



**AZP604**  
**AZP1204**  
**AZP1208**  
**AZP2408**

**ATMOSPHERE SMART AMPLIFIER**

**AZP604-D**  
**AZP1204-D**  
**AZP1208-D**  
**AZP2408-D**

**ATMOSPHERE SMART AMPLIFIER WITH DANTE**



## Architect & Engineer Specifications

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### INTRODUCTION

The Atmosphere AZP Series is a family of intelligent multi-channel amplifiers designed for modern commercial audio systems that demand high-performance amplification, advanced DSP capability, and flexible system integration. Available in 4-channel and 8-channel configurations with 150 W and 300 W average per-channel models, the AZP Series combines powerful processing and flexible amplification into a compact 1RU platform optimized for hospitality, corporate, education, and large-scale distributed audio applications. Select models include integrated Dante® audio networking for seamless audio transport within modern networked AV systems.

Built around a powerful onboard DSP architecture, the AZP Series provides extensive audio processing capabilities including matrix mixing, crossovers, EQ, compressors, priority processing, and advanced loudspeaker protection with peak and RMS limiting. Integrated AtlasIED speaker tunings simplify system optimization while delivering consistent performance across a wide range of applications. An onboard Message Player and Scheduler further expand system functionality for automated announcements, timed events, and critical messaging applications. Dante-enabled models support low-latency networked audio distribution with integrated Dante audio transport and routing capabilities.

AZP amplifiers utilize advanced Power Share technology that allows amplifier power to be software configurable in 5 W increments across groups of four output channels, enabling efficient power allocation without the limitations of traditional fixed-output amplifier designs. With high-power output capability available to individual channels and a robust 15-second CAF power rating, the AZP Series delivers exceptional real-world performance and sustained output capability for demanding commercial audio environments.

In addition to high-performance amplification, the AZP Series includes integrated sound masking functionality with onboard signal generation, scheduling, equalization, and long-term ramping capabilities. Dedicated Cat5 sound masking outputs allow direct connection to AtlasIED SHS series sound masking speakers, simplifying installation while reducing infrastructure costs.

Programming and system configuration are managed through an intuitive onboard web-based interface designed for fast deployment and flexible customization. The modern responsive GUI provides access to amplifier configuration, DSP tuning, Dante routing, monitoring, and system management from nearly any device without requiring dedicated software installation. Dual network ports support configurable deployment options for control and Dante audio networking while simplifying system connectivity. The AZP Series also supports PoE-powered monitoring of the control platform during AC power loss, enabling continued network visibility and status reporting. Integration with Atmosphere Cloud provides secure remote monitoring, management, and system access from anywhere.





## Architect & Engineer Specifications

### AtlasIED Atmosphere™ AZP604

The amplifier system shall be a four-input by four-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include four balanced analog inputs and four powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24 dB/octave slopes and Linkwitz-Riley 12- and 24 dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide two RJ45 outputs for SHS-3T2 sound masking loudspeakers over CAT5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a pushbutton for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include four balanced analog inputs using 3.5 mm Euroblock connectors and four amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate and Switch modes. The front-end DSP and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 615 W<sub>RMS</sub> from one, four-channel amplifier module. Average output power shall be 150 W per channel, and any single powered output channel shall be capable of being configured for up to 600 W. Power Share technology shall be channel independent and software assignable in 5 W increments across the four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100 V<sub>RMS</sub> /145 V peak and maximum output current of 10 A<sub>RMS</sub> / 14.5 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. The amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 106 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be +20 dBu / 7.75 V<sub>RMS</sub>.

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15 A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include two fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0° C to 40° C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W x 15.1" D x 1.7" H with rack ears, or 482 mm x 384 mm x 43 mm. Rack depth shall be 14.3" / 364 mm. Unit weight with rack ears shall be 13.54 lb / 6.14 kg. Shipping dimensions shall be 23.3" W x 19.6" D x 4.6" H, or 591 mm x 499 mm x 118 mm, with a shipping weight of 19.3 lb/8.75 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP604.



