BK+*

*<$;@R0H,0;%4OFU|&MZ;,P#0_?<7>^AB/VMQECL1?\;"W8,@*S M#!R9$:KLWG#A>UHE?QK'W0<5)9+EME7Z*P-(;UA@!AM!3#AYU!7;,K];,:@P= M)^YB,)WF?*

00=^!LP7<^!30U!(R0.=#VL$_)C"SD\LR!9>X!, M6*=EZH@#P5%L&]D^UFH;Z.!B&3Z^SI 'N'TK;P_$LJ8.'./?K6WJ_,X,LAY M4.,$Q/1R!8A%\^6G>/X,!XZ9LDU?U5"1514FPG0H?]!.&

*I_R';]3BQ4+"Q[ZQA*VDI_F>QBDY?[1$L*W^>% MV;I MMQ$'^%DZ#23)=U"%54YVR2O\,*X!]B#]R5|]&H!GVDPL4LRG]P7P&M(-(^PL^$>M<8D[2A89\=*

<7]7ONZ8[_G9JVW96QM!Y:[V5BPW)2:PX]A1S2<.M>](X60E-A@(:\SL@W&BJ-3U/#T%9GJ<(B%W$X/=57G3YH_N!'G=6B@3;5$HZ M)A#,Z<%;Z!DZ=]DH3-KFK"-7)Z4I>$YXM:|*

(R!70K)BZ(7A!:R;?P8 _$F6W M+!.O,Y;8IY-CWURME=O=*?[F<:.U":U),+,).S M%WL0'1IL==)=K!5ZI!7M&IX6?GS0%+5:`$;,FY$-[^PI83EY@EIP?/),\$F8 M+T.Y3$WT,?

A;RYMR^#7Z&+(3H+IU_T#W;LI\).55;>^[S;&@?KF%:CN"9S4 M2U"'7%V@NX]NCR]%IB/+"C/L)EL8$[NA(ACD$]"TPN BASZM6 MMM=X[-$*A)RA#J"%*

:QL&:,QC1%KAZCG!]@#YPE6JR3PM($C#.X#@3&K$X@CU!-$<%$X.M[USA;KE4= MX\%WAZ6@'>]^JOZXL6PT?ZK3?A_.R U(39HS='5#R|W!#9:,2KZCGY7X $V M3>GM1FT!4H*

#1UZ"?OX4D.S"...R_J;_LS&9)(6]\C ^HRQ;$'<'{@\C2[ME\W|&T!U OSDG;YU%)59_57"]I-CL>+ 5L.FSZ@ACYX"QT(B] #:.#'3UF=]G^ M-^'D?_X@6GU':D)/U!H;>DS?75F

K>)_J1N0=5W'4LR GWZA^&E MRQ),/7AR'8Z5$[^^5?VXM\V%BZ!{;G@_M@L!=.T!Q1NF&^]DS&S(.MRGX]QL=FV!ND]:/CUE,7@C+C)3?4DN],6!PUM,I3#C ,P9:LZ'-,339T ME\K;W-

R ZAD&4SR)4?ADPXXPN5S\(/M+;2;>2Y]AI<>Z.(2R<0H$B-4.# G8 M+!:.48(4,7=AM?A6_G-E2QY&W@QVL08\"8(.K"PI!4$NNC3)0)\]-RF4Z:KA

M7S!^+@(H+BN\B)EL#$&0E5")NF].""E+.O08N)6I'"'U+E>.ESPK.(1U-!9 M,],W7F%[XBWQ.X:-_ UO*0B8G!$GH\7]D>,<@TD55',3IV%^P", ^;4*4M MZ\Z,<*.?HD2FF],N5]RX5,*

(_3_,5GF[KRM-PD[@F&?E\+BJ0+_$F6W M+L+ BL4BLGMWGT]Y9[3.)5Q(`]:XQ+$JVND^^DIOR874/S)R.QGSP0+5:`$;,FY$-[^PI83EY@EIP?/),\$F8 M+T.Y3$WT,?

*{.V;509@O6%A^$*GFO,_M>(4=\]ZO'/- {L#'!6L>L"}4E89LXN6&D_NTU<27V1*UMFTRG[A..5W^;DZ,. MLK>R9K7-J\&)HUO@Q%@G *8S|SF"$&.LV)^^K!$2@>:.L?FPEN_IQP H*5(>?*

*MO&8T&;!:A.KQ)$*Q!5Z%*O(;P%(U!\NX\T>FXM.S)TD-VARO=_<5,%VM4> M^F16AOED=ML'ORM'-DE]DTMP;<"90+9/*=B<62%,I/)0[{7 YE) MXS.:*

<'>YI95L^,P=T.M5#F9TQ>=6F|LHWW9?N8>CPM5R-0L'W".S$LW2>\;[.2*L=RK8*K5@F".0KLMOT+ MHERKGX<#A>,JMD>4O7P]'IW<*N7>52T"9;O/ M>*O4[7?&NZ?M> /CFF,.JI70T@;9O DU%PUX 64QX"7^1KMI<4OC0K(!D ME;$ER0E4MYD3{!A3!,&?@K*UUN_-KSL"?]D(HG.Z?/]X\]_?]/W.#- ,/9/ M5IU"\!FF(($V*Q0KZG/+$< J_7UEB7P/PH0Z.("P?*

NPHFC@<6<[XD+]1XV-M9B V&5!-1C>?O9/^*0;?[F\Z_RF&?/$E?7W+4!+FI3'[M>I>=:"(]I^F(;5%O.D&)R8R)-$(B8F*MW;B=I8GG#:0CUS:Z=I">V M;WS&:

(BKY1>/_FND[.3QZ?13\I6;)W4R9209.BC M8 #2E.R:L74_)R.B5OIQQ:#,_;152Y M8GA>,3PO+PE\LK(F@2^ &YM W=)0W8:M&8@$LM>I?,C5A09F\O&1"^_D,QR MPAV/'W],

(M\N(?7]&>.!#\Q+G[TOKP ,.5HB;2"/38>1KGU&WH/MR\DO7 MU=X3O3R=GERV*0_RNBX4C,;'9#GP50YM|V2<++)M=:]N(>,U/;86SE!/S^W[MA5166DN3B!\/7%8*

SLO(S.OR5HR!'OQY/34<>B+CS/"V;7'5;=R=#?R*V;W(R M.NG,1'/,LPP-?V=(V)N55U%KY;,H1BJ(*]&"*&T$@<0C^5%&74V!FVD R,7]N-MZ@*@_,(T/ZD^3W#Z_'-

>'/*87*D+*%XB7]6[OGSV?ONQ MG5]G=.DP4H43M=4*Z(LZ3H5W4$5*'DCHAAAUHO2D(SY;IK,"7; MY15.8=H]4K%39GGT=<5,>2"M3]'4&E[MG!4SY8&R&Q_5 M66-

X_G0_5%=UUNB;3]IZJ4_L>LZZB053;.AC@\P'ISC!-;P%/>3F?29W>4[_E2 MF4Z?U2%WD,_K.N:!,UX25(S%I&(CP(C@_<+2=.;U89%HHHH[*^*$#3G',^9->3.$&=B"QX"F!*

*WOAP.F.>;L?5[I)]+%<^R/;P M068/?IL,@\#FG=-;,$>XV#A*S[DZCS=6T5OT*XA6'G< J]1"""N+T2E?S%#L%C%H<2*W,SN]M>56F=-'89, M#C@LGY/Q6=+6>/+/OBHS3H76B()5V-*

*__4^,.BXJCP/M"XYNJ,A3B8,:6%9^.M84,+%/I7V8"/,"P75G-OIH5%3A:!*R7#3AF M8U'D7]E0H:>J_]41X0$\9X5,*FE@N=MR!>?VJ3'-3/ XO=Z+-]E0 \OFB,%<@L5QORMM5+T_#*

[<)6 M.15N06_&ZO!8 MIQY,JMN1ZJ0:7ZSV1C?GI#15:?-=')FO8AZSW3')LYFFEG2DZ_)X*RHD%"_M0@V9!M3696*VI'W2C(*A0T;?L?BS*!QV.2%]3M2]K^>DLB1Z RI<2Z%KCYP"*

M2U;0_IVM@^MSV!F9Q)NU\-9PAB:C^K>^6;\4N2%&MO&G"(@7WF;K+ 1PLMZ MFV""%$;9K%9"#U_]Y7?.&/?Z,8Q7HDBEKASKFZ60D0M+H5"8#NT-V)$RV[FIQ

*MP4[RE!)8]:YH*6;.ZYG\1-=946FBH_B4&IQFX.4+QJQL,BW30=.4&"+]2@ZU]MCAR4'B0&>DRR4**C_*:&X[5*+2^VV4V@&X0?S?A>X.*&87M0L92"%V6CT1HQ|E M,D+]\-N-]%I&*

(C&;+=AK4++>V8K!027MA(/OO>.FCI8#2U@M2GHSQ.2VRR0<%Q! MA@:2\/W<.W__^&R6/R+D0>!B?]"!M'+4J4JZS>HSF2J-5YC(11.%>?3GF$>I M(BOLL#6S2.^K'XQ,..

D<2_$SC4A I<;LJ6:GFQID*WRDJ^PQ&3@0,)=A= P M=[E.GD3;2U",N;I1C)FD)&F-'>'7U:QRM4, PFA+$(!4F+=8,I:@?UMM$@/N_' M-2XO-[A9E]":&,N1(BHX208=6S.JH!!(6@I1-*

*(TT!UT,& $4A*\P#'L=-' M6 /Q\]JSIT!$4|@Q*T!06+ T^JA!/=$TRF&?J&E?7W+4!+FI3'[M>I>=:"(]I^F(;5%O.D&)R8R)-$(B8F*MW;B=I8GG#:0CUS:Z=I">V M;WS&:$(BKY1>/_FND[.3QZ?13\I6;)W4R9209.BC M8 #2E.R:L74_)R.B5OIQQ:#,_;152Y M8GA>,3PO+PE\LK(F@2^ &YM W=)0W8:M&8@$LM>I?,C5A09F\O&1"^_D,QR MPAV/'W],*

[<)6 M.15N06_&ZO!8 MIQY,JMN1ZJ0:7ZSV1C?GI#15:?-=')FO8AZSW3')LYFFEG2DZ_)X*RHD%"_M0@V9!M3696*VI'W2C(*A0T;?L?BS*!QV.2%]3M2]K^>DLB1Z RI<2Z%KCYP"*

M2U;0_IVM@^MSV!F9Q)NU\-9PAB:C^K>^6;\4N2%&MO&G"(@7WF;K+ 1PLMZ MFV""%$;9K%9"#U_]Y7?.&/?Z,8Q7HDBEKASKFZ60D0M+H5"8#NT-V)$RV[FIQ

*MP4[RE!)8]:YH*6;.ZYG\1-=946FBH_B4&IQFX.4+QJQL,BW30=.4&"+]2@ZU]MCAR4'B0&>DRR4**C_*:&X[5*+2^VV4V@&X0?S?A>X.*&87M0L92"%V6CT1HQ|E M,D+]\-N-]%I&*

(C&;+=AK4++>V8K!027MA(/OO>.FCI8#2U@M2GHSQ.2VRR0<%Q! MA@:2\/W<.W__^&R6/R+D0>!B?]"!M'+4J4JZS>HSF2J-5YC(11.%>?3GF$>I M(BOLL#6S2.^K'XQ,..

D<2_$SC4A I<;LJ6:GFQID*WRDJ^PQ&3@0,)=A= P M=[E.GD3;2U",N;I1C)FD)&F-'>'7U:QRM4, PFA+$(!4F+=8,I:@?UMM$@/N_' M-2XO-[A9E]":&,N1(BHX208=6S.JH!!(6@I1-*

*(TT!UT,& $4A*\P#'L=-' M6 /Q\]JSIT!$4|@Q*T!06+ T^JA!/=$TRF&?J&E?7W+4!+FI3'[M>I>=:"(]I^F(;5%O.D&)R8R)-$(B8F*MW;B=I8GG#:0CUS:Z=I">V M;WS&:$(BKY1>/_FND[.3QZ?13\I6;)W4R9209.BC M8 #2E.R:L74_)R.B5OIQQ:#,_;152Y M8GA>,3PO+PE\LK(F@2^ &YM W=)0W8:M&8@$LM>I?,C5A09F\O&1"^_D,QR MPAV/'W],*

(M\N(?7]&>.!#\Q+G[TOKP ,.5HB;2"/38>1KGU&WH/MR\DO7 MU=X3O3R=GERV*0_RNBX4C,;'9#GP50YM|V2<++)M=:]N(>,U/;86SE!/S^W[MA5166DN3B!\/7%8*

SLO(S.OR5HR!'OQY/34<>B+CS/"V;7'5;=R=#?R*V;W(R M.NG,1'/,LPP-?V=(V)N55U%KY;,H1BJ(*]&"*&T$@<0C^5%&74V!FVD R,7]N-MZ@*@_,(T/ZD^3W#Z_'-

>'/*87*D+*%XB7]6[OGSV?ONQ MG5]G=.DP4H43M=4*Z(LZ3H5W4$5*'DCHAAAUHO2D(SY;IK,"7; MY15.8=H]4K%39GGT=<5,>2"M3]'4&E[MG!4SY8&R&Q_5 M66-

X_G0_5%=UUNB;3]IZJ4_L>LZZB053;.AC@\P'ISC!-;P%/>3F?29W>4[_E2 MF4Z?U2%WD,_K.N:!,UX25(S%I&(CP(C@_<+2=.;U89%HHHH[*^*$#3G',^9->3.$&=B"QX"F!*

*WOAP.F.>;L?5[I)]+%<^R/;P M068/?IL,@\#FG=-;,$>XV#A*S[DZCS=6T5OT*XA6'G< J]1"""N+T2E?S%#L%C%H<2*W,SN]M>56F=-'89, M#C@LGY/Q6=+6>/+/OBHS3H76B()5V-*

*__4^,.BXJCP/M"XYNJ,A3B8,:6%9^.M84,+%/I7V8"/,"P75G-OIH5%3A:!*R7#3AF M8U'D7]E0H:>J_]41X0$\9X5,*FE@N=MR!>?VJ3'-3/ XO=Z+-]E0 \OFB,%<@L5QORMM5+T_#

AMPG:WarrantsToPurchaseCommonStockMember 2024-01-01 2024-09-30 0001518461 2024-11-08 0001518461 2024-09-30 0001518461 2023-12-31 0001518461 2024-07-01 2024-09-30 0001518461 2023-07-01 2023-09-30 0001518461 2023-01-01 2023-09-30 0001518461 us-gaap:CommonStockMember 2024-06-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2024-06-30 0001518461 us-gaap:RetainedEarningsMember 2024-06-30 0001518461 2024-06-30 0001518461 us-gaap:CommonStockMember 2023-12-31 0001518461 us-gaap:AdditionalPaidInCapitalMember 2023-12-31 0001518461 us-gaap:RetainedEarningsMember 2023-12-31 0001518461 us-gaap:CommonStockMember 2023-06-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2023-06-30 0001518461 us-gaap:RetainedEarningsMember 2023-06-30 0001518461 2023-06-30 0001518461 us-gaap:CommonStockMember 2022-12-31 0001518461 us-gaap:AdditionalPaidInCapitalMember 2022-12-31 0001518461 us-gaap:RetainedEarningsMember 2022-12-31 0001518461 2022-12-31 0001518461 us-gaap:CommonStockMember 2024-07-01 2024-09-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2024-07-01 2024-09-30 0001518461 us-gaap:RetainedEarningsMember 2024-07-01 2024-09-30 0001518461 us-gaap:CommonStockMember 2024-01-01 2024-09-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2024-01-01 2024-09-30 0001518461 us-gaap:RetainedEarningsMember 2024-01-01 2024-09-30 0001518461 us-gaap:CommonStockMember 2023-07-01 2023-09-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2023-07-01 2023-09-30 0001518461 us-gaap:RetainedEarningsMember 2023-07-01 2023-09-30 0001518461 us-gaap:CommonStockMember 2023-01-01 2023-09-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2023-01-01 2023-09-30 0001518461 us-gaap:RetainedEarningsMember 2023-01-01 2023-09-30 0001518461 us-gaap:CommonStockMember 2024-09-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2024-09-30 0001518461 us-gaap:RetainedEarningsMember 2024-09-30 0001518461 us-gaap:CommonStockMember 2023-09-30 0001518461 us-gaap:AdditionalPaidInCapitalMember 2023-09-30 0001518461 us-gaap:RetainedEarningsMember 2023-09-30 0001518461 2023-09-30 0001518461 AMPG:AmplitechIncMember 2012-08-13 2012-08-13 0001518461 AMPG:AmplitechIncMember 2012-08-13 0001518461 2021-02-17 2021-02-17 0001518461 us-gaap:IPOMember 2021-02-17 2021-02-17 0001518461 us-gaap:IPOMember 2021-02-17 0001518461 srt:MaximumMember 2024-09-30 0001518461 2023-01-01 2023-12-31 0001518461 srt:MinimumMember us-gaap:OfficeEquipmentMember 2024-09-30 0001518461 srt:MaximumMember us-gaap:OfficeEquipmentMember 2024-09-30 0001518461 us-gaap:OfficeEquipmentMember 2024-01-01 2024-09-30 0001518461 srt:MinimumMember us-gaap:MachineryAndEquipmentMember 2024-09-30 0001518461 srt:MaximumMember us-gaap:MachineryAndEquipmentMember 2024-09-30 0001518461 us-gaap:MachineryAndEquipmentMember 2024-01-01 2024-09-30 0001518461 srt:MinimumMember AMPG:ComputerEquipmentSoftwareMember 2024-09-30 0001518461 srt:MaximumMember AMPG:ComputerEquipmentSoftwareMember 2024-09-30 0001518461 AMPG:ComputerEquipmentSoftwareMember 2024-01-01 2024-09-30 0001518461 us-gaap:VehiclesMember 2024-09-30 0001518461 us-gaap:VehiclesMember 2024-01-01 2024-09-30 0001518461 us-gaap:LeaseholdImprovementsMember 2024-09-30 0001518461 us-gaap:LeaseholdImprovementsMember 2024-01-01 2024-09-30 0001518461 srt:MinimumMember us-gaap:CustomerRelationshipsMember 2024-09-30 0001518461 srt:MaximumMember us-gaap:CustomerRelationshipsMember 2024-09-30 0001518461 us-gaap:CustomerRelationshipsMember 2024-01-01 2024-09-30 0001518461 us-gaap:IntellectualPropertyMember 2024-09-30 0001518461 us-gaap:IntellectualPropertyMember 2024-01-01 2024-09-30 0001518461 AMPG:DomesticSalesMember AMPG:AmplitechIncandSpecialtyMicrowaveMember 2024-07-01 2024-09-30 0001518461 AMPG:DomesticSalesMember AMPG:AmplitechIncandSpecialtyMicrowaveMember 2023-07-01 2023-09-30 0001518461 AMPG:InternationalSalesMember AMPG:AmplitechIncandSpecialtyMicrowaveMember 2024-07-01 2024-09-30 0001518461 AMPG:InternationalSalesMember AMPG:AmplitechIncandSpecialtyMicrowaveMember 2023-07-01 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2023-01-01 2023-09-30 0001518461 AMPG:AmplitechIncandSpecialtyMicrowaveMember 2024-01-01 2024-09-30 0001518461 AMPG:AmplitechIncandSpecialtyMicrowaveMember 2023-01-01 2023-09-30 0001518461 AMPG:DomesticSalesMember AMPG:SpectrumMember 2024-01-01 2024-09-30 0001518461 AMPG:DomesticSalesMember AMPG:SpectrumMember 2023-01-01 2023-09-30 0001518461 AMPG:InternationalSalesMember AMPG:SpectrumMember 2024-01-01 2024-09-30 0001518461 AMPG:InternationalSalesMember AMPG:SpectrumMember 2023-01-01 2023-09-30 0001518461 AMPG:SpectrumMember 2024-01-01 2024-09-30 0001518461 AMPG:SpectrumMember 2023-01-01 2023-09-30 0001518461 AMPG:ManufacturingAndEngineeringMember 2024-07-01 2024-09-30 0001518461 AMPG:DistributionMember 2024-07-01 2024-09-30 0001518461 AMPG:CorporatesMember 2024-07-01 2024-09-30 0001518461 AMPG:ManufacturingAndEngineeringMember 2024-09-30 0001518461 AMPG:DistributionMember 2024-09-30 0001518461 AMPG:CorporatesMember 2024-09-30 0001518461 AMPG:ManufacturingAndEngineeringMember 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NV 27-4566352 155 Plant Avenue Hauppauge NY 11788 (631) 521-7831 Common Stock, par value $0.001 per share AMPG NASDAQ Warrants to Purchase Common Stock AMPGW NASDAQ Yes Yes Non-accelerated Filer true false false 11091601 0.001 1076537 6726013 1275931 2542710 7548159 6537578 2747309 1342335 12647936 17148636 2349796 2599448 4517685 3538798 2871625 2984133 4696883 4696883 348250 348250 114174 91481 27546349 31407629 1111298 846179 145428 14239 17379 16799 447556 541324 854214 80841 2575875 1499382 20321 32537 4255140 3171979 294381 24000 24000 7169717 4727898 0.001 0.001 500000000 500000000 11091601 11091601 9714613 9714613 11092 9715 37556381 36439739 -17190841 -9769723 20376632 26679731 27546349 31407629 2834512 3387169 7655285 11572699 1486583 1904388 4367639 6305928 1347929 1482781 3287646 5266771 1864245 1984452 6063047 5677778 572422 425573 1309299 1643458 2436667 2410025 7372346 7321236 -1088738 -927244 -4084700 -2054465 3248911 4098 41700 36187 25965 49994 -100945 -750 -113472 20335 -100945 39535 -3336418 112029 -1189683 -887709 -7421118 -1942436 -1189683 -887709 -7421118 -1942436 -0.12 -0.12 -0.09 -0.09 -0.76 -0.76 -0.20 -0.20 10003556 10003556 9662003 9662003 9813200 9813200 9645367 9645367 9719613 9720 36675164 -16001158 20683726 94463 94463 2500 3 -3 1369488 1369 786757 788126 -1189683 -1189683 11091601 11092 37556381 -17190841 20376632 9714613 9715 36439739 -9769723 26679731 329893 329893 7500 8 -8 1369488 1369 786757 788126 -7421118 -7421118 11091601 11092 37556381 -17190841 20376632 9639613 9640 36181131 -8359011 27831760 149624 149624 47500 47 -47 -887709 -887709 9687113 9687 36330708 -9246720 27093675 9634613 9635 36050161 -7304284 28755512 9634613 9635 36050161 -7304284 28755512 280599 280599 52500 52 -52 -1942436 -1942436 -1942436 9687113 9687 36330708 -9246720 27093675 9687113 9687 36330708 -9246720 27093675 -7421118 -1942436 388590 359416 414356 411475 329893 280599 89509 8461 17000 41700 3248911 -1266779 37879 1027581 -24279 1409447 883614 -22693 21704 265119 586033 -399376 -392188 131189 -143318 -4128869 -1766090 26431 931692 3248911 2808022 -3275342 -3739714 788126 1274000 11636 29404 295755 116482 2180826 1754735 -2326712 -5649476 -7832516 6726013 13290222 1076537 5457706 116673 23359 10200 8 52 8461 61133 429000 13932242 (1) Organization and Business Description   AmpliTech Group, Inc. (“AmpliTech” or the “Company”) was incorporated under the laws of the State of Nevada on December 30, 2010. On August 13, 2012, the Company acquired AmpliTech, Inc., by issuing <span id="xdx_909_eus-gaap--BusinessAcquisitionEquityInterestsIssuedOrIssuableNumberOfSharesIssued_pid_c20120813__20120813__us-gaap--BusinessAcquisitionAxis__custom--AmplitechIncMember_zfjAswfz6r38" title="Acquisition of entity by issuing of common stock">833,750 shares of the Company’s common stock to the shareholders of AmpliTech, Inc. in exchange for <span id="xdx_902_eus-gaap--BusinessAcquisitionPercentageOfVotingInterestsAcquired_iI_pid_dp_uPure_c20120813__us-gaap--BusinessAcquisitionAxis__custom--AmplitechIncMember_zxhhIvQMoyj6" title="Percentage of voting interest acquired">100% of the outstanding shares of AmpliTech Inc. (the “Share Exchange”). After the Share Exchange, the selling shareholders owned <span id="xdx_90E_ecustom--BusinessAcquisitionEquityInterestsOwnedBySellingShareHolders_pid_c20120813__20120813__us-gaap--BusinessAcquisitionAxis__custom--AmplitechIncMember_zf6ypIGagDS3" title="Equity interests owned by selling share holders">60,000 shares of the outstanding 893,750 shares of Company common stock, resulting in a change in control. Accordingly, the transaction was accounted for as a reverse acquisition in which AmpliTech, Inc. was deemed to be the accounting acquirer, and the operations of the Company were consolidated for accounting purposes. The capital balances have been retroactively adjusted to reflect the reverse acquisition.

