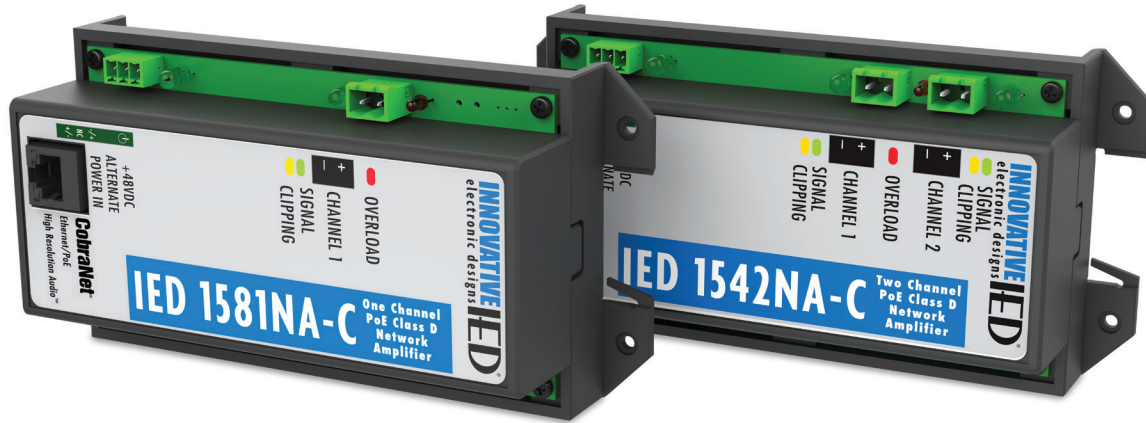![AtlasIED]

1581NA-C / 1542NA-C

Compact PoE Network Amplifier

Features

- Available in Single-Channel or Two-Channel Configurations
- Available with CobraNet® Audio network Interface
- 8Ω & 4Ω Load Compatible, 70.7V & 100V Compatible (with Optional Transformer)
- CobraNet® Enabled Devices Work Seamlessly with AtlasIED's GLOBALCOM® vACS Controller are Interoperable with Any CobraNet® Audio Transmitter Device and Can Be Configured with CobraNet® Discovery Tool
- Settings Storage in Non-Volatile Memory
- Utilizes IEEE 802.af Power Over Ethernet (PoE)
- Intelligent Current Management (ICM) Technology
- Removable Connectors for Easy Installation
- Rugged DIN-Rail or Panel / Wall Mount Enclosure

General Description

1500 Series amplifiers are compact digital audio amplifiers capable of powering small paging zones, background audio system or sound masking zones. The PoE amplifier series can be placed on any network that supports CobraNet® digital audio making it ideal to interface with a new or existing digital audio system.

Two models are available to meet system design requirements with both mono and stereo models with CobraNet® digital transport platforms. The 1581NA-C provides a single output with 8-watts of power into an 8Ω load. The 1542NA-C provides two outputs, each capable of delivering 4-watts of power into an 8Ω load or 6-watts of power into a 4Ω load. This makes the modules ideal for use in zones or areas that utilize only a few loudspeakers with low power taps.
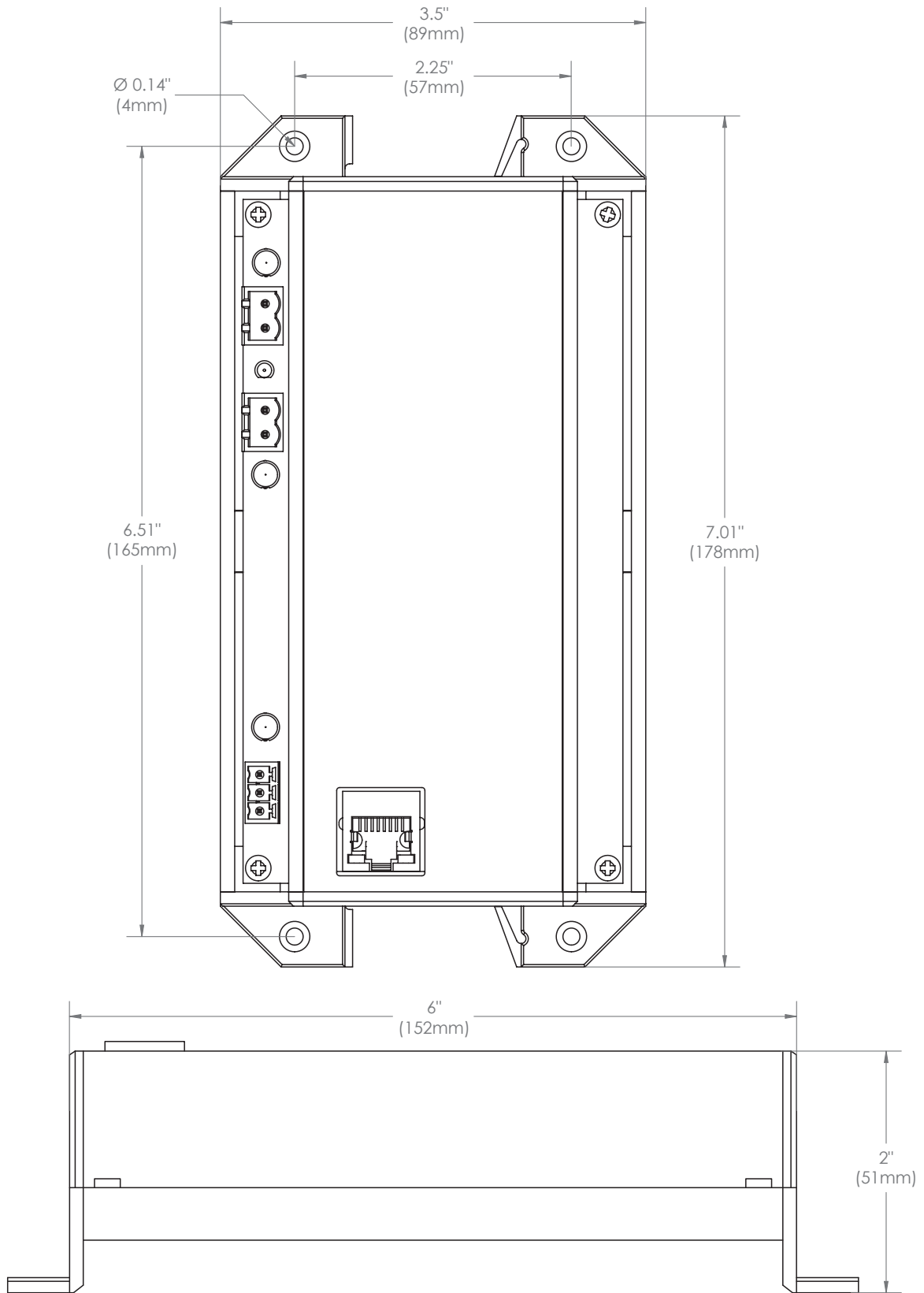
Both models are powered using standard PoE and draw a maximum power of 13 watts. Each model includes Intelligent Current Management (ICM) technology to prevent amplifier and PoE network switch overdrive. If PoE equipment is not used, an input is provided for an external +48VDC power supply. A green power indicator LED is included and each channel has an additional green LED indicator that illuminates when signal is present and a yellow LED that indicates clipping. Another yellow LED illuminates to indicate that the device is in thermal overload. When this condition occurs, the device will stop passing signal until the condition has cleared.