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### AtlasIED Atmosphere™ AZP604-D

The amplifier system shall be a four-input by four-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include four balanced analog inputs, four Dante/AES67 network audio inputs, and four Dante/AES67 network audio outputs operating at 48 kHz. The amplifier shall provide four powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24-dB/octave slopes and Linkwitz-Riley 12- and 24dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide two RJ45 outputs for SHS-3T2 sound masking loudspeakers over CAT5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a pushbutton for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include four balanced analog inputs using 3.5 mm Euroblock connectors and four amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate, Switch, and Redundant modes. The device shall support Dante networked audio and shall provide four Dante inputs and four Dante outputs. The front-end DSP, Dante, and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4 $\Omega$ , 8 $\Omega$ , 70V, and 100V systems. The amplifier shall provide a total amplifier module power of 615 W<sub>RMS</sub> from one, four-channel amplifier module. Average output power shall be 150 W per channel, and any single powered output channel shall be capable of being configured for up to 600 W. Power Share technology shall be channel independent and software assignable in 5 W increments across the four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100 V<sub>RMS</sub>/145 V peak and maximum output current of 10 A<sub>RMS</sub>/14.5 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. The amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 106 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be +20 dBu / 7.75 V<sub>RMS</sub>.

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15 A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include two fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0°C to 40°C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W  $\times$  15.1" D  $\times$  1.7" H with rack ears, or 482 mm  $\times$  384 mm  $\times$  43 mm. Rack depth shall be 14.3" / 364 mm. Unit weight with rack ears shall be 13.54 lb / 6.14 kg. Shipping dimensions shall be 23.3" W  $\times$  19.6" D  $\times$  4.6" H, or 591 mm  $\times$  499 mm  $\times$  118 mm, with shipping weight of 19.3 lb/8.75 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP604-D.



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### AtlasIED Atmosphere™ AZP1204

The amplifier system shall be a four-input by four-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include four balanced analog inputs and four powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24-dB/octave slopes and Linkwitz-Riley 12- and 24 dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide two RJ45 outputs for SHS-3T2 sound masking loudspeakers over Cat5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a push-button for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include four balanced analog inputs using 3.5 mm Euroblock connectors and four amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate and Switch modes. The front-end DSP and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 1215  $W_{RMS}$  from one, four-channel amplifier module. Average output power shall be 300 W per channel, and any single powered output channel shall be capable of being configured for up to 1200 W. Power Share technology shall be channel independent and software assignable in 5 W increments across the four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100  $V_{RMS}$  /145 V peak and maximum output current of 17  $A_{RMS}$  /24 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. The amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 110 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be +20 dBu / 7.75  $V_{RMS}$ .

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15 A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include two fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0°C to 40°C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W  $\times$  15.1" D  $\times$  1.7" H with rack ears, or 482 mm  $\times$  384 mm  $\times$  43 mm. Rack depth shall be 14.3"/364 mm. Unit weight with rack ears shall be 13.94 lb/6.32 kg. Shipping dimensions shall be 23.3" W  $\times$  19.6" D  $\times$  4.6" H, or 591 mm  $\times$  499 mm  $\times$  118 mm, with a shipping weight of 19.7 lb/8.94 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP1204.



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### AtlasIED Atmosphere™ AZP1204-D

The amplifier system shall be a four-input by four-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include four balanced analog inputs, four Dante/AES67 network audio inputs, and four Dante/AES67 network audio outputs operating at 48 kHz. The amplifier shall provide four powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24 dB/octave slopes and Linkwitz-Riley 12- and 24 dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide two RJ45 outputs for SHS-3T2 sound masking loudspeakers over Cat5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a push-button for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include four balanced analog inputs using 3.5 mm Euroblock connectors and four amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate, Switch, and Redundant modes. The device shall support Dante networked audio and shall provide four Dante inputs and four Dante outputs. The front-end DSP, Dante, and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 1215 W RMS from one, four-channel amplifier module. Average output power shall be 300 W per channel, and any single powered output channel shall be capable of being configured for up to 1200 W. Power Share technology shall be channel independent and software assignable in 5 W increments across the four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100 V<sub>RMS</sub> /145 V peak and maximum output current of 17 A<sub>RMS</sub>/24 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. The amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 110 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be +20 dBu/7.75 V<sub>RMS</sub>.