* AmpliTech designs, engineers and assembles microwave component based low noise amplifiers (“LNA”) that meet individual customer specifications. Application of the Company’s proprietary technology results in maximum frequency gain with minimal background noise distortion as required by each customer. The Company has both domestic and international customers in such industries as aerospace, governmental, defense and commercial satellite.   On September 12, 2019, AmpliTech Group, Inc. acquired the assets of Specialty Microwave Corporation (“Specialty”), a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty.   Specialty designs and manufactures passive microwave components and related subsystems that meet individual customer specifications for both domestic and international customers for use in satellite communication ground networks.   On February 17, 2021, AmpliTech Group, Inc., common stock and warrants under the symbols “AMPG” and “AMPGW”, respectively, commenced trading on NASDAQ. A reverse split of the outstanding common stock at a 1-for-20 ratio became effective February 17, 2021 as of 12:01 a.m., Eastern Time. In connection with the public offering, 1,371,428 units at an offering price of $7.00 per unit were sold. Each unit issued in the offering consisted of one share of common stock and one warrant.   In 2021, the Company opened AGMDC, a monolithic microwave integrated circuits (“MMIC”) chip design center in Texas and has started to implement several of its proprietary amplifier designs into MMIC components. MMICs are semiconductor chips used in high-frequency communications applications. MMICs are widely desired for power amplification solutions to service emerging technologies, such as phased array antennas and quantum computing. MMICs carry a smaller footprint enabling them to be incorporated into a broader array of systems while reducing costs. AGMDC designs, develops and manufactures state-of-the-art signal processing components for satellite and 5G communications networks, defense, space and other commercial applications, allowing the Company to market its products to a wider base of customers requiring high technology in smaller packages.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   On November 19, 2021, AmpliTech Group, Inc. entered into an Asset Purchase Agreement (the “Purchase Agreement”) with Spectrum Semiconductor Materials Inc. (the “Seller” or “SSM”), pursuant to which AmpliTech would acquire substantially all the assets of the Company (the “Acquisition”). The Acquisition was completed on December 15, 2021.   Spectrum Semiconductor Materials (“SSM”), located in Silicon Valley (San Jose, CA), is a global authorized distributor of integrated circuit (“IC”) packaging and lids for semiconductor device assembly, prototyping, testing, and production requirements.   In August 2022, AmpliTech Group’s True G Speed Services (AGTGSS) division was founded to serve and provide complete system integration and ORAN compliant O-RU’s (Radio Units) for telcos, enabling the industry to access ‘True 5G Speeds’. AGTGSS provides Managed Services, Cyber Security, Cloud Services, Data Sciences and Telco Cloud Services. AGTGSS will also be providing full installation of Private 5G Networks (P5G) which includes the deployment of AmpliTech Group’s developed radio units. AGTGSS will implement AmpliTech’s low noise amplifier devices in these systems to promote greater coverage, longer range and faster speeds.   833750 1 60000 893750 1-for-20 1371428 7.00 (2) Loss on Investment of Digital Assets   During the three months ended March 31, 2024, the Company made several transactions in digital currency in the total amount of approximately $3.25 million. The Company believes that it was fraudulently induced to hold its digital currency with a custodian whom the Company believed to be valid, but no longer exists. The Company is taking steps in an attempt to seek recovery of the funds including discussions with local, federal, and international law enforcement agencies and private consultants and is currently conducting a review of its processes and procedures related to this investment. At the present time, the Company is not aware of, and does not expect any additional losses arising out or relating to the above-described investment. In addition, the Company does not believe that the Company’s systems, records, or other assets were otherwise affected or compromised in connection with these investments.   As a result of the fraudulent digital currency transactions noted above, the Company was a victim of a cyber phishing scam that defrauded the Company. During the nine months ended September 30, 2024, the Company recorded a complete loss from the investment in digital assets of $3,248,911. As of September 30, 2024, the remaining balance of digital assets was $0.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   -3250000 3248911 0 (3) Summary of Significant Accounting Policies   Basis of Accounting   The accompanying condensed consolidated financial statements have been prepared using the accrual basis of accounting.   Principles of Consolidation   The accompanying condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.   Use of Estimates   The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. Actual results could differ from those estimates.   Cash and Cash Equivalents   The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of September 30, 2024 the Company’s cash and cash equivalents were deposited in four financial institutions.   The Company’s policy is to place its cash and cash equivalents with high-quality, major financial and investment institutions to limit the amount of credit exposure. Accounts at each financial institution are insured by the Federal Deposit Insurance Corporation (“FDIC”) up to $250,000. At September 30, 2024 and December 31, 2023, the Company had $466,399 and $3,170,500 in excess of FDIC insured limits, respectively. The Company has*

not experienced any losses in such accounts.   Accounts Receivable   Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with ASC Topic 326, “Financial Instruments - Credit Losses,” the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of our customers, prevailing economic conditions, and reasonable and supportable forward-looking information.   An allowance of $0 has been recorded at September 30, 2024 and December 31, 2023, respectively.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Inventories   Inventories, which consist primarily of raw materials, work in progress and finished goods, are stated at the lower of cost (first-in, first-out basis) or market (net realizable value).   Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold.   As of September 30, 2024 and December 31, 2023 the reserve for inventory obsolescence was $1,164,000 and $1,146,000, respectively.   Property and Equipment   Property and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements.   Property and equipment are depreciated as follows: Schedule of Property and Equipment Depreciated
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<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top">
<td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 36%">Description </td>
<td style="padding-bottom: 1pt; width: 2%"> </td>
<td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 22%; text-align: left">Useful Life</td>
<td style="padding-bottom: 1pt; width: 2%"> </td>
<td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 38%; text-align: left">Method</td></tr>
<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White">
<td style="font: 10pt Times New Roman, Times, Serif">Office equipment </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_903_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--OfficeEquipmentMember__srt--RangeAxis__srt--MinimumMember_zP3zJMLkmxOh" title="Estimated useful life">3 to <span id="xdx_90F_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--OfficeEquipmentMember__srt--RangeAxis__srt--MaximumMember_z9gRt8OVh461" title="Estimated useful life">7 years </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif; text-align: left"><span id="xdx_904_ecustom--PropertyPlantAndEquipmentsDepreciationMethods_c20240101__20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--OfficeEquipmentMember_zYtAvwdHrUY9" title="Depreciation Method">Straight-line</td></tr>
<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White">
<td style="font: 10pt Times New Roman, Times, Serif">Machinery/shop equipment </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_90C_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--MachineryAndEquipmentMember__srt--RangeAxis__srt--MinimumMember_zJuBEOih5jFa" title="Estimated useful life">7 to <span id="xdx_903_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--MachineryAndEquipmentMember__srt--RangeAxis__srt--MaximumMember_z4gckRGx5Uf9" title="Estimated useful life">15 years </td>
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<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White">
<td style="font: 10pt Times New Roman, Times, Serif">Computer equipment/software </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_90F_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ComputerEquipmentSoftwareMember__srt--RangeAxis__srt--MinimumMember_ztB9vxnKjGy7" title="Estimated useful life">1 to <span id="xdx_909_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ComputerEquipmentSoftwareMember__srt--RangeAxis__srt--MaximumMember_zuD71amjuAt6" title="Estimated useful life">7 years </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif; text-align: left"><span id="xdx_901_ecustom--PropertyPlantAndEquipmentsDepreciationMethods_c20240101__20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ComputerEquipmentSoftwareMember_zBgwaAc5i87a" title="Depreciation Method">Straight-line</td></tr>
<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White">
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<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif">5 years </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif; text-align: left">Straight-line</td></tr>
<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White">
<td style="font: 10pt Times New Roman, Times, Serif">Leasehold improvements</td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_907_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--LeaseholdImprovementsMember_zukZWjBUKSo5" title="Estimated useful life">7 years </td>
<td> </td>
<td style="font: 10pt Times New Roman, Times, Serif; text-align: left"><span id="xdx_90C_ecustom--PropertyPlantAndEquipmentsDepreciationMethods_c20240101__20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--LeaseholdImprovementsMember_zYvoR4GkGtIf" title="Depreciation Method">Straight-line</td></tr>
</table>

Intangible Assets

Definite-lived intangible assets including customer relationships and intellectual property are subject to amortization. Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization.

Intangible assets are amortized as follows:
 Schedule of Amortization of Intangible Assets
<table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; width: 100%; border-collapse: collapse">
<tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top">
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Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Long-Lived Assets   The Company reviews the carrying value of long-lived assets such property and equipment, right-of-use (“ROU”) assets, and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Circumstances which could trigger a review include, but are not limited to; significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.   The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of long-lived assets.   Goodwill and Indefinite-Lived Intangible Assets   We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired.   Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on management’s judgment.   If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets exceed their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets.   During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of indefinite-lived intangible assets.   Investment Policy-Cost Method   Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Company’s share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held $348,250 of investments without readily determinable fair values at September 30, 2024 and December 31, 2023, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the nine months ended September 30, 2024 and the year ended December 31, 2023.   Investment in Digital Assets <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-

align: justify"> We account for all digital assets as indefinite-lived intangible assets in accordance with ASC 350, Intangibles—Goodwill and Other. The Company presents digital assets separately from other intangible assets, recorded as digital assets on the condensed consolidated balance sheets. The digital assets are initially recorded at cost and are subsequently remeasured at cost, net of any impairment losses incurred since acquisition.   We performed an analysis this quarter to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. When the then current carrying value of a digital asset exceeds the fair value determined each quarter, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the prices determined. Gains are not recorded until realized upon sale(s), at which point they are presented net of any impairment losses for the same digital assets. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Leases   We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks.   Revenue Recognition   We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party's rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred.   Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period.   Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds.   We do not have significant returns. We do not typically offer extended warranty or service plans.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of September 30, 2024 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues.   Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customer's control at contractually stated pricing.   Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue.   Cost of Sales   We include product costs such material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales.   Shipping and Handling   Shipping and handling charges are generally incurred at the customer's expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales.   Research and Development   Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies.   Research and development costs for the nine months ended September 30, 2024 and 2023, were $1,309,299 and $1,643,458, respectively.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Income Taxes   The Company's deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are

determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At September 30, 2024 and December 31, 2023, the Company had no material unrecognized tax benefits.   Earnings Per Share   Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted average number of shares of common stock outstanding during each period. Diluted earnings (loss) per share is calculated by adjusting the weighted average number of shares of common stock outstanding for the dilutive effect, if any, of common stock equivalents. Common stock equivalents whose effect would be anti-dilutive are not included in diluted earnings (loss) per share. The Company uses the treasury stock method to determine the dilutive effect, which assumes that all common stock equivalents have been exercised at the beginning of the period and that the funds obtained from those exercises were used to repurchase shares of common stock of the Company at the average closing market price during the period. As of September 30, 2024 and 2023, there were 4,586,800 and 4,247,942, respectively, potential common share equivalents from stock options excluded from the diluted loss per share calculations as their effect is anti-dilutive.   Fair Value Measurements   The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date.   Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly.   Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest.   Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets.   Stock-Based Compensation   The Company records stock-based compensation in accordance with ASC 718, Compensation-Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period.   Concentration of Credit Risk   Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable.   The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses.   Recent Accounting Pronouncements   In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segment's profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company has adopted this pronouncement and does not expect the adoption to have a material impact on our results of operation, financial position or cash flow.   In August 2023, the FASB issued ASU 2023-05, Business Combinations—Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures.   Basis of Accounting   The accompanying condensed consolidated financial statements have been prepared using the accrual basis of accounting.   Principles of Consolidation <p style="font: 10pt Times New Roman, Times,

Serif; margin: 0pt 0pt 0pt 0; text-align: justify">   The accompanying condensed consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.   Use of Estimates   The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses for the periods presented. Actual results could differ from those estimates.   Cash and Cash Equivalents   The Company considers deposits that can be redeemed on demand and investments and marketable securities that have original maturities of less than three months, when purchased, to be cash equivalents. As of September 30, 2024 the Company’s cash and cash equivalents were deposited in four financial institutions.   The Company’s policy is to place its cash and cash equivalents with high-quality, major financial and investment institutions to limit the amount of credit exposure. Accounts at each financial institution are insured by the Federal Deposit Insurance Corporation (“FDIC”) up to $250,000. At September 30, 2024 and December 31, 2023, the Company had $466,399 and $3,170,500 in excess of FDIC insured limits, respectively. The Company has not experienced any losses in such accounts.   250000 466399 3170500 Accounts Receivable   Accounts receivable consist of trade receivables arising from credit sales to customers in the normal course of business. These receivables are recorded at the time of sale, net of an allowance for current expected credit losses. In accordance with ASC Topic 326, “Financial Instruments – Credit Losses,” the Company estimates expected credit losses based on historical bad debt experience, the aging of accounts receivable, the current creditworthiness of our customers, prevailing economic conditions, and reasonable and supportable forward-looking information.   An allowance of $0 has been recorded at September 30, 2024 and December 31, 2023, respectively.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   0 0 Inventories   Inventories, which consist primarily of raw materials, work in progress and finished goods, are stated at the lower of cost (first-in, first-out basis) or market (net realizable value).   Inventory quantities and related values are analyzed at the end of each fiscal quarter to determine those items that are slow moving and obsolete. An inventory reserve is recorded for those items determined to be slow moving with a corresponding charge to cost of goods sold. Inventory items that are determined obsolete are written off currently with a corresponding charge to cost of goods sold.   As of September 30, 2024 and December 31, 2023 the reserve for inventory obsolescence was $1,164,000 and $1,146,000, respectively.   1164000 1146000 Property and Equipment   Property and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements.   Property and equipment are depreciated as follows: Schedule of Property and Equipment Depreciated <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; width: 100%; border-collapse: collapse"> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top"> <td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 36%">Description </td> <td style="padding-bottom: 1pt; width: 2%"> </td> <td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 22%; text-align: left">Useful Life</td> <td style="padding-bottom: 1pt; width: 2%"> </td> <td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 38%; text-align: left">Method</td></tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Office equipment </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_903_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--OfficeEquipmentMember__srt--RangeAxis__srt--MinimumMember_zP3zJMLkmxOh" title="Estimated useful life">3 to <span id="xdx_90F_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--OfficeEquipmentMember__srt--RangeAxis__srt--MaximumMember_z9gRt8OVh461" title="Estimated useful life">7 years </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif; text-align: left"><span id="xdx_904_ecustom--PropertyPlantAndEquipmentDepreciationMethods_c20240101__20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--OfficeEquipmentMember_zYtAvwdHrUY9" title="Depreciation Method">Straight-line</td></tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Machinery/shop equipment </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_90C_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--MachineryAndEquipmentMember__srt--RangeAxis__srt--MinimumMember_zJuBEOih5jFa" title="Estimated useful life">7 to <span id="xdx_903_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--MachineryAndEquipmentMember__srt--RangeAxis__srt--MaximumMember_z4gckRGx5Uf9" title="Estimated useful life">15 years </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif; text-align: left"><span id="xdx_90B_ecustom--PropertyPlantAndEquipmentDepreciationMethods_c20240101__20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--MachineryAndEquipmentMember_z9ZP83MXuzwl" title="Depreciation Method">Straight-line</td></tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Computer equipment/software </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_90F_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ComputerEquipmentSoftwareMember__srt--RangeAxis__srt--MinimumMember_ztB9vxnKjGy7" title="Estimated useful life">1 to <span id="xdx_909_eus-gaap--PropertyPlantAndEquipmentUsefulLife_iI_dtY_c20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ComputerEquipmentSoftwareMember__srt--RangeAxis__srt--MaximumMember_zuD71amjuAt6" title="Estimated useful life">7 years </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif; text-align: left"><span id="xdx_901_ecustom--PropertyPlantAndEquipmentDepreciationMethods_c20240101__20240930__us-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ComputerEquipmentSoftwareMember_zBgwaAc5i87a" title="Depreciation Method">Straight-line</td></tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Vehicles </td> <td> </td> <td style="font: 10pt Times New Roman, Times, Serif">