The amplifier is provided in an enclosure that can either be mounted to a DIN rail or screwed to a panel or wall allowing for convenient installation in remote closets close to the loudspeaker zone. These amplifiers are compatible with any device that uses CobraNet® as their network audio transport mechanism or can be integrated seamlessly into an AtlasIED GLOBALCOM® Communications System.

System	
Type	Compact Class-D PoE Network Amplifier 1581NA-C / 1542NA-C
Connectors	
Loudspeaker Output	2-pin Phoenix, 5.08mm Spacing, Qty 1 per Channel
Ethernet / PoE	RJ-45 (CAT5e or Higher, 100BaseTX Cable)
48VDC Alternate Power Input	3-pin Phoenix, 3.81mm Spacing
Controls and Indicators	
Power	Green LED, Qty 1
Overload (Thermal)	Yellow LED, Qty 1
Signal Present	Green LED, Qty 1 per Channel
Signal Clipping	Yellow LED, Qty 1 per Channel
AC Power Requirements	
Input Voltage	48VDC (PoE Compliant with IEEE 802.3af)
Power	13 Watts Max
Optional 48VDC Alternate Power Input Voltage	40 - 50VDC
Electrical, Power Output	
1581NA-C (8Ω)	8-Watts x 1 Ch
1581NA-C (4Ω)	13-Watts x 1 Ch
1581NA-C (70.7/100V Optional)	13-Watts x 1 Ch
1542NA-C (8Ω)	4-Watts x 2 Ch
1542NA-C (4Ω)	6-Watts x 2 Ch
1542NA-C (70.7/100V Optional)	6-Watts x 2 Ch
Efficiency	
Power Output = 100%	75%
Nominal Loudspeaker Impedance	8Ω
Frequency Response	80Hz – 15kHz, –3dB
Signal-to-Noise Ratio (Unweighted, 20Hz - 20kHz)	75dB
Total Harmonic Distortion, THD	0.05% @ 1 kHz
Input Level Reference	
Model 1542 (-8.0dBu)	0dBfs 8Ω Load
Model 1542 (-9.4dBu)	0dBfs 4Ω Load
Model 1581 (-5.5dBu)	0dBfs 8Ω Load
Model 1581 (-5.9dBu)	0dBfs 4Ω Load
Mechanical	
Dimensions (HxWxD)	7" x 3.5" x 2" (178mm x 89mm x 53mm)
Shipping Dimensions (HxWxD)	7.75" x 5.25" x 3" (197mm x 133mm x 67mm)
Unit Weight - lbs (1581NA)	0.46lb (0.21kg)
Unit Weight - lbs (1542NA)	0.47lb (0.21kg)
Shipping Weight - lbs	0.7lb (0.32kg)
Mount	DIN-Rail or Panel / Wall Mount Enclosure
Environmental Specifications	
Operating Temperature Range	–22 °F – +149 °F (–30 °C – +65 °C)
Compliance	
1581NA-C / 1542NA-C	FCC Part 15B, CE Marked, RoHS Directive

AtlasIED |◀))|

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Dimensional Drawings

3.5"
(89mm)

2.25"
(57mm)

∅ 0.14"
(4mm)

6.51"
(165mm)

7.01"
(178mm)

6"
(152mm)

2"
(51mm)