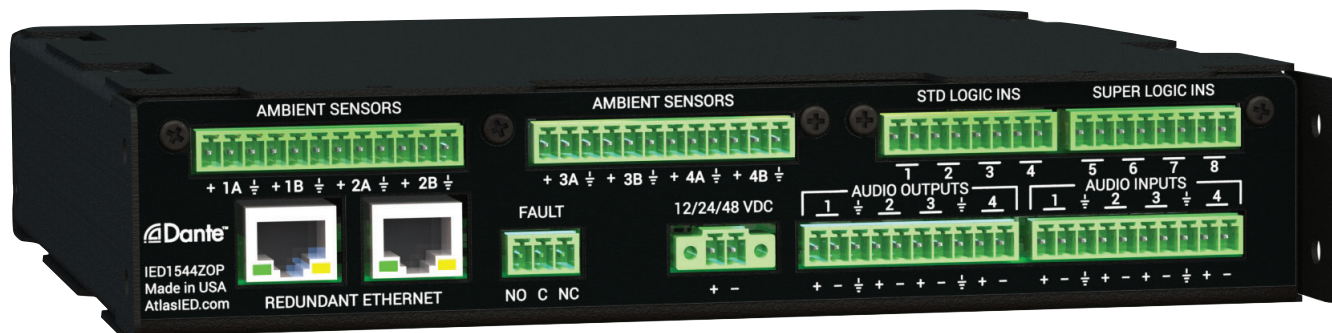
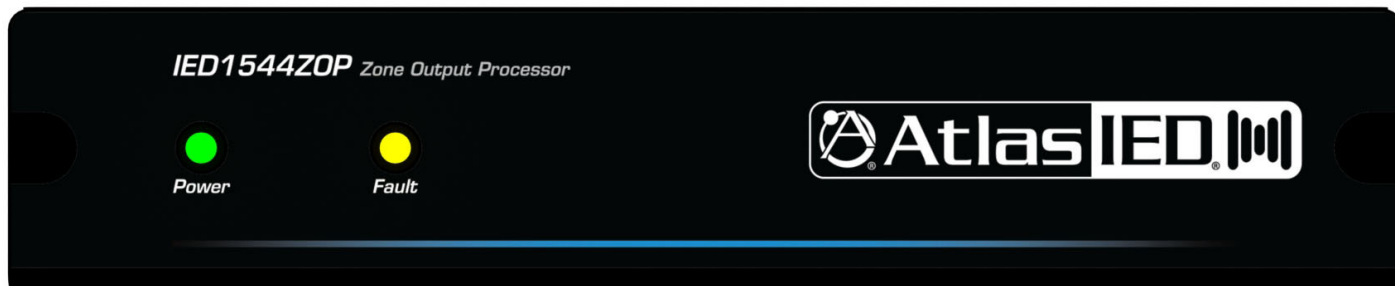


IED1544ZOP

4x4 Smart Zone Output Processor



Features

- Supports Audinate's Dante™ digital audio
- Compatible with IED GLOBALCOM® systems and 3rd party Dante™ devices
- Provides redundant Ethernet ports
- 7-band parametric EQ and a high-pass and low-pass filter per channel
- LED indicators for power and faults, plus a fault relay (Form C)
- Built-in supervision of external equipment or speaker lines may be configured.
- Fault reports and amplifier status available over Ethernet using standard SNMP protocol
- Two inputs for ambient noise sensors for each amplifier output channel

General Description

The 1544ZOP 4x4 Smart Zone Output Processor provides all the network audio routing and zone digital signal processing functions of a DNA2404D integrated network amplifier unit. This includes Dante network audio input, equalization, level control, and IED's patented AlwaysHEART™ smart ambient analysis automatic level adjustment. AlwaysHEAR™ ensures the audio levels are automatically adjusted to always be set at the perfect sound level.

The 1544ZOP provides four line-level balanced analog audio outputs for driving external amplifiers or powered line arrays. The 1544ZOP integrates with AtlasIED's GLOBALCOM.IP announcement controller, or may be used in stand-alone applications. Optionally, the processed zone output audio may be routed back out over the network as Dante digital audio.

In addition to the four zone outputs, the 1544ZOP has four balanced line-level analog inputs that may be used as automated test inputs associated with the four zone outputs. Alternately, the analog inputs may be routed out over the network as Dante digital audio for such uses as for background music or auxiliary audio sources.