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include two fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0°C to 40°C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W  $\times$  15.1" D  $\times$  1.7" H with rack ears, or 482 mm  $\times$  384 mm  $\times$  43 mm. Rack depth shall be 14.3" / 364 mm. Unit weight with rack ears shall be 13.94 lb/6.32 kg. Shipping dimensions shall be 23.3" W  $\times$  19.6" D  $\times$  4.6" H, or 591 mm  $\times$  499 mm  $\times$  118 mm, with a shipping weight of 19.7 lb/8.94 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP1204-D.



## Architect & Engineer Specifications

### AtlasIED Atmosphere™ AZP1208

The amplifier system shall be an eight-input by eight-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include eight balanced analog inputs and eight powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24-dB/octave slopes and Linkwitz-Riley 12- and 24dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide four RJ45 outputs for SHS-3T2 sound masking loudspeakers over Cat5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a push-button for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include eight balanced analog inputs using 3.5 mm Euroblock connectors and eight amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate and Switch modes. The front-end DSP and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 1230 W<sub>RMS</sub> from two, four-channel amplifier modules, with each module providing 615 W RMS. Average output power shall be 150 W per channel, and any single powered output channel shall be capable of being configured for up to 600 W. Power Share technology shall be channel independent and software assignable in 5W increments across each four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100V<sub>RMS</sub>/145 V peak and maximum output current of 10 A<sub>RMS</sub>/14.5 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. Each amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 106 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be +20 dBu/7.75 V<sub>RMS</sub>.

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15 A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include four fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0°C to 40°C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W x 15.1" D x 1.7" H with rack ears, or 482 mm x 384 mm x 43 mm. Rack depth shall be 14.3"/364 mm. Unit weight with rack ears shall be 15.8 lb/7.17 kg. Shipping dimensions shall be 23.3" W x 19.6" D x 4.6" H, or 591 mm x 499 mm x 118 mm, with a shipping weight of 21.8 lb/9.89 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP1208.



## Architect & Engineer Specifications

### AtlasIED Atmosphere™ AZP1208-D

The amplifier system shall be an eight-input by eight-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include eight balanced analog inputs, eight Dante/AES67 network audio inputs, and eight Dante/AES67 network audio outputs operating at 48 kHz. The amplifier shall provide eight powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24-dB/octave slopes and Linkwitz-Riley 12- and 24 dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide four RJ45 outputs for SHS-3T2 sound masking loudspeakers over Cat5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a push-button for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include eight balanced analog inputs using 3.5 mm Euroblock connectors and eight amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate, Switch, and Redundant modes. The device shall support Dante networked audio and shall provide eight Dante inputs and eight Dante outputs. The front-end DSP, Dante, and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 1230 W<sub>RMS</sub> from two, four-channel amplifier modules, with each module providing 615 W<sub>RMS</sub>. Average output power shall be 150 W per channel, and any single powered output channel shall be capable of being configured for up to 600 W. Power Share technology shall be channel independent and software assignable in 5 W increments across each four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100 V<sub>RMS</sub> /145 V peak and maximum output current of 10 A<sub>RMS</sub> /14.5 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. Each amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 106 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be +20 dBu/7.75 V<sub>RMS</sub>.

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include four fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0°C to 40°C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W  $\times$  15.1" D  $\times$  1.7" H with rack ears, or 482 mm  $\times$  384 mm  $\times$  43 mm. Rack depth shall be 14.3"/36 mm. Unit weight with rack ears shall be 15.8 lb/7.17 kg. Shipping dimensions shall be 23.3" W  $\times$  19.6" D  $\times$  4.6" H, or 591 mm  $\times$  499 mm  $\times$  118 mm, with shipping weight of 21.8 lb/9.89 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP1208-D.