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Intangible assets are amortized over their estimated useful life on a straight-line basis. Estimated useful lives are determined considering the period the assets are expected to contribute to future cash flows. Indefinite-lived intangible assets are not subject to amortization.   Intangible assets are amortized as follows: Schedule of Amortization of Intangible Assets <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; width: 100%; border-collapse: collapse"> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top"> <td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 36%">Description</td> <td style="font: 10pt Times New Roman, Times, Serif; padding-bottom: 1pt; width: 2%"> </td> <td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 22%">Useful Life</td> <td style="font: 10pt Times New Roman, Times, Serif; padding-bottom: 1pt; width: 2%"> </td> <td style="border-bottom: Black 1pt solid; font: 10pt Times New Roman, Times, Serif; width: 38%">Method</td> </tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Trade names</td> <td style="font: 10pt Times New Roman, Times, Serif"> </td> <td style="font: 10pt Times New Roman, Times, Serif">Indefinite</td> <td style="font: 10pt Times New Roman, Times, Serif"> </td> <td style="font: 10pt Times New Roman, Times, Serif">N/A</td> </tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Customer relationships</td> <td style="font: 10pt Times New Roman, Times, Serif"> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_906_eus-gaap--FiniteLivedIntangibleAssetUsefulLife_iI_dtY_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember__srt--RangeAxis__srt--MinimumMember_zf3JNj4E4mae" title="Useful Life">15 to <span id="xdx_901_eus-gaap--FiniteLivedIntangibleAssetUsefulLife_iI_dtY_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember__srt--RangeAxis__srt--MaximumMember_zJlfXefurVsj" title="Useful Life">20 years</td> <td style="font: 10pt Times New Roman, Times, Serif"> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_905_eus-gaap--FiniteLivedIntangibleAssetsAmortizationMethod_c20240101__20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zpjiZIH4zPx9" title="Depreciation Method">Straight-line</td> </tr> <tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top; background-color: White"> <td style="font: 10pt Times New Roman, Times, Serif">Intellectual property</td> <td style="font: 10pt Times New Roman, Times, Serif"> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_90A_eus-gaap--FiniteLivedIntangibleAssetUsefulLife_iI_dtY_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_zE98K6zBEA9l" title="Useful Life">15 years</td> <td style="font: 10pt Times New Roman, Times, Serif"> </td> <td style="font: 10pt Times New Roman, Times, Serif"><span id="xdx_906_eus-gaap--FiniteLivedIntangibleAssetsAmortizationMethod_c20240101__20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_zYiMjuXE5D9j" title="Depreciation Method">Straight-line</td> </tr> </table>

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Circumstances which could trigger a review include, but are not limited to; significant decrease in the market price of the asset; significant adverse changes in the business climate or legal factors; current period cash flow or operating losses combined with a history of losses or a forecast of continuing losses associated with the use of the asset; and current expectation that the asset will more likely than not be sold or disposed of significantly before the end of its estimated useful life.   The recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount of fair value less costs to sell and would no longer be depreciated. The depreciable basis of assets that are impaired and continue in use is their respective fair values. During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of long-lived assets.   0 0 Goodwill and Indefinite-Lived Intangible Assets   We follow the acquisition method of accounting to record the assets and liabilities of acquired businesses at their estimated fair value at the date of acquisition. We initially record goodwill for the amount the consideration transferred exceeds the acquisition-date fair value of net tangible and identifiable intangible assets acquired.   Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are tested for impairment annually on December 31, or more frequently when events or circumstances indicate an impairment may have occurred. When assessing the recoverability of goodwill and indefinite-lived intangible assets, the Company may first assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit, including goodwill, or an indefinite-lived intangible asset is less than its carrying amount. The qualitative assessment is based on several factors, including the current operating environment, industry and market conditions, and overall financial performance. The Company may elect to bypass this qualitative assessment for some or all of its reporting units or other indefinite-lived intangible assets and perform a quantitative assessment, based on management’s judgment.   If we quantitatively test goodwill and indefinite-lived intangible assets for possible impairment, we calculate the fair value for the reporting unit and indefinite-lived assets and compare the amount to their carrying amount. If the fair value of a reporting unit and indefinite-lived asset exceeds their carrying amount, the reporting unit and indefinite-lived assets are not considered impaired. If the carrying amount of the reporting unit and indefinite-lived assets exceed their fair value, the reporting unit and indefinite-lived assets are considered to be impaired, and an impairment charge is recognized for the difference.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   We estimate the fair value of our reporting units and indefinite-lived intangible assets based on the present value of estimated future cash flows. Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate the future cash flows used to measure fair value. Our estimates of future cash flows consider past performance, current and anticipated market conditions and internal projections and operating plans. Additional assumptions include forecasted growth rates, estimated discount rates, and estimated royalty rates for our indefinite-lived intangible assets.   During the nine months ended September 30, 2024 and the year ended December 31, 2023, there were no impairments of indefinite-lived intangible assets.   0 0 Investment Policy-Cost Method   Investments consist of non-controlling equity investments in privately held companies. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not control or have the ability to exercise considerable influence over operating and financial policies. These investments are accounted for under the cost method of accounting. Under the cost method of accounting, the non-marketable equity securities are carried at cost less any impairment, adjusted for observable price changes of similar investments of the same issuer. Fair value is not estimated for these investments if there are no identified events or changes in circumstances that may influence the fair value of the investment. Under this method, the Company’s share of the earnings or losses of such investee companies is not included in the consolidated balance sheet or consolidated statements of operations. The Company held $348,250 of investments without readily determinable fair values at September 30, 2024 and December 31, 2023, respectively. (see Note 9). These investments are included in other assets on the consolidated balance sheets. There were no indicators of impairment during the nine months ended September 30, 2024 and the year ended December 31, 2023. *

   348250 348250 Investment in Digital Assets   We account for all digital assets as indefinite-lived intangible assets in accordance with ASC 350, Intangibles—Goodwill and Other. The Company presents digital assets separately from other intangible assets, recorded as digital assets on the condensed consolidated balance sheets. The digital assets are initially recorded at cost and are subsequently remeasured at cost, net of any impairment losses incurred since acquisition.   We performed an analysis this quarter to identify whether events or changes in circumstances, principally decreases in the quoted prices on active exchanges, indicate that it is more likely than not that our digital assets are impaired. In determining if an impairment has occurred, we consider the lowest market price of one unit of digital asset quoted on the active exchange since acquiring the digital asset. When the then current carrying value of a digital asset exceeds the fair value determined each quarter, an impairment loss has occurred with respect to those digital assets in the amount equal to the difference between their carrying values and the prices determined. Gains are not recorded until realized upon sale(s), at which point they are presented net of any impairment losses for the same digital assets. In determining the gain to be recognized upon sale, we calculate the difference between the sales price and carrying value of the digital assets sold immediately prior to sale.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Leases   We lease property and equipment under finance and operating leases. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the lease term. The Company has elected not to separate lease and non-lease components for all property leases for the purpose of calculating ROU assets and lease liabilities. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when appropriate. When available, we use the rate implicit in the lease to discount lease payments to present value; however, most of our leases do not provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate to discount the lease payments based on information available at lease commencement. The incremental borrowing rate is the rate of interest that a lessee would have to pay to borrow on a collateralized basis considering such factors as lease term and economic environment risks.   Revenue Recognition   We sell our products through a combination of a direct sales force in the United States and independent sales representatives in international markets. Revenue is recognized when a customer obtains control of promised goods based on the consideration we expect to receive in exchange for these goods. This core principle is achieved through the following steps: Identify the contract with the customer. A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party's rights regarding the goods to be transferred and identifies the payment terms related to these goods, (ii) the contract has commercial substance and, (iii) we determine that collection of substantially all consideration for services that are transferred is probable based on the customer's intent and ability to pay the promised consideration. We do not have significant costs to obtain contracts with customers. For commissions on product sales, we have elected the practical expedient to expense the costs as incurred.   Identify the performance obligations in the contract. Our contracts with customers do not include multiple performance obligations to be completed over a period.   Our performance obligations relate to delivering single-use products to a customer, subject to the shipping terms of the contract. Limited warranties are provided, under which we typically accept returns and provide either replacement parts or refunds.   We do not have significant returns. We do not typically offer extended warranty or service plans.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Determine the transaction price. Payment by the customer is due under customary fixed payment terms, and we evaluate if collectability is reasonably assured. None of our contracts as of September 30, 2024 contained a significant financing component. Revenue is recorded at the net sales price, which includes estimates of variable consideration such as product returns, rebates, discounts, and other adjustments. The estimates of variable consideration are based on historical payment experience, historical and projected sales data, and current contract terms. Variable consideration is included in revenue only to the extent that it is probable that a significant reversal of the revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenues.   Allocate the transaction price to performance obligations in the contract. We typically do not have multiple performance obligations in our contracts with customers. We recognize revenue upon transfer of the product to the customer's control at contractually stated pricing.   Recognize revenue when or as we satisfy a performance obligation. We generally satisfy performance obligations at a point in time upon either shipment or delivery of goods, in accordance with the terms of each contract with the customer. We do not have significant service revenue.   Cost of Sales   We include product costs such material, direct labor, overhead costs, production-related depreciation expense, outside labor and production supplies in cost of sales.   Shipping and Handling   Shipping and handling charges are generally incurred at the customer's expense. However, when billed to our customers, shipping and handling charges are included in net sales for the applicable period, and the corresponding shipping and handling expense is reported in cost of sales.   Research and Development   Research and development expenditures are charged to operations as incurred. The major components of research and development costs include payroll, consultants, outside service, and supplies.   Research and development costs for the nine months ended September 30, 2024 and 2023, were $1,309,299 and $1,643,458, respectively.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   1309299 1643458 <span style="text-

decoration: underline">Income Taxes   The Company's deferred tax assets and liabilities for the expected future tax consequences of events have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statement carrying amounts and tax bases of certain assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The deferred tax assets and liabilities are classified according to the financial statement classification of the assets and liabilities generating the differences. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. At September 30, 2024 and December 31, 2023, the Company had no material unrecognized tax benefits.   Earnings Per Share   Basic earnings (loss) per share is calculated by dividing net income (loss) by the weighted average number of shares of common stock outstanding during each period. Diluted earnings (loss) per share is calculated by adjusting the weighted average number of shares of common stock outstanding for the dilutive effect, if any, of common stock equivalents. Common stock equivalents whose effect would be anti-dilutive are not included in diluted earnings (loss) per share. The Company uses the treasury stock method to determine the dilutive effect, which assumes that all common stock equivalents have been exercised at the beginning of the period and that the funds obtained from those exercises were used to repurchase shares of common stock of the Company at the average closing market price during the period. As of September 30, 2024 and 2023, there were 4,586,800 and 4,247,942, respectively, potential common share equivalents from stock options excluded from the diluted loss per share calculations as their effect is anti-dilutive.   4586800 4247942 Fair Value Measurements   The fair value of a financial instrument is the amount that could be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. A fair value hierarchy is used to prioritize the quality and reliability of the information used to determine fair values. Categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is defined in the following three categories: Level 1: Unadjusted quoted prices that are available in active markets for identical assets or liabilities at the measurement date.   Level 2: Significant other observable inputs available at the measurement date, other than quoted prices included in Level 1, either directly or indirectly.   Level 3: Significant unobservable inputs that cannot be corroborated by observable market data and reflect the use of significant management judgment.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Cash and cash equivalents, receivables, inventories, prepaid expenses, accounts payable, accrued expenses, and customer deposits approximate fair value, due to their short-term nature. The carrying value of notes payable and short and long-term debt also approximates fair value since these instruments bear market rates of interest.   Assets and liabilities that are measured at fair value on a nonrecurring basis relate primarily to long-lived assets, intangible assets, and goodwill, which are remeasured when the derived fair value is below carrying value in the consolidated balance sheets.   Stock-Based Compensation   The Company records stock-based compensation in accordance with ASC 718, Compensation-Stock Compensation. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. Equity instruments issued to employees and the cost of the services received as consideration are measured and recognized based on the fair value of the equity instruments issued and are recognized over the employees required service period, which is generally the vesting period.   Concentration of Credit Risk   Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents, marketable securities and accounts receivable.   The Company places its cash and cash equivalents and marketable securities with high-quality, major financial and investment institutions in order to limit the amount of credit exposure. For accounts receivable, the Company performs ongoing credit evaluations of its customers and maintains allowances for potential credit losses.   Recent Accounting Pronouncements   In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): Improvements to Income Tax Disclosures, which enhances the transparency and decision usefulness of income tax disclosures by requiring: (1) consistent categories and greater disaggregation of information in the rate reconciliation and (2) income taxes paid disaggregated by jurisdiction. It also includes certain other amendments to improve the effectiveness of income tax disclosures. ASU 2023-09 is effective for fiscal years beginning after December 15, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   In November 2023, the FASB issued ASU 2023-07, Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures, which requires a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and to provide in interim periods all disclosures about reportable segment's profit or loss and assets that are currently required annually. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, with early adoption permitted. The Company has adopted this pronouncement and does not expect the adoption to have a material impact on our results of operation, financial position or cash flow.   In August 2023, the FASB issued ASU 2023-05, Business Combinations—Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement, which requires a newly-formed joint venture to apply a new basis of accounting to its contributed net assets, resulting in the joint venture initially measuring its contributed net assets at fair value on the formation date. ASU 2023-05 is effective for all joint venture formations with a formation date on or after January 1, 2025, with early adoption permitted. These amendments are to be applied prospectively, with retrospective application permitted for joint ventures formed before the effective date. We are currently evaluating the impact this standard will have on our consolidated financial statement disclosures. (4) Revenues   The following table presents sales disaggregated based on geographic regions and for the three and nine months ended: <span

style="font-family: Times New Roman, Times, Serif; font-size: 10pt"> Schedule of Disaggregated Revenue <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom"> <td style="font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49B_20240701__20240930_zKtk45PBLxhf" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_490_20230701__20230930_zQVmvuRFVr0f" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2023</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="6" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Three months ended</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td style="font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2023</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-weight: bold; text-align: justify; padding-bottom: 1pt">AmpliTech Inc. and Specialty Microwave</td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; 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padding-bottom: 1pt">International sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">238,970</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">460,435</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember_zA0hdVSE9bra" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">761,889</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">1,581,013</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-decoration: underline; font-weight: bold; text-align: justify">Spectrum</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_zwm0MX9wqH4d" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Domestic sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">1,607,677</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">1,201,856</td><td style="text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_zhIziRXJzt1" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">464,946</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">604,300</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember_zmNUdQIMQXbg" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 1pt; text-align: justify">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2,072,623</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">1,806,156</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_zn16hh6bhjb7" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2,834,512</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="border-bottom: Black 1pt solid; text-align: right">3,387,169</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table>   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom"> <td style="text-align: center; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_492_20240101__20240930_zbfq5tgcOqBk" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2024</td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_493_20230101__20230930_zkKvLBqunYRb" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2023</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td style="text-

align: center"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="6" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Nine months ended</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td style="text-align: center; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2024</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2023</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-weight: bold; text-align: justify; padding-bottom: 1pt">AmpliTech Inc. and Specialty Microwave</td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_400_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_zxAdw33meYqf" style="vertical-align: bottom; background-color: White"> <td style="width: 60%; text-align: justify">Domestic sales</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">1,918,295</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">3,588,637</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_z4wkVByxF8zi" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">646,725</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">977,152</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember_zFoRultEu20a" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">2,565,020</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,565,789</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-decoration: underline; font-weight: bold; text-align: justify">Spectrum</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_zDUFBtkmkxd3" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Domestic sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">3,789,111</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,577,466</td><td style="text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_z08cxCOHnLUg" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">1,301,154</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">2,429,444</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember_zNmfAxLMUQ2c" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 1pt; text-align: justify">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">5,090,265</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">7,006,910</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; 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text-align: right">11,572,699</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table>   The following table presents sales disaggregated based on geographic regions and for the three and nine months ended: Schedule of Disaggregated Revenue <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom"> <td style="font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49B_20240701__20240930_zKtk45PBLxhf" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_490_20230701__20230930_zQVmvuRFVr0f" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2023</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="6" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Three months ended</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td style="font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Sept. 30, 2023</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-weight: bold; text-align: justify; padding-bottom: 1pt">AmpliTech Inc. and Specialty

Microwave</td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td> <td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_znTzUdYOd213" style="vertical-align: bottom; background-color: White"> <td style="width: 60%; text-align: justify">Domestic sales</td> <td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">522,919</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">1,120,578</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_zgSP63E5f3f3" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td> <td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">238,970</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">460,435</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember_zA0hdVSE9bra" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">761,889</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">1,581,013</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-decoration: underline; font-weight: bold; text-align: justify">Spectrum</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_zwm0MX9wqH4d" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Domestic sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">1,607,677</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">1,201,856</td><td style="text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_zhIziRXJzt1" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">464,946</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">604,300</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember_zmNUdQIMQXbg" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 1pt; text-align: justify">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2,072,623</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">1,806,156</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td></tr> <tr id="xdx_40A_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_znI6hh6bhjb7" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2,834,512</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="border-bottom: Black 1pt solid; text-align: right">3,387,169</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table>   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom"> <td style="text-align: center; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_492_20240101__20240930_zbfq5tgcQgBk" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2024</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_493_20230101__20230930_zkKvLBqunYRb" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2023</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="6" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Nine months ended</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td style="text-align: center; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2024</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td><td style="text-align: center; font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center; font-weight: bold">Sept. 30, 2023</td><td style="text-align: center; padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-weight: bold; text-align: justify; padding-bottom: 1pt">AmpliTech Inc. and Specialty Microwave</td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_400_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_zxAdw33meYqf" style="vertical-align: bottom; background-color: White"> <td style="width: 60%; text-align: justify">Domestic sales</td><td style="width: 2%">

 </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">1,918,295</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">3,588,637</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_z4wkVByxF8zi" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td> <td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">646,725</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">977,152</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--AmplitechIncandSpecialtyMicrowaveMember_zFoRultEu20a" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">2,565,020</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,565,789</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-decoration: underline; font-weight: bold; text-align: justify">Spectrum</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--DomesticSalesMember_zDUFBtkmkxd3" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Domestic sales</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">3,789,111</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,577,466</td><td style="text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember__srt--StatementGeographicalAxis__custom--InternationalSalesMember_z08cxCOHnLUg" style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">International sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">1,301,154</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">2,429,444</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_hdei--LegalEntityAxis__custom--SpectrumMember_zNmfAxLMUQ2c" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 1pt; text-align: justify">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">5,090,265</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">7,006,910</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--RevenueFromContractWithCustomerExcludingAssessedTax_z5ydDfs3k3y4" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Total sales</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">7,655,285</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="border-bottom: Black 1pt solid; text-align: right">11,572,699</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> 522919 1120578 238970 460435 761889 1581013 1607677 1201856 464946 604300 2072623 1806156 2834512 3387169 1918295 3588637 646725 977152 2565020 4565789 3789111 4577466 1301154 2429444 5090265 7006910 7655285 11572699 (5) Segment Reporting   ASC 280, “Segment Reporting”, establishes standards for reporting information about operating segments on a basis consistent with the Company’s internal organizational structure as well as information about geographical areas, business segments and major customers in financial statements for details on the Company’s business segments. The Company has two reportable segments, the manufacturing and engineering segment, which is operated by AmpliTech Inc. and Specialty Microwave; and the distribution segment, which is operated by Spectrum. The manufacturing and engineering segment assembles microwave components, and the distribution segment is a global distributor of integrated circuits packages and lids. The Company provides general corporate services to its segments; however, these services are not considered when making operating decisions and assessing segment performance. These services are reported under “Corporate” below and include costs associated with executive management, financing activities and public company compliance.   <p id="xdx_89F_eus-gaap--ScheduleOfSegmentReportingInformationBySegmentTextBlock_zpxhOI7jFN35" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify; background-color: white">The following table presents summary information by segment for the three months ended September 30, 2024:   Schedule of Segment Reporting <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; collapse; width: 100%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Manufacturing and Engineering</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Distribution</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Corporate</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Total</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 44%; text-align: justify">Revenue</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_982_eus-gaap--Revenues_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zhY5KvHH5eod" style="width: 10%; text-align: right" title="Revenue">761,889</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_988_eus-gaap--Revenues_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zCbDtFfsHsBe" style="width: 10%; text-align: right" title="Revenue">2,072,623</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_98A_eus-gaap--Revenues_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zgACG3IpCs2e" style="width: 10%; text-align: right" title="Revenue">-</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_98A_eus-gaap--Revenues_c20240701__20240930_zYbM42OSLVc" style="width: 10%; text-align: right" title="Revenue">