The 1544ZOP also provides eight (8) logic inputs. Four of the inputs are standard closure detection and four are supervision capable, which provides the additional means to detect open or short conditions on the incoming links.

Inputs are provided for connecting up to eight (8) 540S ambient noise sensors (2 sensors for each output channel). This allows the output of each channel to be automatically adjusted in real time based on the measured ambient noise level in the zone.

The 1544ZOP may be configured from the GLOBALCOM.IP System Management Center (SMC) or via the open-standard SNMP (Simple Network Management Protocol).

Options – ordered separately

IED1112MPS-MOD, single unit power supply.

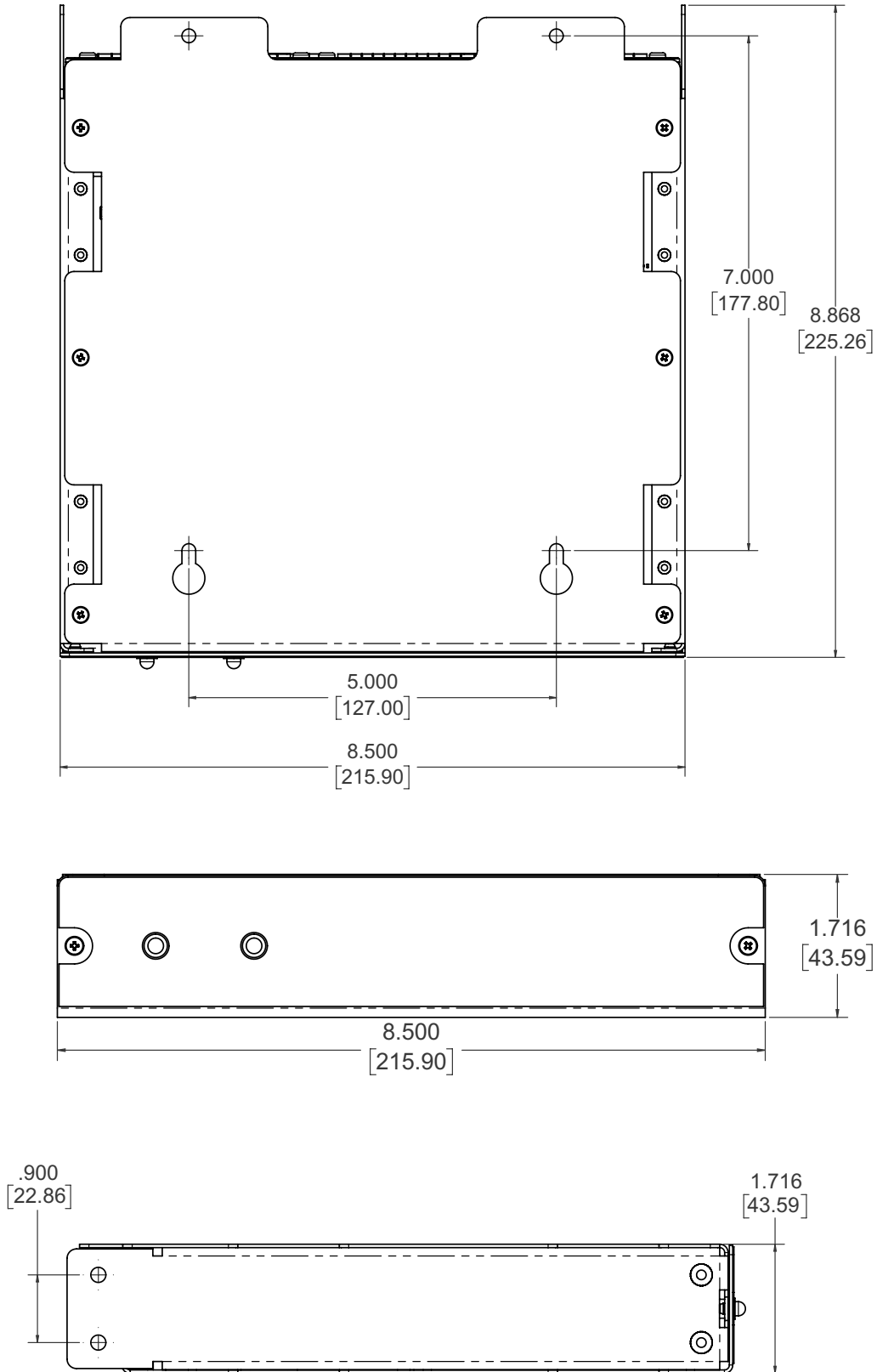
IED1112PS rack mount, 5-output power supply, with optional redundant supply.