## Architect & Engineer Specifications

### AtlasIED Atmosphere™ AZP2408

The amplifier system shall be an eight-input by eight-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include eight balanced analog inputs and eight powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24-dB/octave slopes and Linkwitz-Riley 12- and 24 dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

The amplifier shall include an onboard message player capable of storing up to 100 messages with delay and repeat options. Messages shall be triggerable by GPI, scheduler, or third-party control. Supported message file formats shall include .wav, .mp3, and .flac, with greater than 1 GB total storage available. The amplifier shall include customizable scene presets for gain, mute, and matrix mixer settings. An onboard scheduler shall provide the ability to recall scenes or messages and shall include recurrence options.

The amplifier shall include sound masking capability with independent pink noise and white noise generators per output channel. Sound masking processing shall include a 20-band graphic equalizer with Perfect Fit, Tilter Filter, low-pass filter, and high-pass filter. A sound masking scheduler shall provide weekly schedule control with on-hours, off-hours, and a 30-day long-term commissioning ramp-up. The amplifier shall provide four RJ45 outputs for SHS-3T2 sound masking loudspeakers over Cat5 in addition to Euroblock loudspeaker outputs.

The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a push-button for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include eight balanced analog inputs using 3.5 mm Euroblock connectors and eight amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate and Switch modes. The front-end DSP and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 2430 W RMS from two, four-channel amplifier modules, with each module providing 1215 W RMS. Average output power shall be 300 W per channel, and any single powered output channel shall be capable of being configured for up to 1200 W. Power Share technology shall be channel independent and software assignable in 5 W increments across each four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of  $100 V_{RMS} / 145 V$  peak and maximum output current of  $17 A_{RMS} / 24 A$  peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. Each amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

The amplifier shall provide audio performance including frequency response of  $\pm 0.5$  dB from 20 Hz to 20 kHz at 8 ohms, THD+N of less than 0.02% from 1 W to 100 W and 0.20% from 100 W to 1200 W, signal-to-noise ratio of 110 dB, crosstalk of -80 dB at 1 kHz, latency of 3.7 ms, and DC offset of less than 10 mV. Analog input sensitivity shall be selectable between -10 dBV, 1.4 V, +4 dBu, +20 dBu, and Custom. Maximum analog input level shall be  $+20$  dBu/ $7.75 V_{RMS}$ .

The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include four fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0°C to 40°C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W  $\times$  15.1" D  $\times$  1.7" H with rack ears, or 482 mm  $\times$  384 mm  $\times$  43 mm. Rack depth shall be 14.3"/364 mm. Unit weight with rack ears shall be 16.64 lb/7.55 kg. Shipping dimensions shall be 23.3" W  $\times$  19.6" D  $\times$  4.6" H, or 591 mm  $\times$  499 mm  $\times$  118 mm, with a shipping weight of 22.5 lb/10.21 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP2408.



## Architect & Engineer Specifications

### AtlasIED Atmosphere™ AZP2408-D

The amplifier system shall be an eight-input by eight-output networked commercial audio amplifier suitable for digitally selecting, routing, mixing, processing, amplifying, and monitoring audio signals for distributed loudspeaker systems. The device shall include eight balanced analog inputs, eight Dante/AES67 network audio inputs, and eight Dante/AES67 network audio outputs operating at 48 kHz. The amplifier shall provide eight powered output channels and shall support both low impedance and constant voltage loudspeaker systems.

The amplifier shall include a 48 kHz SHARC DSP processor. Each input shall provide configurable DSP processing including a noise gate with threshold, attack, hold, and release controls; compressor with threshold, ratio, attack, release, and makeup gain controls; four-band parametric equalization; low shelf, high shelf, notch, and high-pass filtering. Input routing shall include default and priority channel routing, along with a fully routable matrix mixer with one matrix mixer per output.