2,834,512</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Cost of Goods Sold</td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--CostOfRevenue_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zKUZZplYq4p6" style="text-align: right" title="Cost of Goods Sold">730,027</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_982_eus-gaap--CostOfRevenue_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zyanbtirJkpf" style="text-align: right" title="Cost of Goods Sold">756,556</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--CostOfRevenue_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zeALD9UGNkv2" style="text-align: right" title="Cost of Goods Sold">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--CostOfRevenue_c20240701__20240930_zCo8VnGHPkMk" style="text-align: right" title="Cost of Goods Sold">1,486,583</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Net Loss</td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--NetIncomeLoss_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zwN55cyUnBYh" style="text-align: right" title="Net Income (Loss)">(1,401,246</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98A_eus-gaap--NetIncomeLoss_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zWE2ceMxQXV5" style="text-align: right" title="Net Income (Loss)">579,172</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--NetIncomeLoss_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zjSAp4nWdG13" style="text-align: right" title="Net Income (Loss)">(367,609</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98F_eus-gaap--NetIncomeLoss_c20240701__20240930_zaGNNepdHqwl" style="text-align: right" title="Net Income (Loss)">(1,189,683</td><td style="text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total Assets</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zrw7pfynt8R" style="text-align: right" title="Total Assets">11,883,507</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zZ7qiMn572J9" style="text-align: right" title="Total Assets">15,580,896</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zFECOqNQiJck" style="text-align: right" title="Total Assets">81,946</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--Assets_iI_c20240930_zV3pwenjxyt3" style="text-align: right" title="Total Assets">27,546,349</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Depreciation and Amortization</td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--DepreciationAndAmortization_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zbBcQuh9F93b" style="text-align: right" title="Depreciation and Amortization">100,641</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--DepreciationAndAmortization_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zHEI8mOUxdah" style="text-align: right" title="Depreciation and Amortization">29,504</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_982_eus-gaap--DepreciationAndAmortization_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_za0dylyCemg5" style="text-align: right" title="Depreciation and Amortization">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--DepreciationAndAmortization_c20240701__20240930_zoEMGOz8cS0j" style="text-align: right" title="Depreciation and Amortization">130,145</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Interest Expense, net</td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--InterestIncomeExpenseNet_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_z4kXvmyMP446" style="text-align: right" title="Interest Income, net">9,941</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--InterestIncomeExpenseNet_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zGgxuVvDgWr1" style="text-align: right" title="Interest Income, net">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--InterestIncomeExpenseNet_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zHtaGSYmnhj1" style="text-align: right" title="Interest Income, net">91,004</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_988_eus-gaap--InterestIncomeExpenseNet_di_c20240701__20240930_zcrVucLTKWG" style="text-align: right" title="Interest Income, net">100,945</td><td style="text-align: left"> </td></tr> </table>   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   The following table presents summary information by segment for the nine months ended September 30, 2024:   <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Manufacturing and Engineering</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Distribution</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Corporate</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Total</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 44%; text-align: justify">Revenue</td><td style="width: 2%">$</td> <td style="width: 1%; text-align: left">$</td><td id="xdx_984_eus-gaap--Revenues_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_z7iBUbRn6fP9" style="width: 10%; text-align: right" title="Revenue">2,565,020</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_98E_eus-gaap--Revenues_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zmUqNC5l9jsk" style="width: 10%; text-align: right" title="Revenue">5,090,265</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_982_eus-gaap--Revenues_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_z63mUkVlfsU4" style="width: 10%; text-align: right" title="Revenue">-</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_981_eus-gaap--Revenues_c20240101__20240930_zVHq2Ks1HVh1" style="width: 10%; text-align: right" title="Revenue">7,655,285</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify"><span style="font-family: Times New Roman,

Times, Serif">Cost of Goods Sold</td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--CostOfRevenue_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zvfz4Mp6DK0d" style="text-align: right" title="Cost of Goods Sold">2,129,328</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--CostOfRevenue_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zwuYpzuq63c5" style="text-align: right" title="Cost of Goods Sold">2,238,311</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--CostOfRevenue_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zKpzQ6StMuj5" style="text-align: right" title="Cost of Goods Sold"></td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_988_eus-gaap--CostOfRevenue_c20240101__20240930_z9CfZwUjnFSe" style="text-align: right" title="Cost of Goods Sold">4,367,639</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Net Income (Loss)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--NetIncomeLoss_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zOMEAAkQ1al6" style="text-align: right" title="Net Income (Loss)">(3,721,055</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--NetIncomeLoss_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zDJOCO1q62Ca" style="text-align: right" title="Net Income (Loss)">783,306</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--NetIncomeLoss_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zXuiLajwbHl5" style="text-align: right" title="Net Income (Loss)">(4,483,369</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--NetIncomeLoss_c20240101__20240930_zOgKaMz7Q01f" style="text-align: right" title="Net Income (Loss)">(7,421,118</td><td style="text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total Assets</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zXwjn0YvOnJi" style="text-align: right" title="Total Assets">11,883,507</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zeZiVDjkNhF7" style="text-align: right" title="Total Assets">15,580,896</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_985_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_z0AVT9F6fPK9" style="text-align: right" title="Total Assets">81,946</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_982_eus-gaap--Assets_iI_c20240930_zvUZjlYsWNGa" style="text-align: right" title="Total Assets">27,546,349</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Depreciation and Amortization</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--DepreciationAndAmortization_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zGJPWeU1jQc2" style="text-align: right" title="Depreciation and Amortization">301,242</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--DepreciationAndAmortization_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zPY1FNfZgIl5" style="text-align: right" title="Depreciation and Amortization">87,348</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--DepreciationAndAmortization_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zX2wpGXwa8X6" style="text-align: right" title="Depreciation and Amortization">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--DepreciationAndAmortization_c20240930_z4saZCilrlBg" style="text-align: right" title="Depreciation and Amortization">388,590</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Interest Expense, net</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--InterestIncomeExpenseNet_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_z5DeBjHCt267" style="text-align: right" title="Interest Income, net">17,468</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--InterestIncomeExpenseNet_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zp0UlXJusCSh" style="text-align: right" title="Interest Income, net">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--InterestIncomeExpenseNet_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_z8gJAWVuEjha" style="text-align: right" title="Interest Income, net">96,004</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--InterestIncomeExpenseNet_di_c20240101__20240930_zDc5ue1wqXm5" style="text-align: right" title="Interest Income, net">113,472</td><td style="text-align: left"> </td></tr> </table>   <p id="xdx_89F_eus-gaap--ScheduleOfSegmentReportingInformationBySegmentTextBlock_zpxhOI7jFN35" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify; background-color: white">The following table presents summary information by segment for the three months ended September 30, 2024:   Schedule of Segment Reporting <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Manufacturing and Engineering</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Distribution</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Corporate</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Total</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 44%; text-align: justify">Revenue</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_982_eus-gaap--Revenues_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zhY5KvIH5eod" style="width: 10%; text-align: right" title="Revenue">761,889</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_988_eus-gaap--Revenues_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zCbDtFfsHsBe" style="width: 10%; text-align: right" title="Revenue">2,072,623</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_98A_eus-gaap--Revenues_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zgACG3IpCs2e" style="width: 10%; text-align: right" title="Revenue">-</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_98A_eus-gaap--Revenues_c20240701__20240930_zYbM42OSLVc" style="width: 10%; text-align: right" title="Revenue">2,834,512</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Cost of Goods Sold</td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--CostOfRevenue_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zKUZZplYq4p6" style="text-align: right" title="Cost of Goods Sold">730,027</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_982_eus-gaap--CostOfRevenue_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zyanbtirJkpf" style="text-

align: right" title="Cost of Goods Sold">756,556</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--CostOfRevenue_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zeALD9UGNkv2" style="text-align: right" title="Cost of Goods Sold">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--CostOfRevenue_c20240701__20240930_zCo8VnGHPkMk" style="text-align: right" title="Cost of Goods Sold">1,486,583</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Net Loss</td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--NetIncomeLoss_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zwN55cyUnBYh" style="text-align: right" title="Net Income (Loss)">(1,401,246</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98A_eus-gaap--NetIncomeLoss_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zWE2ceMxQXV5" style="text-align: right" title="Net Income (Loss)">579,172</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--NetIncomeLoss_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zjSAp4nWdG13" style="text-align: right" title="Net Income (Loss)">(367,609</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98F_eus-gaap--NetIncomeLoss_c20240701__20240930_zaGNNepdHqwI" style="text-align: right" title="Net Income (Loss)">(1,189,683</td><td style="text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total Assets</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zrw7pfynt8R" style="text-align: right" title="Total Assets">11,883,507</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zZ7qiMn572J9" style="text-align: right" title="Total Assets">15,580,896</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zFECOqNQiJck" style="text-align: right" title="Total Assets">81,946</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--Assets_iI_c20240930_zV3pwenjxyt3" style="text-align: right" title="Total Assets">27,546,349</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Depreciation and Amortization</td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--DepreciationAndAmortization_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zbBcQuh9F93b" style="text-align: right" title="Depreciation and Amortization">100,641</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--DepreciationAndAmortization_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zHEI8mOUxdah" style="text-align: right" title="Depreciation and Amortization">29,504</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_982_eus-gaap--DepreciationAndAmortization_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_za0dylyCemg5" style="text-align: right" title="Depreciation and Amortization">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--DepreciationAndAmortization_c20240701__20240930_zoEMGOz8cS0j" style="text-align: right" title="Depreciation and Amortization">130,145</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Interest Expense, net</td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--InterestIncomeExpenseNet_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_z4kXymyMP446" style="text-align: right" title="Interest Income, net">9,941</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--InterestIncomeExpenseNet_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zGgxuVvDgWr1" style="text-align: right" title="Interest Income, net">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--InterestIncomeExpenseNet_c20240701__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zHtaGSYmnhj1" style="text-align: right" title="Interest Income, net">91,004</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--InterestIncomeExpenseNet_di_c20240701__20240930_zcrVucLTKWG" style="text-align: right" title="Interest Income, net">100,945</td><td style="text-align: left"> </td></tr> </table>   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   The following table presents summary information by segment for the nine months ended September 30, 2024:   <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Manufacturing and Engineering</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Distribution</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Corporate</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Total</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 44%; text-align: justify">Revenue</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_984_eus-gaap--Revenues_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_z7iBUbRn6fP9" style="width: 10%; text-align: right" title="Revenue">2,565,020</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_98E_eus-gaap--Revenues_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zmUqNC5l9jsk" style="width: 10%; text-align: right" title="Revenue">5,090,265</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_982_eus-gaap--Revenues_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_z63mUkVlfsU4" style="width: 10%; text-align: right" title="Revenue">-</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_981_eus-gaap--Revenues_c20240101__20240930_zVHq2Ks1HVh1" style="width: 10%; text-align: right" title="Revenue">7,655,285</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Cost of Goods Sold</td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--CostOfRevenue_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zvfz4Mp6DK0d" style="text-align: right" title="Cost of Goods Sold">2,129,328</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--CostOfRevenue_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zwuYpzuq63c5" style="text-align: right" title="Cost of Goods Sold">2,238,311</td><td style="text-align: left"> </td><td> </td> <td style="text-align:

left"> </td><td id="xdx_989_eus-gaap--CostOfRevenue_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zKpzQ6StMuj5" style="text-align: right" title="Cost of Goods Sold"></td><td style="text-align: left"> </td><td> </td><td> </td><td style="text-align: left"> </td><td id="xdx_988_eus-gaap--CostOfRevenue_c20240101__20240930_z9CfZwUjnFSe" style="text-align: right" title="Cost of Goods Sold">4,367,639</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Net Income (Loss)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--NetIncomeLoss_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zOMEAAkQ1al6" style="text-align: right" title="Net Income (Loss)">(3,721,055</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--NetIncomeLoss_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zDJOCO1q62Ca" style="text-align: right" title="Net Income (Loss)">783,306</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--NetIncomeLoss_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zXuiLajwbHl5" style="text-align: right" title="Net Income (Loss)">(4,483,369</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--NetIncomeLoss_c20240101__20240930_zOgKaMz7Q01f" style="text-align: right" title="Net Income (Loss)">(7,421,118</td><td style="text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Total Assets</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zXwjn0YvOnji" style="text-align: right" title="Total Assets">11,883,507</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_983_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zeZiVDjkNhF7" style="text-align: right" title="Total Assets">15,580,896</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_985_eus-gaap--Assets_iI_c20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_z0AVT9F6fPK9" style="text-align: right" title="Total Assets">81,946</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_982_eus-gaap--Assets_iI_c20240930_zvUZjlYsWNGa" style="text-align: right" title="Total Assets">27,546,349</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Depreciation and Amortization</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--DepreciationAndAmortization_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_zGJPWeU1jQc2" style="text-align: right" title="Depreciation and Amortization">301,242</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--DepreciationAndAmortization_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zPY1FNfZgIl5" style="text-align: right" title="Depreciation and Amortization">87,348</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--DepreciationAndAmortization_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_zX2wpGXwa8X6" style="text-align: right" title="Depreciation and Amortization">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--DepreciationAndAmortization_c20240101__20240930_z4saZCilrlBg" style="text-align: right" title="Depreciation and Amortization">388,590</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify">Interest Expense, net</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--InterestIncomeExpenseNet_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--ManufacturingAndEngineeringMember_z5DeBjHCt267" style="text-align: right" title="Interest Income, net">17,468</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--InterestIncomeExpenseNet_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--DistributionMember_zp0UJXJusCSh" style="text-align: right" title="Interest Income, net">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--InterestIncomeExpenseNet_c20240101__20240930__us-gaap--StatementBusinessSegmentsAxis__custom--CorporatesMember_z8gJAWVuEjha" style="text-align: right" title="Interest Income, net">96,004</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--InterestIncomeExpenseNet_di_c20240101__20240930_zDc5ue1wqXm5" style="text-align: right" title="Interest Income, net">113,472</td><td style="text-align: left"> </td></tr> </table> 761889 2072623 2834512 730027 756556 1486583 -1401246 579172 -367609 -1189683 11883507 15580896 81946 27546349 100641 29504 130145 9941 91004 -100945 2565020 5090265 7655285 2129328 2238311 4367639 -3721055 783306 -4483369 -7421118 11883507 15580896 81946 27546349 301242 87348 388590 17468 96004 -113472 (6) Inventories   The inventory consists of the following at September 30, 2024 and December 31, 2023: Schedule of Inventory <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 80%; margin-left: 0.5in"> <tr style="vertical-align: bottom"> <td> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_494_20240930_zBBygfP4SOY3" style="border-bottom: Black 1pt solid; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49B_20231231_zQqfedVzlML" style="border-bottom: Black 1pt solid; text-align: center">December 31, 2023</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td> </td> <td colspan="2"> </td><td> </td> <td colspan="2"> </td><td> </td></tr> <tr id="xdx_402_eus-gaap--InventoryRawMaterials_if_pp0p0_maIGzu23_zZySIgbx02F6" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: left">Raw Materials</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">1,320,434</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">959,645</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--InventoryWorkInProcess_if_pp0p0_maIGzu23_zn83lGjckyRi" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Work-in Progress</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">100,522</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">51,140</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--InventoryFinishedGoods_if_pp0p0_maIGzu23_z6o7V38cvip" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Finished Goods</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">7,291,203</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">6,672,793</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--InventoryGross_iTI_pp0p0_maINzcjs_mtIGzu23_zwTi66MYR5n3" style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt">Subtotal</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">8,712,159</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">7,683,578</td><td style="text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--InventoryAdjustments_iNI_di_msINzcjs_zWUIRHX9Tjbl" style="vertical-align: bottom; background-color:

rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Less: Reserve for Obsolescence</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,164,000</td><td style="padding-bottom: 1pt; text-align: left">)</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,146,000</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: White"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_402_eus-gaap--InventoryNet_iTI_mtINzcjs_zP2flie4N4yh" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 2.5pt">Total</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">7,548,159</td><td style="padding-bottom: 2.5pt; text-align: left"> </td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">6,537,578</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr></table>   The inventory consists of the following at September 30, 2024 and December 31, 2023:   Schedule of Inventory <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 80%; margin-left: 0.5in"> <tr style="vertical-align: bottom"> <td> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_494_20240930_zBBygfP4SOY3" style="border-bottom: Black 1pt solid; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49B_20231231_zQqfedVzlML" style="border-bottom: Black 1pt solid; 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background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Finished Goods</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">7,291,203</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">6,672,793</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--InventoryGross_iTI_pp0p0_maINzcjs_mtIGzu23_zwTi66MYR5n3" style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt">Subtotal</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">8,712,159</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">7,683,578</td><td style="text-align: left"> </td></tr> <tr id="xdx_407_eus-gaap--InventoryAdjustments_iNI_di_msINzcjs_zWUIRHX9Tjbl" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Less: Reserve for Obsolescence</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,164,000</td><td style="padding-bottom: 1pt; text-align: left">)</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,146,000</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: White"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_402_eus-gaap--InventoryNet_iTI_mtINzcjs_zP2flie4N4yh" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 2.5pt">Total</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">7,548,159</td><td style="padding-bottom: 2.5pt; text-align: left"> </td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">6,537,578</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr></table> 1320434 959645 100522 51140 7291203 6672793 8712159 7683578 1164000 1146000 7548159 6537578 (7) Property and Equipment   Property and Equipment consisted of the following at September 30, 2024 and December 31, 2023:   Schedule of Property and Equipment <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 80%; margin-left: 0.25in"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_496_20240930_z5mmbEqG8fii" style="border-bottom: Black 1pt solid; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49E_20231231_zb3fmT8mDIQk" style="border-bottom: Black 1pt solid; text-align: center">December 31, 2023</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td> </td> <td colspan="2"> </td><td> </td> <td colspan="2"> </td><td> </td></tr> <tr id="xdx_403_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--LabEquipmentMember_z6Sk0PfPO5rb" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: left">Lab Equipment</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">3,412,958</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="width: 16%; text-align: right">3,400,207</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ManufacturingEquipmentMember_zyGyQSw8Gh7" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Manufacturing Equipment</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"><span style="font-family: Times New Roman, Times,