Kit for rack mounting or for joining pairs of units into one 19" rack device is included with the product.

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Connections	All connections except Ethernet via 3.81 mm spacing lugless screw connectors.
Ethernet RJ-45	2 (redundant) 1 (w/ PoE)
Balanced Line Level Audio Inputs	4 (3 pins each)
Balanced Line Level Audio Outputs	4 (3 pins each)
Standard Logic Inputs	4 (2 pins each)
Supervised Logic Inputs	4 (2 pins each)
Ambient Sensor Inputs	8 (3 pins each)
Fault Relay	1 (Form C, 3 pins)
Indicators	
Power LED	Green LED on Front
Fault LED	Yellow/Amber LED on Front
Network Connection LED	Yellow LED on RJ-45 Connectors on Rear
Network Data LED	Green LED on RJ-45 Connectors on Rear
Electrical	
Frequency Response	±0.3 dB, 20 Hz - 20 kHz Unweighted
Total Harmonic Distortion (THD)	<0.01%, 20 Hz - 20 kHz Unweighted
Signal to Noise Ratio	>90 dB, 20 to 20kHz, Unweighted
Line Level Inputs	+6 dBu Max.
Line Level Outputs	+6 dBu Max.
A/D Converter	. 24 Bit
D/A Converter	. 24 Bit
Sample Rate	48 kHz
DSP Functions	
Level Control	Per Input/Output Channel
Equalization	7 Parametric Plus High-Pass & Low-Pass Per Channel
Ambient Analysis	Up To Two Sensors Per Channel
Built-In Automated Testing	For 4 Inputs
Compression On Audio Inputs	4
Power Requirements	
11.5V – 60V DC	2-pin Lugless Compression-Type (Nominally Use 12, 24 or 48V Supply) Screw Terminal
Max Power Draw	.10W
Dimensions And Weight	
Height	1.75" (4.4 cm)
Width	8.5" (21.6 cm) with Rack Ears 19" (48.3 cm)
Depth	8.9" (22.6 cm) For proper operation add a minimum of 2" (5.1cm) clearance to the back for wiring to the unit.
Weight	3.25 lbs (1.5 kg) (unit alone) 3.75 lbs (1.7 kg) (unit w/ rack ears)
Cooling Fan	None

Dimensional Drawings



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Architecture and Engineering Specifications

The Smart Zone Output Processor (ZOP) shall provide network audio and zone digital signal processing. The ZOP shall support Dante™ network audio input and output, 7 band parametric equalization high pass filter, low pass filter and ambient analysis with level control on a per channel basis.

Configuration of the ZOP shall be via network connection to System Management Control Center or via the open standard SNMP (Simple Network Management Protocol). Network connectivity shall be through dual redundant Ethernet ports located on the rear chassis. The ZOP shall be monitored, and report through a unit fault relay and via the network to a system controller.

The ZOP shall provide individually processed four(4) balanced line output connections for driving external amplifiers or powered line array loudspeaker systems. Optionally the processed zone outputs can be made available to the system as Dante™ digital audio sources.

The ZOP shall provide individually processed four (4) Balanced Line Input connections in addition to the four analog zone outputs that may be used for automated testing and monitoring of the four analog outputs. Alternatively the analog inputs can be made available to the system as as Dante™ Digital Audio sources for background(BGM) music sources or auxillary(AUX) audio sources.

The ZOP shall provide eight(8) Logic inputs, four(4) are standard closure detection and four(4) are supervised which shall provide a means by which open or short conditions can be monitored and reported on the incoming links for fire alarm and emergency notification use.

The ZOP shall provide connections for up to 2 ambient sensors per channel for (8 total) for the output of each channel to be automatically adjusted in real time based on the measured ambient noise level in the zone.

The ZOP is to be capable of being powered from an external 12/24/48V power supply (optional) employ removable Phoenix™ style connectors for easy Installation, and be housed in a rugged 19" half rack mountable enclosure (standard rack width mounting kit shall be available).

The Smart Zone Output Processor (ZOP) shall be the IED1544ZOP manufactured by AtlasIED.