Each output shall include DSP processing for loudspeaker management and system tuning. Output processing shall include AtlasIED and Atlas + Fyne loudspeaker tunings, 20 Hz/80 Hz high-pass filtering, output delay up to 100ms, priority ducking for message player and GPI high-priority events, crossover filters, equalization, and user-adjustable peak and RMS output limiters. Crossover filters shall include high-pass and low-pass filter options using Butterworth 6-, 12-, 18-, and 24-dB/octave slopes and Linkwitz-Riley 12- and 24dB/octave slopes. Output equalization shall include eight-band parametric EQ, Tilter Filter, tone control, low shelf, and high shelf filters. The amplifier shall also include a built-in signal generator configurable for sine, pink noise, or white noise.

The amplifier shall provide a web browser based GUI for configuration, control, and monitoring. The GUI shall be compatible with mobile devices and shall be accessible through Atmosphere Cloud for remote monitoring and control. The device shall support up to 32 user accounts with Installer, Manager, Associate, and Planner access levels to provide tailored access per user.

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The front panel shall include an OLED display capable of showing the assigned IP address, amplifier status, device name, firmware version, and other status information configurable through the web UI. Individual channel indicators shall show signal, channel standby, clip, and fault status. The front panel shall include a push-button for cycling through OLED menu options or placing the amplifier into standby, with the standby function defeatable.

The rear panel shall include eight balanced analog inputs using 3.5 mm Euroblock connectors and eight amplified outputs using 7.62 mm Euroblock connectors. The rear panel shall include two RJ45 Gigabit Ethernet ports. The network ports shall support selectable operating modes including Separate, Switch, and Redundant modes. The device shall support Dante networked audio and shall provide eight Dante inputs and eight Dante outputs. The front-end DSP, Dante, and logic processing shall be capable of being powered by PoE Class 3 using network Port A.

The rear panel shall include six general purpose inputs capable of recalling scenes or messages, one High Priority input, and two general purpose outputs with selectable modes including heartbeat, fault, and AC loss detect. The amplifier shall include a third-party API for integration with external control and monitoring systems.

All powered outputs shall be capable of driving low impedance and constant voltage loudspeaker loads, including 4  $\Omega$ , 8  $\Omega$ , 70 V, and 100 V systems. The amplifier shall provide a total amplifier module power of 2430 W<sub>RMS</sub> from two, four-channel amplifier modules, with each module providing 1215 W RMS. Average output power shall be 300 W per channel, and any single powered output channel shall be capable of being configured for up to 1200W. Power Share technology shall be channel independent and software assignable in 5W increments across each four-channel amplifier module bank. The amplifier shall provide a maximum output voltage of 100 V<sub>RMS</sub> /145 V peak and maximum output current of 17 A RMS/24 A peak.

The amplifier shall be stable with resistive, capacitive, or inductive loads greater than 1.5 ohms. The amplifier shall provide protection against short circuit, thermal overload, high frequency, and DC faults. Each channel shall be capable of being placed into standby mode, with automatic wake-up within 0.75 seconds. Each amplifier module shall be capable of being placed into Deep Sleep mode for additional power savings, with automatic wake-up within 3 seconds. Power-on delay shall be 3.5 seconds when PoE is present and 22 seconds when operating from AC power only.

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The amplifier shall operate from universal 100–240 VAC  $\pm 10\%$ , 50/60 Hz AC mains with power factor correction and shall use a 15A IEC C13 inlet connector. The cooling system shall use variable-speed forced air cooling with front-to-back airflow and side- and rear-panel venting. The amplifier shall include four fans, with idle fan SPL less than 38 dBA at 1 meter and maximum fan SPL less than 50 dBA at 1 meter. Operating temperature shall be 0° C to 40° C.

The amplifier shall be a 1RU rack-mount chassis measuring 19.0" W  $\times$  15.1" D  $\times$  1.7" H with rack ears, or 482 mm  $\times$  384 mm  $\times$  43 mm. Rack depth shall be 14.3"/364 mm. Unit weight with rack ears shall be 16.64 lb/7.55 kg. Shipping dimensions shall be 23.3" W  $\times$  19.6" D  $\times$  4.6" H, or 591 mm  $\times$  499 mm  $\times$  118 mm, with shipping weight of 22.5 lb/10.21 kg.

The amplifier system shall be an AtlasIED Atmosphere™ AZP2408-D.