Serif">129,745</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">129,745</td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--AutomobilesMember_zil4jh7778Vh" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td>Automobiles</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">7,335</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">7,335</td><td style="text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--ComputerEquipmentMember_zbo20P5KiyCa" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Computer Equipment and Software</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">146,785</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">194,238</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--LeaseholdImprovementsMember_zlxUNm9ODBb1" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Leasehold Improvements</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">84,172</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">84,172</td><td style="text-align: left"> </td></tr> <tr id="xdx_40F_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--FurnitureAndFixturesMember_zBpSOC2WTh7" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Furniture and Fixtures</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">170,643</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; 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vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt">Property plant and equipment, gross</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">3,951,638</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">3,986,340</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td> <td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--AccumulatedDepreciationDepletionAndAmortizationPropertyPlantAndEquipment_iNI_pp0p0_di_msPPAENzfiS_zP40x55IZW2i" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less: Accumulated Depreciation</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,601,842</td><td style="padding-bottom: 1pt; text-align: left">)</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,386,892</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_401_eus-gaap--PropertyPlantAndEquipmentNet_iTI_pp0p0_mtPPAENzfiS_zggzDjG4BvW3" style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; padding-bottom: 2.5pt">Total</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">2,349,796</td><td style="padding-bottom: 2.5pt; text-align: left"> </td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">2,599,448</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--PropertyPlantAndEquipmentNet_iTI_pp0p0_mtPPAENzfiS_zs9Oyb0vc4Wc" style="display: none; vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; padding-bottom: 2.5pt">Property plant and equipment, net</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">2,349,796</td><td style="padding-bottom: 2.5pt; text-align: left"> </td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">2,599,448</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr> </table>   Depreciation expense for the three months ended September 30, 2024 and 2023 was $92,567 and $91,715 respectively, of which $71,144 and $68,819 respectively were included in cost of goods sold.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Depreciation expense for the nine months ended September 30, 2024 and 2023 was $276,082 and $247,019 respectively, of which $213,391 and $185,239, respectively were included in cost of goods sold.   Property and equipment purchased in the amount of $234,036 under financing leases is included in the totals above. As of September 30, 2024 and 2023, the outstanding balance of the financing leases were $37,700 and $<span id="xdx_904_eus-gaap--FinanceLeaseLiability_iI_c20230930_z9twUtj7RYe5" title="Financing leases outstanding

balance">49,336, respectively.   Disposal of property and equipment as of September 30, 2024 was $61,133.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_89F_eus-gaap--PropertyPlantAndEquipmentTextBlock_zZA7CErXClQc" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Property and Equipment consisted of the following at September 30, 2024 and December 31, 2023:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> Schedule of Property and Equipment</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 80%; margin-left: 0.25in"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_496_20240930_z5mmbEqG8fii" style="border-bottom: Black 1pt solid; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49E_20231231_zb3fmT8mDIQk" style="border-bottom: Black 1pt solid; text-align: center">December 31, 2023</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td> </td><td> </td> <td colspan="2"> </td><td> </td><td> </td> <td colspan="2"> </td><td> </td></tr> <tr id="xdx_403_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--LabEquipmentMember_z6Sk0PfPO5rb" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: left">Lab Equipment</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">3,412,958</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">3,400,207</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_409_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__custom--ManufacturingEquipmentMember_zyGyOSw8Gh7" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Manufacturing Equipment</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">129,745</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td> </td><td style="text-align: right">129,745</td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--AutomobilesMember_zil4jh7778Vh" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td>Automobiles</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">7,335</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td> </td><td style="text-align: right">7,335</td><td style="text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--ComputerEquipmentMember_zbo20PSKiyCa" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Computer Equipment and Software</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">146,785</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">194,238</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--LeaseholdImprovementsMember_zlxUNm9ODBb1" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Leasehold Improvements</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">84,172</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">84,172</td><td style="text-align: left"> </td></tr> <tr id="xdx_40F_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_hus-gaap--PropertyPlantAndEquipmentByTypeAxis__us-gaap--FurnitureAndFixturesMember_zBpSOC2WTh7" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Furniture and Fixtures</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">170,643</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">170,643</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td></tr> <tr id="xdx_401_eus-gaap--PropertyPlantAndEquipmentGross_iI_pp0p0_maPPAENzfiS_zZSvQwaZ9lle" style="vertical-align: bottom; 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background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less: Accumulated Depreciation</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,601,842</td><td style="padding-bottom: 1pt; text-align: left">)</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,386,892</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_401_eus-gaap--PropertyPlantAndEquipmentNet_iTI_pp0p0_mtPPAENzfiS_zggzDjG4BvW3" style="vertical-align: bottom; 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text-align: right">2,349,796</td><td style="padding-bottom: 2.5pt; text-align: left"> </td><td

style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left"> $</td><td style="border-bottom: Black 2.5pt double; text-align: right">2,599,448</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr></table> 3412958 3400207 129745 129745 7335 7335 146785 194238 84172 84172 170643 170643 3951638 3986340 3951638 3986340 1601842 1386892 2349796 2599448 2349796 2599448 92567 91715 71144 68819 276082 247019 213391 185239 234036 37700 49336 61133 (8) Goodwill and Intangible Assets   Goodwill   Goodwill is related to the acquisition of Spectrum Semiconductor Materials Inc. on December 15, 2021. Goodwill is primarily related to expected improvements and technology performance and functionality, as well as sales growth from future product and service offerings and new customers, together with certain intangible assets that do not qualify for separate recognition. Goodwill is generally not amortizable for tax and financial statement purposes. As of September 30, 2024 and December 31, 2023, goodwill was $4,696,883, respectively.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Other Intangible Assets</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_89E_eus-gaap--ScheduleOfFiniteLivedIntangibleAssetsTableTextBlock_zTztT98ZKW08" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Intangible assets consisted of the following at September 30, 2024:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> Schedule of Intangible Assets</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Gross Carrying Amount</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Accumulated Amortization</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Net</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Weighted Average Life</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 44%; text-align: left">Trade name</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_984_eus-gaap--FiniteLivedIntangibleAssetsGross_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--TradeNamesMember_z4VqrQUy1Kh9" style="width: 10%; text-align: right" title="Gross Carrying Amount">584,517</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_981_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--TradeNamesMember_zghwynb3nHdg" style="width: 10%; text-align: right" title="Accumulated Amortization">-</td><td style="width: 1%; text-align: left">) </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_989_eus-gaap--IndefiniteLivedIntangibleAssetsExcludingGoodwill_iTI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--TradeNamesMember_zHwwKQkxI7ra" style="width: 10%; text-align: right" title="Net">584,517</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 10%; text-align: right">Indefinite</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Customer relationships</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--FiniteLivedIntangibleAssetsGross_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zrkj5GLxEib8" style="text-align: right" title="Gross Carrying Amount">2,591,491</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zn1chZ5rqrp9" style="text-align: right" title="Accumulated Amortization">438,691</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--FiniteLivedIntangibleAssetsNet_iTI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zfE1pRWO8Duh" style="text-align: right" title="Net">2,152,800</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td> </td><td style="text-align: right"><span id="xdx_90F_eus-gaap--AcquiredFiniteLivedIntangibleAssetsWeightedAverageUsefulLife_dtY_c20240101__20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zPV7anzCCqFg" title="Weighted Average Life">16.06</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Intellectual Property</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_987_eus-gaap--FiniteLivedIntangibleAssetsGross_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_zoJa4dQJXR92" style="border-bottom: Black 1pt solid; text-align: right" title="Gross Carrying Amount">202,771</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_986_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_zorz76ZtjQZ3" style="border-bottom: Black 1pt solid; text-align: right" title="Accumulated Amortization">68,463</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98A_eus-gaap--FiniteLivedIntangibleAssetsNet_iTI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_z9PLHIuIMFwj" style="border-bottom: Black 1pt solid; text-align: right" title="Net">134,308</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">9.96</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td> </td><td> </td> <td style="text-align: left"> </td><td> </td><td style="text-align: right"> </td><td> </td> <td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 1pt">Total</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_981_eus-gaap--IntangibleAssetsGrossExcludingGoodwill_iI_c20240930_zCHRtIJjiAAuk" style="border-bottom: Black 1pt solid; text-align: right" title="Gross Carrying Amount">3,378,779</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_986_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930_zheFLlcPfxKe" style="border-bottom: Black 1pt solid; text-align: right" title="Accumulated Amortization">507,154</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_987_eus-gaap--IntangibleAssetsNetExcludingGoodwill_iTI_c20240930_zZBk5UwcGjL" style="border-bottom: Black 1pt solid; text-align: right" title="Net">2,871,625</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> <span style="font-family: Times New

Roman, Times, Serif; font-size: 10pt"> Amortization expense for the three months ended September 30, 2024 and 2023 was $37,578, respectively.   Amortization expense for the nine months ended September 30, 2024 and 2023 was $112,508 and $112,397, respectively.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: center"> </p> <p style="font: bold 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: center">AmpliTech Group, Inc.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: center">Notes To Condensed Consolidated Financial Statements</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: center">For the Nine Months Ended September 30, 2024 and 2023 </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_898_eus-gaap--ScheduleofFiniteLivedIntangibleAssetsFutureAmortizationExpenseTableTextBlock_zkRDMMof4dRa" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Annual amortization of intangible assets are as follows:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0"> Schedule of Amortization of Assets</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; margin-left: auto; border-collapse: collapse; width: 60%; margin-right: auto"> <tr style="display: none; vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_494_20240930_zj7fgZPzfMN" style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_402_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseRemainderOfFiscalYear_iI_maFLIANzhEU_zgoWyEmaLhW5" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 86%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 10%; text-align: right">37,465</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_400_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseNextTwelveMonths_iI_maFLIANzhEU_ze4EobXziWB" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseYearTwo_iI_maFLIANzhEU_zvWxpha8bgN9" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseYearThree_iI_maFLIANzhEU_zAhnVLBtOi3d" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2027</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_403_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseYearFour_iI_maFLIANzhEU_zEt2br1Trk85" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2028</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_ecustom--FiniteLivedIntangibleAssetsAmortizationExpenseAfterYearFour_iI_maFLIANzhEU_zlRVLMFCB6i7" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">Thereafter</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">1,649,747</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--FiniteLivedIntangibleAssetsNet_iTI_mtFLIANzhEU_zVeTzvkmF8L3" style="vertical-align: bottom; background-color: rgb(204,238,255)"><td>Total</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">2,287,108</td><td style="text-align: left"> </td></tr></table>   4696883 4696883 Intangible assets consisted of the following at September 30, 2024: Schedule of Intangible Assets <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td style="text-align: center"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Gross Carrying Amount</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Accumulated Amortization</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Net</td><td style="padding-bottom: 1pt"> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; text-align: center">Weighted Average Life</td><td style="padding-bottom: 1pt"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 44%; text-align: left">Trade name</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_984_eus-gaap--FiniteLivedIntangibleAssetsGross_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--TradeNamesMember_z4VgrQUy1Kh9" style="width: 10%; text-align: right" title="Gross Carrying Amount">584,517</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_981_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--TradeNamesMember_zghwynb3nHdg" style="width: 10%; text-align: right" title="Accumulated Amortization"></td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_989_eus-gaap--IndefiniteLivedIntangibleAssetsExcludingGoodwill_iTI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--TradeNamesMember_zHwwKQkxI7ra" style="width: 10%; text-align: right" title="Net">584,517</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 10%; text-align: right">Indefinite</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Customer relationships</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98D_eus-gaap--FiniteLivedIntangibleAssetsGross_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zrkj5GLxElb8" style="text-align: right" title="Gross Carrying Amount">2,591,491</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zn1chZ5rqrp9" style="text-align: right" title="Accumulated Amortization">438,691</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_980_eus-gaap--FiniteLivedIntangibleAssetsNet_iTI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zfE1pRWO8Duh" style="text-align: right" title="Net">2,152,800</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"><span id="xdx_90F_eus-gaap--AcquiredFiniteLivedIntangibleAssetsWeightedAverageUsefulLife_dtY_c20240101__20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--CustomerRelationshipsMember_zPV7anzCCqFg" title="Weighted Average Life">16.06</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Intellectual Property</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_987_eus-gaap--FiniteLivedIntangibleAssetsGross_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_zoJa4dQJXR92" style="border-bottom: Black 1pt solid; text-align: right" title="Gross Carrying Amount">202,771</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_986_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_zorz76ZtjQZ3" style="border-bottom: Black 1pt solid; text-align: right" title="Accumulated Amortization">68,463</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; 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style="font-family: Times New Roman, Times, Serif"> </td><td id="xdx_98A_eus-gaap--FiniteLivedIntangibleAssetsNet_iTI_c20240930__us-gaap--FiniteLivedIntangibleAssetsByMajorClassAxis__us-gaap--IntellectualPropertyMember_z9PLHIuIMFwj" style="border-bottom: Black 1pt solid; text-align: right" title="Net">134,308</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td><td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">9.96</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td> </td><td> </td><td style="text-align: left"> </td><td style="text-align: right"> </td><td> </td><td style="text-align: left"> </td><td> </td><td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td><td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td><td> </td><td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-bottom: 1pt">Total</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_981_eus-gaap--IntangibleAssetsGrossExcludingGoodwill_iI_c20240930_zCHRtIJiAAuk" style="border-bottom: Black 1pt solid; text-align: right" title="Gross Carrying Amount">3,378,779</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_986_eus-gaap--FiniteLivedIntangibleAssetsAccumulatedAmortization_iI_c20240930_zheFLlcPfxKe" style="border-bottom: Black 1pt solid; text-align: right" title="Accumulated Amortization">507,154</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_987_eus-gaap--IntangibleAssetsNetExcludingGoodwill_iTI_c20240930_zZBk5UwcGjL" style="border-bottom: Black 1pt solid; text-align: right" title="Net">2,871,625</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr></table> 584517 584517 2591491 438691 2152800 P16Y21D 202771 68463 134308 P9Y11M15D 3378779 507154 2871625 37578 37578 112508 112397 <p id="xdx_898_eus-gaap--ScheduleofFiniteLivedIntangibleAssetsFutureAmortizationExpenseTableTextBlock_zkRDMMof4dRa" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Annual amortization of intangible assets are as follows:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0"> Schedule of Amortization of Assets</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; margin-left: auto; border-collapse: collapse; width: 60%; margin-right: auto"> <tr style="display: none; vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td> </td> <td style="text-align: left"> </td><td id="xdx_494_20240930_zj7fgZPzfMN" style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_402_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseRemainderOfFiscalYear_iI_maFLIANzhEU_zgoWyEmaLhW5" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 86%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 10%; text-align: right">37,465</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_400_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseNextTwelveMonths_iI_maFLIANzhEU_ze4EobXziWB" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseYearTwo_iI_maFLIANzhEU_zvWxpha8bgN9" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseYearThree_iI_maFLIANzhEU_zAhnVLBtOi3d" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2027</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_403_eus-gaap--FiniteLivedIntangibleAssetsAmortizationExpenseYearFour_iI_maFLIANzhEU_zEt2br1Trk85" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2028</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">149,974</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_ecustom--FiniteLivedIntangibleAssetsAmortizationExpenseAfterYearFour_iI_maFLIANzhEU_zlRVLMFCB6i7" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">Thereafter</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">1,649,747</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--FiniteLivedIntangibleAssetsNet_iTI_mtFLIANzhEU_zVeTzvkmF8L3" style="vertical-align: bottom; background-color: rgb(204,238,255)"><td>Total</td><td> </td> <td style="text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="text-align: right">2,287,108</td><td style="text-align: left"> </td></tr></table> 37465 149974 149974 149974 149974 1649747 2287108 (9) Cost Method Investment   On June 10, 2021, the Company entered into a membership interest purchase agreement with SN2N, LLC for an aggregate purchase price of $<span id="xdx_902_ecustom--AggregatePurchasePriceForMembershipInterest_iI_c20210610__us-gaap--RelatedPartyTransactionsByRelatedPartyAxis__custom--SN2NLLCMember_zo3FQ9enqjJ6" title="Aggregate purchase price for membership interest">350,000, to be paid in four tranches. <span id="xdx_90D_eus-gaap--EquityMethodInvestmentAdditionalInformation_c20210609__20210610__us-gaap--RelatedPartyTransactionsByRelatedPartyAxis__custom--SN2NLLCMember_zoLNklRHihzl" title="Equity method investment additional information">Each tranche represented a 5% membership interest, and in aggregate a 20% membership interest. On June 15, 2022, an amendment to the membership interest purchase agreement was made to reflect a <span id="xdx_904_ecustom--AggregatePurchasePriceForMembershipInterestPercentage_iI_pid_dp_uPure_c20220615__us-gaap--RelatedPartyTransactionsByRelatedPartyAxis__custom--SN2NLLCMember_zaST3OsLEnth" title="Cost method investment membership interest percentage">19.9% membership interest. Considering this amendment, the Company overpaid $<span id="xdx_901_ecustom--OverpaidForTheMembershipInterest_iI_c20220615__us-gaap--RelatedPartyTransactionsByRelatedPartyAxis__custom--SN2NLLCMember_zg0cuCqRUWzh" title="Overpaid for the membership interest">1,750 for the membership interest and was subsequently reimbursed. As of September 30, 2024, the Company has made an investment of $348,250 for a 19.9% membership interest.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   350000 Each tranche represented a 5% membership interest, and in aggregate a 20% membership interest 0.199 1750 348250 0.199 (10) Leases   The following was included in our balance sheet as of September 30, 2024:   Schedule of Lease Assets and Liabilities <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; margin-left: auto; border-collapse: collapse; width: 60%; margin-right: auto"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49C_20240930_zylqiQ7Ligvl" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-decoration: underline; font-weight: bold; text-align: left">Operating leases</td><td style="font-weight: bold"> </td> <td style="font-weight: bold; text-align: left"> </td><td style="font-weight: bold; text-align: right"><span

style="font-family: Times New Roman, Times, Serif"> </td><td style="font-weight: bold; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="font-style: italic">Assets</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40F_eus-gaap--OperatingLeaseRightOfUseAsset_iI_zLyPIAESDMKj" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%; text-align: left">ROU operating lease assets</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">4,517,685</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td> </tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-style: italic">Liabilities</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--OperatingLeaseLiabilityCurrent_iI_maOLLz764_zgDaPPDlr5Da" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Current portion of operating lease</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">447,556</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--OperatingLeaseLiabilityNoncurrent_iI_maOLLz764_zhRgGK1VbJya" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Operating lease, net of current portion</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,255,140</td><td style="text-align: left"> </td></tr> <tr id="xdx_405_eus-gaap--OperatingLeaseLiability_iTI_mtOLLz764_zmxXHqE3YS26" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-left: 10pt">Total operating lease liabilities</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,702,696</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-decoration: underline; font-weight: bold; text-align: left">Financing leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-style: italic">Assets</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_403_eus-gaap--PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetBeforeAccumulatedDepreciationAndAmortization_iI_maPPAEAze7Z_zxFQZRkFXvld" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Property and equipment, gross</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">234,036</td><td style="text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAccumulatedDepreciationAndAmortization_iNI_di_msPPAEAze7Z_zhoWUQeuz8zb" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-left: 10pt">Accumulated depreciation</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">(180,643</td><td style="text-align: left">)</td></tr> <tr id="xdx_401_eus-gaap--PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAfterAccumulatedDepreciationAndAmortization_iTI_mtPPAEAze7Z_z3yK0PutBCAj" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Property and equipment, net</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">53,393</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="font-style: italic">Liabilities</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40B_eus-gaap--FinanceLeaseLiabilityCurrent_iI_maFLLzvD4_zw32MygHlZF5" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Current portion of financing lease</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">17,379</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--FinanceLeaseLiabilityNoncurrent_iI_maFLLzvD4_zkWuKJKqPcOj" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Financing lease, net of current portion</td><td> </td> <td style="text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="text-align: right">20,321</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--FinanceLeaseLiability_iTI_mtFLLzvD4_zUX6mcIuHxEe" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-left: 10pt">Total financing lease liabilities</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">37,700</td><td style="text-align: left"> </td></tr> </table>   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   <p id="xdx_894_ecustom--ScheduleOfWeightedAverageRemainingLeaseTermAndWeightedAverageDiscountRateTableTextBlock_z1AhP07VeTwk" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The weighted average remaining lease term and weighted average discount rate at September 30, 2024 are as follows: Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; margin-left: auto; border-collapse: collapse; width: 60%; margin-right: auto"> <tr style="vertical-align: bottom"> <td style="border-bottom: Black 1pt solid; font-weight: bold">Weighted average remaining lease term (years)</td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%; text-align: left">Operating leases</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 16%; text-align: right">8.18</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Financing leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">2.29</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-weight: bold; padding-bottom: 1pt">Weighted average discount rate</td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Operating leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">6.42</td><td style="text-align: left">%</td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Financing leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">4.68

</td><td style="text-align: left">%</td></tr> </table>   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Operating Leases   On September 12, 2019, the Company entered into a new operating lease agreement to rent office space in Ronkonkoma, NY. This five- year agreement commenced on September 12, 2019 with an annual rent of $90,000 and 3% increase in each successive lease year beginning in 2021. The Company has an option to buy the property during the first two years of the lease for $1,200,000 and then at fair market value for the remainder of the lease term. This option has expired and was not exercised as of December 31, 2022. On April 13, 2023, this lease was terminated subject to the terms of a Surrender Agreement between the Company and landlord. As a result, a gain on termination of right-of-use operating lease was recognized of $8,461.   On November 27, 2019, the Company entered a 39-month agreement to lease an automobile with a monthly payment of $420. This lease was paid in full as of March 31, 2023.   On December 15, 2021, the Company assumed the SSM lease agreement for office and warehouse space in San Jose, CA, with the same terms and conditions. Effective February 1, 2020, the lease term will expire on January 31, 2025, with a base rent of $24,234 for the first 12 months and increases by approximately <span id="xdx_905_ecustom--OperatingLeasePaymentsIncreasePercentage_pid_dp_uPure_c20200201__20200201__us-gaap--TypeOfArrangementAxis__custom--SpectrumSemiconductorMaterialsLeaseAgreementMember_z7UR4ECLMR0j" title="Operating lease payments increase percentage">3% every year. On September 6, 2024, the lease was amended extending the lease term to March 31, 2030 while maintaining the base rent of $24,234 and <span id="xdx_90A_ecustom--OperatingLeasePaymentsIncreasePercentage_pid_dp_uPure_c20240906__20240906__us-gaap--TypeOfArrangementAxis__custom--SpectrumSemiconductorMaterialsLeaseAgreementMember_zVqtl3IOzPy5" title="Operating lease payments increase percentage">3% increases for each year thereafter.   On October 15, 2021, the Company entered a new lease for a 20,000 square foot facility at 155 Plant Avenue, Hauppauge, New York, for a term of seven years and two months. The yearly base rent of $346,242 shall increase at a rate of 2.75% per year to begin on the first anniversary lease commencement date and each year thereafter. The first two months of basic rent shall be abated following the commencement lease date. In the event the landlord decides to sell the property, the Company shall have the right of first offer to purchase subject property. Upon lease execution, the Company paid two months of base rent as a security deposit and one month’s rent totaling $86,560. The Company moved into the new manufacturing and headquarters facility April 1, 2022.   On August 9, 2023, the Company entered a 39-month agreement for $20,880 to lease an automobile with a monthly payment of $605.   On January 15, 2024, the Company entered a triple net lease agreement for a 1,900 square foot facility in Allen, Texas for a term of five years and one month. The yearly base rent of $53,675 shall increase at a rate of 2.5% per year to begin on the first anniversary lease commencement date and each year thereafter. The first month’s rent shall be abated following the commencement lease date. Upon lease execution, the Company paid two months of rent as a security deposit and one month’s rent totaling $17,999. The Company moved into the new facility on August 1, 2024.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   The following table reconciles future minimum operating lease payments to the discounted lease liability as of September 30, 2024:   Schedule of Future Minimum Operating Lease Payments <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: center"> </td><td style="text-align: center"> </td> <td style="text-align: center"> </td><td id="xdx_498_20240930_zk8BQmRI6hS2" style="text-align: center"> </td><td style="text-align: center"> </td></tr> <tr id="xdx_409_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear_iI_pp0p0_maLOLLPzfCB_zRjROxDwq7jk" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 16%; text-align: right">188,322</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths_iI_pp0p0_maLOLLPzfCB_z1GFN6RdE8W1" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">728,280</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueYearTwo_iI_pp0p0_maLOLLPzfCB_zcc7u3yuF496" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">743,301</td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueYearThree_iI_pp0p0_maLOLLPzfCB_zmT2FqXawlh4" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2027</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">757,493</td><td style="text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueYearFour_iI_pp0p0_maLOLLPzfCB_zMXfNMFpqEqk" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2028</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">779,311</td><td style="text-align: left"> </td></tr> <tr id="xdx_40F_ecustom--LesseeOperatingLeaseLiabilityPaymentsDueAfterYearFour_iI_pp0p0_maLOLLPzfCB_zxUg0T4xmG2c" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">Thereafter</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">2,762,279</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDue_iTI_pp0p0_mtLOLLPzfCB_zcILOqm9k644" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease payments</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">5,958,986</td><td style="text-align: left"><span style="font-family: Times New Roman, Times,

Serif"> </td></tr> <tr id="xdx_40C_eus-gaap--LesseeOperatingLeaseLiabilityUndiscountedExcessAmount_iNI_pp0p0_di_zxYaYIMw4jkj" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less imputed interest</td> <td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,256,290</td><td style="padding-bottom: 1pt; text-align: left">)</td> </tr> <tr id="xdx_406_eus-gaap--OperatingLeaseLiability_iTI_pp0p0_zv4QAcKYT8Pe" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease obligations</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">4,702,696</td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--OperatingLeaseLiabilityCurrent_iNI_pp0p0_di_z55oTrQMp4k3" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less current obligations</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(447,556</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40E_eus-gaap--OperatingLeaseLiabilityNoncurrent_iI_pp0p0_zfDC1ECrfDWi" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 2.5pt">Long-term lease obligations</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">4,255,140</td> <td style="padding-bottom: 2.5pt; text-align: left"> </td></tr> </table> <p id="xdx_8A2_zekLFLIElVJb" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> Financing Lease </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The Company entered into several 60-month lease agreements to finance certain laboratory and office equipment. As such, the Company has accounted for these transactions as a financing lease. </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p id="xdx_898_esrt--ContractualObligationFiscalYearMaturityScheduleTableTextBlock_zwlfGQqCjL94" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The following table reconciles future minimum financing lease payments to the discounted lease liability as of September 30, 2024:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Schedule of Future Minimum Lease Payments for Finance Lease </p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: center"> </td><td style="text-align: center"> </td> <td style="text-align: center"> </td><td id="xdx_49D_20240930_zUJY7smfMuk4" style="text-align: center"> </td><td style="text-align: center"> </td></tr> <tr id="xdx_409_eus-gaap--FinanceLeaseLiabilityPaymentsRemainderOfFiscalYear_iI_pp0p0_maFLLPDzcHU_zXUtLgV3N6v7" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 16%; text-align: right">5,687</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--FinanceLeaseLiabilityPaymentsDueNextTwelveMonths_iI_pp0p0_maFLLPDzcHU_zL6RvOWrlqc3" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">18,195</td><td style="text-align: left"> </td></tr> <tr id="xdx_402_eus-gaap--FinanceLeaseLiabilityPaymentsDueYearTwo_iI_pp0p0_maFLLPDzcHU_z9wYhybK6uy3" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">11,982</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--FinanceLeaseLiabilityPaymentsDueYearThree_iI_pp0p0_maFLLPDzcHU_zxcl6Vj3Gclk" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2027</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">3,994</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--FinanceLeaseLiabilityPaymentsDue_iTI_pp0p0_mtFLLPDzcHU_zNr0Jgrqa45l" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease payments</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">39,858</td><td style="text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--FinanceLeaseLiabilityUndiscountedExcessAmount_iNI_pp0p0_di_zI4E1VgZt70k" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less imputed interest</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(2,158</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40A_eus-gaap--FinanceLeaseLiability_iI_pp0p0_znN232tNUmff" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease obligations</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">37,700</td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--FinanceLeaseLiabilityCurrent_iNI_pp0p0_di_z9hSmZCGwkD9" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less current obligations</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td> <td style="border-bottom: Black 1pt solid; text-align: right">(17,379</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40B_eus-gaap--FinanceLeaseLiabilityNoncurrent_iI_pp0p0_zKsGVd4knGx4" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Long-term lease obligations</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">20,321</td><td style="text-align: left"> </td></tr> </table>   The following was included in our balance sheet as of September 30, 2024:   Schedule of Lease Assets and Liabilities <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; margin-left: auto; border-collapse: collapse; width: 60%; margin-right: auto"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_49C_20240930_zylqiQ7Ligvl" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-decoration: underline; font-weight: bold; text-align: left">Operating leases</td><td style="font-weight: bold"> </td> <td style="font-weight: bold; text-align: left"> </td><td style="font-weight: bold; text-align: right"> </td><td style="font-weight: bold; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="font-style: italic">Assets</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40F_eus-gaap--OperatingLeaseRightOfUseAsset_iI_zLyPIAESDMKj" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%; text-align: left">ROU operating lease assets</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">4,517,685</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-style: italic">Liabilities</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--OperatingLeaseLiabilityCurrent_iI_maOLLz764_zgDaPPDlr5Da" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Current portion of operating lease</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">447,556</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--OperatingLeaseLiabilityNoncurrent_iI_maOLLz764_zhRgGK1VbJya" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify">Operating lease, net of current portion</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">4,255,140</td><td style="text-align: left"> </td></tr> <tr id="xdx_405_eus-gaap--OperatingLeaseLiability_iTI_mtOLLz764_zmxXHqE3YS26" style="vertical-align: bottom; background-color: White"> <td style="text-align: left;

padding-left: 10pt">Total operating lease liabilities</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right"> 4,702,696</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-decoration: underline; font-weight: bold; text-align: left">Financing leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-style: italic">Assets</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_403_eus-gaap--PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetBeforeAccumulatedDepreciationAndAmortization_iI_maPPAEAze7Z_zxFQZRkFXvld" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Property and equipment, gross</td><td> </td> <td style="text-align: left">$ </td><td style="text-align: right">234,036</td><td style="text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAccumulatedDepreciationAndAmortization_iNI_di_msPPAEAze7Z_zhoWUQeuz8zb" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-left: 10pt">Accumulated depreciation</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">(180,643</td><td style="text-align: left">)</td></tr> <tr id="xdx_401_eus-gaap--PropertyPlantAndEquipmentAndFinanceLeaseRightOfUseAssetAfterAccumulatedDepreciationAndAmortization_iTI_mtPPAEAze7Z_z3yK0PutBCAj" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Property and equipment, net</td><td> </td> <td style="text-align: left">$ </td><td style="text-align: right">53,393</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="font-style: italic">Liabilities</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="text-align: left"> </td></tr> <tr id="xdx_40B_eus-gaap--FinanceLeaseLiabilityCurrent_iI_maFLLzvD4_zw32MygHlZF5" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Current portion of financing lease</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">17,379</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--FinanceLeaseLiabilityNoncurrent_iI_maFLLzvD4_zkWuKJKqPcOj" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Financing lease, net of current portion</td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">20,321</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--FinanceLeaseLiability_iTI_mtFLLzvD4_zUX6mcIuHxEe" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-left: 10pt">Total financing lease liabilities</td><td> </td> <td style="text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="text-align: right">37,700</td><td style="text-align: left"> </td></tr> </table> 4517685 447556 4255140 4702696 234036 180643 53393 17379 20321 37700 <p id="xdx_894_ecustom--ScheduleOfWeightedAverageRemainingLeaseTermAndWeightedAverageDiscountRateTableTextBlock_z1AhP87VeTwk" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The weighted average remaining lease term and weighted average discount rate at September 30, 2024 are as follows: Schedule of Weighted Average Remaining Lease Term and Weighted Average Discount Rate <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; margin-left: auto; border-collapse: collapse; width: 60%; margin-right: auto"> <tr style="vertical-align: bottom"> <td style="border-bottom: Black 1pt solid; font-weight: bold">Weighted average remaining lease term (years)</td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">September 30, 2024</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%; text-align: left">Operating leases</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 16%; text-align: right">8.18</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Financing leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">2.29</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="font-weight: bold; padding-bottom: 1pt">Weighted average discount rate</td><td style="padding-bottom: 1pt"> </td> <td style="text-align: left"> </td><td style="text-align: right"> </td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: left">Operating leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">6.42</td><td style="text-align: left">%</td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Financing leases</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">4.68</td><td style="text-align: left">%</td></tr> </table> P8Y2M4D P2Y3M14D 0.0642 0.0468 the Company entered into a new operating lease agreement to rent office space in Ronkonkoma, NY. This five- year agreement commenced on September 12, 2019 with an annual rent of $90,000 and 3% increase in each successive lease year beginning in 2021 90000 0.03 The Company has an option to buy the property during the first two years of the lease for $1,200,000 and then at fair market value for the remainder of the lease term 8461 420 2025-01-31 24234 0.03 2030-03-31 24234 0.03 20000 P7Y 346242 0.0275 86560 On August 9, 2023, the Company entered a 39-month agreement for $20,880 to lease an automobile with a monthly payment of $605 20880 605 1900 P5Y1M 53675 0.025 17999 The following table reconciles future minimum operating lease payments to the discounted lease liability as of September 30, 2024:   Schedule of Future Minimum Operating Lease Payments <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: center"> </td><td style="text-align: center"> </td> <td style="text-align: center"> </td><td id="xdx_498_20240930_zk8BQmRI6hS2" style="text-align: center"> </td><td style="text-align: center"> </td></tr> <tr id="xdx_409_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsRemainderOfFiscalYear_iI_pp0p0_maLOLLPzfCB_zRjROxDwq7jk" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 16%; text-align: right">188,322</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueNextTwelveMonths_iI_pp0p0_maLOLLPzfCB_z1GFN6RdE8W1" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">728,280</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueYearTwo_iI_pp0p0_maLOLLPzfCB_zcc7u3yuF496" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">743,301</td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueYearThree_iI_pp0p0_maLOLLPzfCB_zmT2FqXawlh4" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2027</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">757,493</td><td style="text-align: left"> </td></tr> <tr id="xdx_40D_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDueYearFour_iI_pp0p0_maLOLLPzfCB_zMXfNMFpqEqk" style="vertical-align:

bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2028</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">779,311</td><td style="text-align: left"> </td></tr> <tr id="xdx_40F_ecustom--LesseeOperatingLeaseLiabilityPaymentsDueAfterYearFour_iI_pp0p0_maLOLLPzfCB_zxUg0T4xmG2c" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">Thereafter</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">2,762,279</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--LesseeOperatingLeaseLiabilityPaymentsDue_iTI_pp0p0_mtLOLLPzfCB_zcILOqm9k644" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease payments</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">5,958,986</td><td style="text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LesseeOperatingLeaseLiabilityUndiscountedExcessAmount_iNI_pp0p0_di_zxYaYIMw4jkj" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less imputed interest</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(1,256,290</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_406_eus-gaap--OperatingLeaseLiability_iTI_pp0p0_zv4QAcKYT8Pe" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease obligations</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">4,702,696</td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--OperatingLeaseLiabilityCurrent_iNI_pp0p0_di_z55oTrQMp4k3" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less current obligations</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(447,556</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40E_eus-gaap--OperatingLeaseLiabilityNoncurrent_iI_pp0p0_zfDC1ECrfDWi" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 2.5pt">Long-term lease obligations</td><td style="padding-bottom: 2.5pt"> </td> <td style="border-bottom: Black 2.5pt double; text-align: left">$</td><td style="border-bottom: Black 2.5pt double; text-align: right">4,255,140</td><td style="padding-bottom: 2.5pt; text-align: left"> </td></tr> </table> 188322 728280 743301 757493 779311 2762279 5958986 1256290 4702696 447556 4255140 The Company entered into several 60-month lease agreements to finance certain laboratory and office equipment. <p id="xdx_898_esrt--ContractualObligationFiscalYearMaturityScheduleTableTextBlock_zwlfGQqCjL94" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">The following table reconciles future minimum financing lease payments to the discounted lease liability as of September 30, 2024:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt 0pt 0pt 0; text-align: justify">Schedule of Future Minimum Lease Payments for Finance Lease </p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="display: none; vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: center"> </td><td style="text-align: center"> </td> <td style="text-align: center"> </td><td id="xdx_49D_20240930_zUJY7smfMuk4" style="text-align: center"> </td><td style="text-align: center"> </td></tr> <tr id="xdx_409_eus-gaap--FinanceLeaseLiabilityPaymentsRemainderOfFiscalYear_iI_pp0p0_maFLLPDzcHU_zXUtLgV3N6v7" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td style="width: 16%; text-align: right">5,687</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--FinanceLeaseLiabilityPaymentsDueNextTwelveMonths_iI_pp0p0_maFLLPDzcHU_zL6RvOWrlqc3" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">18,195</td><td style="text-align: left"> </td></tr> <tr id="xdx_402_eus-gaap--FinanceLeaseLiabilityPaymentsDueYearTwo_iI_pp0p0_maFLLPDzcHU_z9wYhybK6uy3" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">11,982</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--FinanceLeaseLiabilityPaymentsDueYearThree_iI_pp0p0_maFLLPDzcHU_zxcl6Vj3Gclk" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2027</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">3,994</td><td style="text-align: left"> </td></tr> <tr id="xdx_404_eus-gaap--FinanceLeaseLiabilityPaymentsDue_iTI_pp0p0_mtFLLPDzcHU_zNr0Jqrqa45l" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease payments</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">39,858</td><td style="text-align: left"> </td></tr> <tr id="xdx_40A_eus-gaap--FinanceLeaseLiabilityUndiscountedExcessAmount_iNI_pp0p0_di_zl4E1VgZt70k" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less imputed interest</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(2,158</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40A_eus-gaap--FinanceLeaseLiability_iI_pp0p0_znN232tNUmff" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Total lease obligations</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">37,700</td><td style="text-align: left"> </td></tr> <tr id="xdx_40E_eus-gaap--FinanceLeaseLiabilityCurrent_iNI_pp0p0_di_z9hSmZCGwkD9" style="vertical-align: bottom; background-color: White"> <td style="text-align: left; padding-bottom: 1pt">Less current obligations</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(17,379</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_40B_eus-gaap--FinanceLeaseLiabilityNoncurrent_iI_pp0p0_zKsGVd4knGx4" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">Long-term lease obligations</td><td> </td> <td style="text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="text-align: right">20,321</td><td style="text-align: left"> </td></tr> </table> 5687 18195 11982 3994 39858 2158 37700 17379 20321 (11) Notes Payable   Promissory Note: On September 12, 2019, AmpliTech Group, Inc. acquired Specialty, a privately held company based in Ronkonkoma, NY. The purchase included all inventory, orders, customers, property and equipment, and all intellectual property. The assets also included all eight team members of Specialty. The total consideration paid was $1,143,633, consisting of $<span id="xdx_90E_eus-gaap--PaymentsToAcquireBusinessesNetOfCashAcquired_c20190911__20190912__us-gaap--DebtInstrumentAxis__custom--PromissoryNoteMember_zMpc6bPHXiZi" title="Cash paid in acquisition, net of cash acquired">668,633 in cash and a $475,000 promissory note with an interest rate of 6%. Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty-nine (59) monthly payments of $9,213 with a final payment due October 1, 2024 of $9,203. As of September 30, 2024, the balance of this promissory note was $9,166. Principal payments of $64,473 along with interest expense of $2,035 were paid during the nine months ended September 30, 2024.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Loan Payable: On September 12, 2019, the Company was approved for a $250,000 equipment leasing facility

which was subsequently increased to $500,000. The Company has borrowed against the leasing facility as follows: <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; width: 100%; margin-top: 0; margin-bottom: 0"><tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top"> <td style="font: 10pt Times New Roman, Times, Serif; width: 0.25in"></td><td style="font: 10pt Times New Roman, Times, Serif; width: 0.25in">●</td><td style="font: 10pt Times New Roman, Times, Serif; text-align: justify">On May 14, 2020, the Company borrowed $<span id="xdx_905_eus-gaap--ProceedsFromLoans_c20200513__20200514__us-gaap--AwardDateAxis__custom--MayFourteenTwoThousandAndTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zuDwcVU3oUw9" title="Proceeds from loans">27,494 to be paid over a three-year term with monthly payments of $<span id="xdx_905_eus-gaap--DebtInstrumentPeriodicPaymentInterest_c20200513__20200514__us-gaap--AwardDateAxis__custom--MayFourteenTwoThousandAndTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zKCsgEurZ7s1" title="Debt instrument periodic payments interest">815 at an interest rate of <span id="xdx_90F_eus-gaap--DebtInstrumentInterestRateStatedPercentage_iI_pid_dp_uPure_c20200514__us-gaap--AwardDateAxis__custom--MayFourteenTwoThousandAndTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zOyi42IV49Z1" title="Interest rate percentage">4.27%. The balance as of September 30, 2024 was $<span id="xdx_901_eus-gaap--RepaymentsOfDebt_c20240101__20240930__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember__us-gaap--AwardDateAxis__custom--MayFourteenTwoThousandAndTwentyMember_zKAtLAxNHqbi" title="Repayments of debt">0. Principal payments of $<span id="xdx_906_eus-gaap--DebtInstrumentPeriodicPaymentPrincipal_c20230101__20230930__us-gaap--AwardDateAxis__custom--MayFourteenTwoThousandAndTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zZVVWaNW76if" title="Principal payment">3,230 and interest expense of $<span id="xdx_90C_eus-gaap--InterestExpense_c20230101__20230930__us-gaap--AwardDateAxis__custom--MayFourteenTwoThousandAndTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zNNl9AjKPBdk" title="Interest expense">30 were paid for the nine months ended September 30, 2023. This loan was paid in full in April 2023.</td></tr></table>   <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; width: 100%; margin-top: 0; margin-bottom: 0"><tr style="font: 10pt Times New Roman, Times, Serif; vertical-align: top"> <td style="font: 10pt Times New Roman, Times, Serif; width: 0.25in"></td><td style="font: 10pt Times New Roman, Times, Serif; width: 0.25in">●</td><td style="font: 10pt Times New Roman, Times, Serif; text-align: justify">On June 10, 2020, the Company borrowed $<span id="xdx_904_eus-gaap--ProceedsFromLoans_c20200609__20200610__us-gaap--AwardDateAxis__custom--JuneTenTwentyTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_znZbmvHN9lpb" title="Proceeds from loans">41,015 to be paid over a three-year term with monthly payments of $<span id="xdx_901_eus-gaap--DebtInstrumentPeriodicPaymentInterest_c20200609__20200610__us-gaap--AwardDateAxis__custom--JuneTenTwentyTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zYXyoAy1uqL9" title="Debt instrument periodic payments interest">1,216 at an interest rate of <span id="xdx_90D_eus-gaap--DebtInstrumentInterestRateStatedPercentage_iI_pid_dp_uPure_c20200610__us-gaap--AwardDateAxis__custom--JuneTenTwentyTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_z3XK3Udej0Vk" title="Interest rate percentage">4.28%. The balance as of September 30, 2024 was $<span id="xdx_902_eus-gaap--RepaymentsOfDebt_c20240101__20240930__us-gaap--AwardDateAxis__custom--JuneTenTwentyTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zPy6Mg7swzlj" title="Repayments of debt">0. Principal payments of $<span id="xdx_90E_eus-gaap--DebtInstrumentPeriodicPaymentPrincipal_c20230101__20230930__us-gaap--AwardDateAxis__custom--JuneTenTwentyTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_z1WeZFWEGdxh" title="Principal payment">6,012 and interest expense of $<span id="xdx_904_eus-gaap--InterestExpense_c20230101__20230930__us-gaap--AwardDateAxis__custom--JuneTenTwentyTwentyMember__us-gaap--LongtermDebtTypeAxis__us-gaap--LoansPayableMember_zI13TmTTFF22" title="Interest expense">68 were paid for the nine months ended September 30, 2023. This loan was paid in full in May 2023.</td></tr></table>   As of March 14, 2023, the Company closed the equipment line of credit of $500,000, which had $0 balance. All UCC filings on the Company assets have been released as well as the President's personal guarantee.   In January 2022, the Company purchased machinery for $91,795, applying a deposit of $9,180 and financing the balance of $82,616 over 24 payments at an interest rate of 1.90%. The balance as of September 30, 2024 and 2023 was $0 and $10,499, respectively. Principal payments of $0 and $31,201 and interest expense of $0 and $397 were paid for the nine months ended September 30, 2024 and 2023, respectively.   On July 23, 2024, the Company entered into a business loan and security agreement with Altbanq Lending II LLC in the amount of $1,300,000, with an origination fee of $26,000 and an original issue discount of $403,000. The loan is payable within 76 weeks through 38 bi-weekly payments of $44,816 and bears an annual interest rate of 21.2% with prepayment options. The loan is secured by the Company's assets through an UCC filing. Proceeds from the business loan will be used for working capital and 5G licensing and certification fees. The balance as of September 30, 2024 was $1,139,429, net of the debt discount. Principal payments of $224,080 and $89,509 of interest expense were paid for the nine month ended September 30, 2024.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p id="xdx_89C_ecustom--ScheduleOfFuturePrincipalAndInterestPaymentsTableTextBlock_zkCcUfjCikD7" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Future principal payments over the term of the loans as of September 30, 2024 are as follows:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Schedule of Future Principal and Interest Payments </p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_490_20240930_zOT61iNWeOlg" style="border-bottom: Black 1pt solid; text-align: center">Payments</td><td style="padding-bottom: 1pt"> </td></tr> <tr id="xdx_40D_eus-gaap--LongTermDebtMaturitiesRepaymentsOfPrincipalRemainderOfFiscalYear_iI_pp0p0_maLTDzUhw_zuqu4u3JW8Ff" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="width: 16%; text-align: right">278,062</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LongTermDebtMaturitiesRepaymentsOfPrincipalInNextTwelveMonths_iI_pp0p0_maLTDzUhw_zrhvDnBqBxLa" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">1,165,216</td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--LongTermDebtMaturitiesRepaymentsOfPrincipalInYearTwo_iI_pp0p0_maLTDzUhw_zhQ3Dyeaozhe" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">44,808</td><td style="text-align: left"> </td></tr> <tr id="xdx_403_eus-gaap--DebtInstrumentUnamortizedDiscount_iNI_pp0p0_di_msLTDzUhw_zj8cSFvQNQ96" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">Discount</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(339,491</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_408_eus-gaap--LongTermDebt_iTI_pp0p0_mtLTDzUhw_zgYrytrZQvSk" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Total remaining payments</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">1,148,595</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> <p id="xdx_8AE_zy8a6pF5C00k" style="font: 10pt Times New

Roman, Times, Serif; margin: 0pt; text-align: justify">   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   1143633 668633 475000 0.06 Beginning November 1, 2019, payment of principal and interest shall be due payable in fifty-nine (59) monthly payments of $9,213 with a final payment due October 1, 2024 of $9,203 9166 64473 2035 250000 500000 27494 815 0.0427 0 3230 30 41015 1216 0.0428 0 6012 68 500000 0 91795 9180 82616 24 payments 0.0190 0 10499 0 31201 0 397 1300000 26000 403000 44816 0.212 1139429 224080 89509 <p id="xdx_89C_ecustom--ScheduleOfFuturePrincipalAndInterestPaymentsTableTextBlock_zkCcUfjCikD7" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Future principal payments over the term of the loans as of September 30, 2024 are as follows:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Schedule of Future Principal and Interest Payments </p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="padding-bottom: 1pt"> </td> <td colspan="2" id="xdx_490_20240930_zOT61iNWeOlg" style="border-bottom: Black 1pt solid; text-align: center">Payments</td><td style="padding-bottom: 1pt"> </td></tr> <tr id="xdx_40D_eus-gaap--LongTermDebtMaturitiesRepaymentsOfPrincipalRemainderOfFiscalYear_iI_pp0p0_maLTDzUhw_zuqu4u3JW8Ff" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 80%">2024 remaining</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="width: 16%; text-align: right">278,062</td><td style="width: 1%; text-align: left"> </td></tr> <tr id="xdx_40C_eus-gaap--LongTermDebtMaturitiesRepaymentsOfPrincipalInNextTwelveMonths_iI_pp0p0_maLTDzUhw_zrhvDnBqBxLa" style="vertical-align: bottom; background-color: White"> <td style="text-align: left">2025</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">1,165,216</td><td style="text-align: left"> </td></tr> <tr id="xdx_408_eus-gaap--LongTermDebtMaturitiesRepaymentsOfPrincipalInYearTwo_iI_pp0p0_maLTDzUhw_zhQ3Dyeaozhe" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left">2026</td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">44,808</td><td style="text-align: left"> </td></tr> <tr id="xdx_403_eus-gaap--DebtInstrumentUnamortizedDiscount_iNI_pp0p0_di_msLTDzUhw_zj8cSFvQNQ96" style="vertical-align: bottom; background-color: White"> <td style="padding-bottom: 1pt">Discount</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">(339,491</td><td style="padding-bottom: 1pt; text-align: left">)</td></tr> <tr id="xdx_408_eus-gaap--LongTermDebt_iTI_pp0p0_mtLTDzUhw_zgYrytrZQvSk" style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: left; padding-bottom: 1pt">Total remaining payments</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">1,148,595</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> 278062 1165216 44808 339491 1148595 (12) Stockholders’ Equity   The total number of shares of stock this Corporation is authorized to issue shall be five hundred one million (501,000,000) shares, par value $0.001 per share. Our authorized capital stock consists of 500,000,000 shares of common stock and 1,000,000 shares of blank check preferred stock.   Preferred Stock   On July 10, 2013, the Board of Directors of the Company approved a certificate of amendment to the articles of incorporation and changed the authorized capital stock of the Company to include and authorize 500,000 shares of Preferred Stock, par value $0.001 per share. On October 7, 2020, the Board of Directors of the Company approved a certificate of amendment to the articles of incorporation and changed the total number of authorized shares of Preferred Stock to 1,000,000 shares, $0.001 per share.   On October 7, 2020, our Board of Directors and our stockholders approved a resolution to amend and restate the certificate of designation of preferences, rights and limitations of Series A Convertible Preferred Stock to restate that there are <span id="xdx_909_ecustom--PreferredStockDesignatedAsConvertiblePreferredStockShares_iI_c20201007__us-gaap--DebtInstrumentAxis__custom--SeriesAConvertiblePreferredStockMember_ztkc0AuOC28d" title="Preferred stock designated as convertible preferred stock, shares">401,000 shares of the Company’s blank check Preferred Stock designated as Series A Convertible Preferred Stock. The amended and restated certificate clarifies that the Series A Convertible Preferred Stock convert at a rate of five shares of the Company’s common stock for every share of Series A Convertible Preferred Stock, and also restates that the Series A Convertible Preferred Stock shall be entitled to vote on all matters submitted to shareholders of the Company for each share of Series A Convertible Preferred Stock owned on the record date for the determination of shareholders entitled to vote on such matter or, if no such record date is established, on the date such vote is taken, or any written consent of shareholders is solicited. The number of votes entitled to be cast by the holders of the Series A Convertible Preferred Stock equals that number of votes that, together with votes otherwise entitled to be cast by the holders of the Series A Convertible Preferred Stock at a meeting, whether by virtue of stock ownership, proxies, voting trust agreements or otherwise, entitle the holders to exercise 51% of all votes entitled to be cast to approve any action which Nevada law provides may or must be approved by vote or consent of the holders of common stock entitled to vote.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Common Stock: The Company originally authorized 50,000,000 shares of common stock with a par value of $0.001. Effective May 20, 2014, the Company increased its authorized shares of common stock from 50,000,000 to 500,000,000.   On February 17, 2021, AmpliTech Group Inc., common stock and warrants under the symbols “AMPG” and “AMPGW”, respectively, commenced trading on NASDAQ.   On September 9, 2024, the Company entered into a Securities Purchase Agreement (the “Purchase Agreement”) with a single institutional investor for the sale by the Company of <span id="xdx_904_eus-gaap--SaleOfStockNumberOfSharesIssuedInTransaction_c20240909__20240909__us-gaap--TypeOfArrangementAxis__custom--SecuritiesPurchaseAgreementMember__srt--TitleOfIndividualAxis__us-gaap--InvestorMember_zLIiE6ae0Ie4" title="Sale of stock">1,369,488 shares (the “Shares”) of the Company’s common stock, par value $<span id="xdx_90E_eus-gaap--CommonStockParOrStatedValuePerShare_iI_c20240909__us-gaap--TypeOfArrangementAxis__custom--SecuritiesPurchaseAgreementMember__srt--TitleOfIndividualAxis__us-gaap--InvestorMember_z6O5UGTx23m8" title="Common stock, par value">0.001 per share at a per share price of $<span id="xdx_900_eus-gaap--SharesIssuedPricePerShare_iI_c20240909__us-gaap--TypeOfArrangementAxis__custom--SecuritiesPurchaseAgreementMember__srt--TitleOfIndividualAxis__us-gaap--InvestorMember_zH13D7YvkjZg" title="Price per share">0.7302. The closing of the offering occurred on September 11, 2024, subject to satisfaction of customary closing conditions (the “Closing Date”). The gross proceeds to the Company from the offering was approximately $<span id="xdx_90E_eus-gaap--ProceedsFromIssuanceOfCommonStock_pn5n6_c20240909__20240909__us-gaap--TypeOfArrangementAxis__custom--SecuritiesPurchaseAgreementMember__srt--TitleOfIndividualAxis__us-gaap--InvestorMember_zBiRR0M85p5i" title="Gross proceeds">1.0 million, before deducting the placement agent’s fees and other estimated offering expenses payable by the Company in the amount of $<span id="xdx_902_eus-gaap--PaymentsOfStockIssuanceCosts_c20240909__20240909__us-gaap--TypeOfArrangementAxis__custom--SecuritiesPurchaseAgreementMember__srt--TitleOfIndividualAxis__us-gaap--InvestorMember_z1iVESnycqe4" title="Stock issuance expense">211,875. Pursuant to the Purchase Agreement, the Company agreed not to issue, enter into any agreement to issue or announce the issuance or proposed issuance of, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock or file any registration statement or prospectus, or any amendment or supplement thereto for 30 days after the Closing Date, subject to certain exceptions. In addition, the Company agreed not to effect or enter into an agreement to affect any issuance of common stock or any securities convertible into or exercisable or

exchangeable for shares of common stock involving a Variable Rate Transaction (as defined in the Purchase Agreement) until 30 days after the Closing Date, subject to certain exceptions. The offering of the Shares was made pursuant to a shelf registration statement on Form S-3 (File No. 333-278657) (the "Registration Statement"), which was originally filed by the Company with the Securities and Exchange Commission on April 12, 2024, and declared effective on April 24, 2024. The Company filed a prospectus supplement dated September 9, 2024 with the U.S. Securities and Exchange Commission in connection with the offer and sale of the Shares on September 11, 2024 ("Prospectus Supplement").   In connection with the offering of the Shares, on September 9, 2024, the Company entered into a placement agency agreement with Maxim Group LLC (the "Placement Agent") pursuant to which the Company agreed to pay the Placement Agent an aggregate fee equal to <span id="xdx_909_ecustom--PercentageOfGrossProceedsFromSaleOfStock_dp_c20240909__20240909__us-gaap--TypeOfArrangementAxis__custom--PlacementAgencyAgreementMember__srt--TitleOfIndividualAxis__custom--PlacementAgentMember_zQxrYR1z8sf3" title="Percentage of gross proceeds from sale of stock">6.5% of the aggregate gross proceeds received by the Company from the sale of the Shares in the offering. The Company also agreed to reimburse the Placement Agent for up to $<span id="xdx_908_ecustom--ReimburseOfAccountableExpenses_c20240909__20240909__us-gaap--TypeOfArrangementAxis__custom--PlacementAgencyAgreementMember__srt--TitleOfIndividualAxis__custom--PlacementAgentMember_zx5qP6xwGX4" title="Reimburse of accountable expenses">25,000 in accountable expenses, including the Placement Agent's legal counsel's fees.   2020 Equity Incentive Plan: <span id="xdx_905_ecustom--DescriptionEquityIncentivePlan_c20240101__20240930__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zaZXKrvPX4ql" title="Equity incentive plan, description">In October 2020, the Board of Directors and shareholders adopted the Company's 2020 Equity Incentive Plan (the "2020 Plan"), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Company's common stock to employees and individuals who perform services for the Company. The purpose of the 2020 Plan is to attract and retain the best available personnel for positions of substantial responsibility, to provide incentives to individuals who perform services for the Company, and to promote the success of the Company's business. The 2020 Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, and other stock or cash awards as the Board of Directors may determine.   In 2023, the Board and the shareholders adopted the Company's Amended and Restated 2020 Equity Incentive Plan (the "Amended and Restated Plan"), effective as of December 11, 2023. The Amended and Restated Plan is substantially similar to the 2020 Plan except that it increases the shares of our common stock available for issuance thereunder to <span id="xdx_905_eus-gaap--StockIssuedDuringPeriodSharesNewIssues_c20240101__20240930__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember__us-gaap--StatementEquityComponentsAxis__us-gaap--CommonStockMember_z4L5Dl9q7jQl" title="Issuance of common stock shares">2,250,000 shares of common stock.   As of September 30, 2024, all outstanding stock options were issued according to the Company's 2020 Plan, and there remains <span id="xdx_90B_eus-gaap--CommonStockCapitalSharesReservedForFutureIssuance_iI_c20240930__us-gaap--AwardTypeAxis__custom--StockOptionsMember_zlj2cztvlQnk" title="Common stock shares issuable upon exercise of warrants">820,142 shares of common stock available for future issuance under the 2020 Plan.   Stock Options: On January 9, 2024, the Company granted a consultant, ten-year stock options to purchase <span id="xdx_90D_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardMaximumNumberOfSharesPerEmployee_c20240109__20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zUwNarYQ9rC1" title="Purchase shares of common stock">2,500 shares of common stock according to the Company's 2020 Plan. The stock options vested immediately, with an exercise price of $<span id="xdx_90A_eus-gaap--SharebasedCompensationSharesAuthorizedUnderStockOptionPlansExercisePriceRangeOutstandingOptionsWeightedAverageExercisePriceBeginningBalance1_iI_c20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zcNL1KlbltOk" title="Exercise price per share">1.86 per share. The Company has calculated these options estimated fair market value at $<span id="xdx_900_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendPayments_c20240109__20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zRrfR56oGR66" title="Estimated fair value market">3,800 using the Black-Scholes model, with the following assumptions: expected term of <span id="xdx_902_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedTerm1_dtY_c20240109__20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_z672swHe7lod" title="Share based compensation, expected term">5.00 years, stock price of $<span id="xdx_902_eus-gaap--SharePrice_iI_pid_c20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zyf6D6W5wlI6" title="Share based compensation, stock price">1.86, exercise price of $<span id="xdx_908_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExercisePrice_iI_pid_c20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zPBcGvw4pAkd" title="Share based compensation, exercise price">1.86, volatility of <span id="xdx_902_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate_pid_dp_uPure_c20240109__20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zaAZzOB3SE07" title="Share based compensation, volatility">116.1%, risk-free rate of <span id="xdx_90D_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate_pid_dp_uPure_c20240109__20240109__srt--TitleOfIndividualAxis__custom--ConsultantMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zzXHhWNr0bK8" title="Share based compensation, risk-free rate">3.97%, and no forfeiture rate.   On January 16, 2024, the Company granted an employee ten-year stock options to purchase <span id="xdx_907_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardMaximumNumberOfSharesPerEmployee_c20240116__20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zH40QSMXcLY4" title="Purchase shares of common stock">5,000 shares of common stock according to the Company's 2020 Plan. The stock options vest in equal quarterly installments over five years commencing on April 16, 2024, with an exercise price of $<span id="xdx_904_eus-gaap--SharebasedCompensationSharesAuthorizedUnderStockOptionPlansExercisePriceRangeOutstandingOptionsWeightedAverageExercisePriceBeginningBalance1_iI_c20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_z4LN63ID3Xd1" title="Exercise price per share">1.93 per share. The Company has calculated these options estimated fair market value at $<span id="xdx_907_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedDividendPayments_c20240116__20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zyOUdACixNSb" title="Estimated fair value market">8,800 using the Black-Scholes model, with the following assumptions: expected term of <span id="xdx_909_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedTerm1_dtY_c20240116__20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zNy6SchyCGZk" title="Share based compensation, expected term">7.51 years, stock price of $<span id="xdx_909_eus-gaap--SharePrice_iI_pid_c20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zWlORvkwmTF7" title="Share price">1.93, exercise price of $<span id="xdx_90B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExercisePrice_iI_pid_c20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zHyMWAvx2zTk" title="Share based compensation, exercise price">1.93, volatility of <span id="xdx_90B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsExpectedVolatilityRate_pid_dp_uPure_c20240116__20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_z8DsAzDdtRY8" title="Share based compensation, volatility">120.1%, risk-free rate of <span id="xdx_90E_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardFairValueAssumptionsRiskFreeInterestRate_pid_dp_uPure_c20240116__20240116__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_z9Dx92vDSUh" title="Share based compensation, risk-free rate">4.01%, and no forfeiture rate.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   On January 25, 2024, the Company granted an independent contractor ten-year stock options to purchase <span id="xdx_907_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardMaximumNumberOfSharesPerEmployee_c20240116__20240116__srt--TitleOfIndividualAxis__custom--ContractorMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_z0W26zpdBmS4" title="Purchase shares of common stock">50,000 shares of common stock according to the Company's 2020 Plan. <span id="xdx_901_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsVestedNumberOfShares_c20240116__20240116__srt--TitleOfIndividualAxis__custom--ContractorMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_z7bU4zEuDJO3" title="Stock option vested">20,000 stock options vested immediately and the balance of 30,000 shall vest in equal quarterly installments over three years commencing on June 30, 2024, with an exercise price of $2.19 per share. The Company has calculated these options estimated fair market value at $98,600 using the Black-Scholes model, with the following assumptions: expected term of <span id="xdx_900_eus-gaap--

SharebasedCompensationArrangementBySharebasedPaymentAwardFairValueAssumptionsExpectedTerm1_dtY_c20240116__20240116__srt--TitleOfIndividualAxis__custom--ContractorMember__us-gaap--PlanNameAxis__custom--TwoThousandAndTwentyEquityIncentivePlanMember_zn1XnPcoGZNj" title="Share based compensation, expected term">10.00 years, stock price of $2.19, exercise price of $2.19, volatility of 123.0%, risk-free rate of 4.07%, and no forfeiture rate.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p id="xdx_890_eus-gaap--ScheduleOfStockholdersEquityNoteWarrantsOrRightsTextBlock_zZekW5uuVsgd" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Below is a table summarizing the changes in stock options outstanding for the nine months ended September 30, 2024:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Schedule of Stock Options Outstanding</p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Weighted Average</td><td style="font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Options</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Exercise Price ($)</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: justify">Outstanding at December 31, 2023</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td id="xdx_980_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zZICDhe6Kgxd" style="width: 16%; text-align: right" title="Number of Options, Outstanding">1,236,000</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">2.30</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify">Granted</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zBRcn2GiGqh2" style="text-align: right" title="Number of Options, Granted">57,500</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">2.15</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-left: 10pt; text-align: justify">Exercised</td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--StockIssuedDuringPeriodSharesStockOptionsExercised_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zvmcHGGVb5U" style="text-align: right" title="Number of Options, Exercised">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify; padding-bottom: 1pt">Expired</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_988_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExpirationsInPeriod_iN_di_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zt7XH2rz1bf3" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Options, Expired">(8,642</td><td style="padding-bottom: 1pt; text-align: left">)</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2.29</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Outstanding at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98A_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zviBdvpu0P93" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Options, Outstanding">1,284,858</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="border-bottom: Black 1pt solid; text-align: right"><span id="xdx_906_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingWeightedAverageExercisePrice_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zau7Dluj0dp1" title="Weighted Average Exercise Price, Outstanding">2.30</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">Exercisable at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98E_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zixVbHZjkC0j" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Options, Exercisable">674,560</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right"><span id="xdx_907_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableWeightedAverageExercisePrice_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_ze0sq6aADyOi" title="Weighted Average Exercise Price, Exercisable">2.67</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table>   Stock-based compensation expense related to stock options of $89,539 and $315,227 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested stock options is $<span id="xdx_90B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardPlanModificationIncrementalCompensationCost_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zoOHjazQORJe" title="Unrecognized compensation cost">1,033,048 and is expected to be recognized over 4.30 years. The outstanding stock options have a weighted average remaining contractual life of 4.31 years and a total intrinsic value of $<span id="xdx_90E_eus-gaap--

SharebasedCompensationArrangementBySharebasedPaymentAwardEquityInstrumentsOtherThanOptionsAggregateIntrinsicValueOutstanding_iI_c20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zb2gTQWQLLz6" title="Intrinsic value">0.   AmpliTech Group, Inc. Notes To Condensed Consolidated Financial Statements For the Nine Months Ended September 30, 2024 and 2023   Warrants: Below is a table summarizing the changes in warrants outstanding for the nine months ended September 30, 2024:   Schedule of Warrants Outstanding   <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Weighted Average</td><td style="font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Warrants</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Exercise Price ($)</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: justify">Outstanding at December 31, 2023</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td id="xdx_98B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsOutstandingNumber_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_z3mRg9GYY8w8" style="width: 16%; text-align: right" title="Number of Warrants, Outstanding shares">3,296,942</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="width: 16%; text-align: right"><span id="xdx_906_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionOutstandingWeightedAverageExercisePrice_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zpQYtuKbxd43" title="Weighted Average Exercise Price, Outstanding shares">7.83</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify">Granted</td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsGranted_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zU7r9eWUNsDk" style="text-align: right" title="Number of Warrants, Granted shares">-</td><td style="text-align: left"> </td><td>   </td> <td style="text-align: left"> </td><td style="text-align: right"><span id="xdx_90D_ecustom--ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionGrantsInPeriodWeightedAverageExercisePrice_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_z3VZnPXfk2S4" title="Weighted Average Exercise Price Outstanding, Granted shares">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-left: 10pt; text-align: justify">Exercised</td><td> </td> <td style="text-align: left"> </td><td id="xdx_986_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zrseoyzU8oe6" style="text-align: right" title="Number of Warrants, Exercised shares">-</td><td style="text-align: left"> </td><td>   </td> <td style="text-align: left"> </td><td style="text-align: right">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify; padding-bottom: 1pt">Expired</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98D_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExpirations_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zkDopo3ZwQc2" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Warrants,Expired shares">-</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">-</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Outstanding at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsOutstandingNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zHmg8GvG6FMh" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Warrants, Outstanding shares">3,296,942</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">7.83</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">Exercisable at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_988_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercisableNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zEwnvDUOu808" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Warrants, Exercisable shares">3,296,942</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="border-bottom: Black 1pt solid; text-align: right"><span id="xdx_90A_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionExercisableWeightedAverageExercisePrice_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zd11hj1Sb0cl" title="Weighted Average Exercise Price, Exercisable shares">7.83</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table>   Stock-based compensation expense related to warrants of $0 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested warrants is $0. The outstanding warrants have a weighted average remaining contractual life of 1.48 years and a total intrinsic value of $0.   Restricted Stock Units: <span style="font-family: Times New Roman, Times, Serif;

font-size: 10pt"> On May 20, 2022, 30,000 restricted stock units at an exercise price of $1.96 were issued to a board advisor. Vesting will occur in equal quarterly installments of 2,500 shares beginning on May 20, 2022. As of September 30, 2024, 25,000 shares of common stock were issued.</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p id="xdx_89C_eus-gaap--ScheduleOfShareBasedCompensationRestrictedStockUnitsAwardActivityTableTextBlock_zgla5WFJWYB4" style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Below is a table summarizing the changes in restricted stock units outstanding for the nine months ended September 30, 2024:</p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify"> </p> <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align: justify">Schedule of Changes in Restricted Stock Units Outstanding </p> <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Weighted Average</td><td style="font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">RSU's</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Exercise Price ($)</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: justify">Outstanding at December 31, 2023</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td id="xdx_98D_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zLziDtfUUBOc" style="width: 16%; text-align: right" title="Number of RSU's, Outstanding">12,500</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td id="xdx_982_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue_iS_pid_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zhgV5xNlt65e" style="width: 16%; text-align: right" title="Weighted Average Exercise Price, Outstanding">1.96</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify">Granted</td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zbxcn9vpQtD2" style="text-align: right" title="Number of RSU's, Granted">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue_pid_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zhK1w3GZdta3" style="text-align: right" title="Weighted Average Exercise Price, Granted">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-left: 10pt; text-align: justify">Exercised</td><td> </td> <td style="text-align: left"> </td><td id="xdx_984_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisedInPeriod_iN_di_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_z8lyLTw3K2Vi" style="text-align: right" title="Number of RSU's, Exercised">(7,500</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_98D_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageExcercisedFairValue_pid_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zVu7UHR0D6K3" style="text-align: right" title="Weighted Average Exercise Price, Exercised">1.96</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify; padding-bottom: 1pt">Expired</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98A_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_z4V26GepPYV" style="border-bottom: Black 1pt solid; text-align: right" title="Number of RSU's, Expired">-</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_981_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeituresWeightedAverageGrantDateFairValue_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zdyhOPLU0Jfj" style="border-bottom: Black 1pt solid; text-align: right" title="Weighted Average Exercise Price, Expired">-</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Outstanding at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_988_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zWEIVCvLCtbj" style="border-bottom: Black 1pt solid; text-align: right" title="Number of RSU's, Outstanding">5,000</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_983_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue_iE_pid_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_z0y848ZVGqpi" style="border-bottom: Black 1pt solid; text-align: right" title="Weighted Average Exercise Price, Outstanding">1.96</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table>   Stock-based compensation expense related to restricted stock units of $4,924 and $14,666 was recorded for the three and nine months ended September 30, 2024. As of September 30, 2024, the remaining unrecognized compensation cost related to non-vested restricted stock units is $<span id="xdx_902_eus-gaap--EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedShareBasedAwardsOtherThanOptions_iI_c20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zIkJBZWva5Fb">12,579. The outstanding restricted stock units have a weighted average remaining contractual life of <span id="xdx_903_eus-gaap--EmployeeServiceShareBasedCompensationNonvestedAwardsTotalCompensationCostNotYetRecognizedPeriodForRecognition1_dtY_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zJ0Mg2xyPs68">.39 years and a total intrinsic value of $0.   -501000000 0.001 500000000 1000000 500000 0.001 1000000 0.001 401000 50000000 0.001 50000000 500000000 1369488 0.001 0.7302 1000000.0 211875 0.065 25000 In October 2020, the Board of Directors and shareholders adopted the Company's 2020 Equity Incentive Plan (the "2020 Plan"), effective as of December 14, 2020. Under the 2020 Plan, the Company reserved 1,250,000 shares of common stock to grant shares of the Company's common stock to employees and individuals who perform services for the Company. 2250000 820142 2500 1.86 3800 P5Y 1.86 1.86 1.161 0.0397 5000 1.93 8800 P7Y6M3D 1.93 1.93 1.201 0.0401 50000 20000 30000 2.19 98600 P10Y 2.19 2.19 1.230 0.0407 Below is a table summarizing the changes in stock options outstanding for the nine months ended September 30, 2024:   <p style="font: 10pt Times New Roman, Times, Serif; margin: 0pt; text-align:

justify">Schedule of Stock Options Outstanding <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Weighted Average</td><td style="font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Options</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Exercise Price ($)</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: justify">Outstanding at December 31, 2023</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td id="xdx_980_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zZICDhe6Kgxd" style="width: 16%; text-align: right" title="Number of Options, Outstanding">1,236,000</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left">$</td><td style="width: 16%; text-align: right">2.30</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify">Granted</td><td> </td> <td style="text-align: left"> </td><td id="xdx_98E_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsGrantsInPeriodGross_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zBRcn2GiGqh2" style="text-align: right" title="Number of Options, Granted">57,500</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left">$</td><td style="text-align: right">2.15</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-left: 10pt; text-align: justify">Exercised</td><td> </td> <td style="text-align: left"> </td><td id="xdx_989_eus-gaap--StockIssuedDuringPeriodSharesStockOptionsExercised_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zvmcHGGVb5U" style="text-align: right" title="Number of Options, Exercised">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify; padding-bottom: 1pt">Expired</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_988_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExpirationsInPeriod_iN_di_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zt7XH2rz1bf3" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Options, Expired">(8,642</td><td style="padding-bottom: 1pt; text-align: left">)</td> <td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2.29</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Outstanding at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98A_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsOutstandingNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zviBdvpu0P93" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Options, Outstanding">1,284,858</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2.30</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">Exercisable at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98E_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardOptionsExercisableNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--EmployeeStockOptionMember_zixVbHZjkC0j" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Options, Exercisable">674,560</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">2.67</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> 1236000 2.30 57500 2.15 8642 2.29 1284858 2.30 674560 2.67 89539 315227 1033048 P4Y3M18D P4Y3M21D 0 Below is a table summarizing the changes in warrants outstanding for the nine months ended September 30, 2024:   Schedule of Warrants Outstanding <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Weighted Average</td><td style="font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Warrants</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Exercise Price ($)</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: justify">Outstanding at December 31, 2023</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td id="xdx_98B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsOutstandingNumber_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_z3mRg9GYY8w8" style="width: 16%; text-align: right" title="Number of Warrants, Outstanding shares">3,296,942</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td style="width: 16%; text-align: right"><span id="xdx_906_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionOutstandingWeightedAverageExercisePrice_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zpOYtuKbxd43" title="Weighted Average Exercise Price, Outstanding shares">7.83</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify">Granted</td><td> </td> <td style="text-align: left"> </td><td id="xdx_981_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsGranted_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zU7r9eWUNsDk" style="text-align: right" title="Number of Warrants, Granted shares">-</td><td style="text-align: left"> </td><td>

 </td> <td style="text-align: left"> </td><td style="text-align: right"><span id="xdx_90D_ecustom--ShareBasedCompensationArrangementsByShareBasedPaymentAwardNonOptionGrantsInPeriodWeightedAverageExercisePrice_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_z3VZnPXfk2S4" title="Weighted Average Exercise Price Outstanding, Granted shares">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-left: 10pt; text-align: justify">Exercised</td><td> </td> <td style="text-align: left"> </td><td id="xdx_986_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercised_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zrseoyzU8oe6" style="text-align: right" title="Number of Warrants, Exercised shares">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td style="text-align: right">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify; padding-bottom: 1pt">Expired</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98D_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExpirations_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zkDopo3ZwQc2" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Warrants,Expired shares">-</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td style="border-bottom: Black 1pt solid; text-align: right">-</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Outstanding at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98B_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsOutstandingNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zHmg8GvG6FMh" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Warrants, Outstanding shares">3,296,942</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">7.83</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="text-align: justify; padding-bottom: 1pt">Exercisable at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_988_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardNonOptionEquityInstrumentsExercisableNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--WarrantMember_zEwnvDUOu808" style="border-bottom: Black 1pt solid; text-align: right" title="Number of Warrants, Exercisable shares">3,296,942</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td style="border-bottom: Black 1pt solid; text-align: right">7.83</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> 3296942 7.83 3296942 7.83 3296942 7.83 0 0 0 P1Y5M23D 0 30000 1.96 2500 25000 Below is a table summarizing the changes in restricted stock units outstanding for the nine months ended September 30, 2024:   Schedule of Changes in Restricted Stock Units Outstanding <table cellpadding="0" cellspacing="0" style="font: 10pt Times New Roman, Times, Serif; border-collapse: collapse; width: 100%"> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Number of</td><td style="font-weight: bold"> </td><td style="font-weight: bold"> </td> <td colspan="2" style="font-weight: bold; text-align: center">Weighted Average</td><td style="font-weight: bold"> </td></tr> <tr style="vertical-align: bottom"> <td> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">RSU's</td><td style="padding-bottom: 1pt; font-weight: bold"> </td><td style="font-weight: bold; padding-bottom: 1pt"> </td> <td colspan="2" style="border-bottom: Black 1pt solid; font-weight: bold; text-align: center">Exercise Price ($)</td><td style="padding-bottom: 1pt; font-weight: bold"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="width: 60%; text-align: justify">Outstanding at December 31, 2023</td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"> </td><td id="xdx_98D_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber_iS_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zLziDtfUUBOc" style="width: 16%; text-align: right" title="Number of RSU's, Outstanding">12,500</td><td style="width: 1%; text-align: left"> </td><td style="width: 2%"> </td> <td style="width: 1%; text-align: left"><span style="font-family: Times New Roman, Times, Serif">$</td><td id="xdx_902_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue_iS_pid_c20240101__20
gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zhgV5xNIt65e" style="width: 16%; text-align: right" title="Weighted Average Exercise Price, Outstanding">1.96</td><td style="width: 1%; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify">Granted</td><td> </td> <td style="text-align: left"> </td><td id="xdx_987_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriod_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zbxcn9vpOtD2" style="text-align: right" title="Number of RSU's, Granted">-</td><td style="text-align: left"> </td><td> </td> <td style="text-align: left"> </td><td id="xdx_98C_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsGrantsInPeriodWeightedAverageGrantDateFairValue_pid_c20240101__gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zhK1w3GZdta3" style="text-align: right" title="Weighted Average Exercise Price, Granted">-</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="padding-left: 10pt; text-align: justify">Exercised</td><td> </td> <td style="text-align: left"> </td><td id="xdx_984_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsExercisedInPeriod_iN_di_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_z8lyLTw3K2Vi" style="text-align: right" title="Number of RSU's, Exercised">(7,500</td><td style="text-align: left">)</td><td> </td> <td style="text-align: left">$</td><td id="xdx_98D_ecustom--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsVestedInPeriodWeightedAverageExcercisedFairValue_pid_c20240101__gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zVu7UHR0D6K3" style="text-align: right" title="Weighted Average Exercise Price, Exercised">1.96</td><td style="text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: White"> <td style="padding-left: 10pt; text-align: justify; padding-bottom: 1pt">Expired</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_98A_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeitedInPeriod_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_z4V26GepPYV" style="border-bottom: Black 1pt solid; text-align: right" title="Number of RSU's, Expired">-</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_981_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsForfeituresWeightedAverageGrantDateFairValue_c20240101__202409
gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zdyhOPLU0Jlj" style="border-bottom: Black 1pt solid; text-align: right" title="Weighted Average Exercise

Price, Expired">-</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> <tr style="vertical-align: bottom; background-color: rgb(204,238,255)"> <td style="text-align: justify; padding-bottom: 1pt">Outstanding at September 30, 2024</td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left"> </td><td id="xdx_988_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedNumber_iE_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_zWEIVCvLCtbj" style="border-bottom: Black 1pt solid; text-align: right" title="Number of RSU's, Outstanding">5,000</td><td style="padding-bottom: 1pt; text-align: left"> </td><td style="padding-bottom: 1pt"> </td> <td style="border-bottom: Black 1pt solid; text-align: left">$</td><td id="xdx_983_eus-gaap--ShareBasedCompensationArrangementByShareBasedPaymentAwardEquityInstrumentsOtherThanOptionsNonvestedWeightedAverageGrantDateFairValue_iE_pid_c20240101__20240930__us-gaap--AwardTypeAxis__us-gaap--RestrictedStockUnitsRSUMember_z0y848ZVGqpi" style="border-bottom: Black 1pt solid; text-align: right" title="Weighted Average Exercise Price, Outstanding">1.96</td><td style="padding-bottom: 1pt; text-align: left"> </td></tr> </table> 12500 1.96 7500 1.96 5000 1.96 4924 14666 12579 P0Y4M20D 0 (13) Commitments and Contingencies   On July 26, 2024, the Company's AGTGSS division entered into a licensing product agreement. Under the terms of the agreement, the licensor agreed to an exclusive United States distribution and global licensing rights for certain 5G telecom equipment for 18 months for the purpose of marketing, selling, renting, deployment and maintenance of the licensed products with the Company. For services, the Company will pay the Licensor certain software IP license fees in the amount of $1,250,000. In addition, the licensor may provide certain product certification support for certain fees. As of September 30, 2024, we have paid $710,000 towards the licensing agreement.   1250000 710000

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