

1581NA / 1542NA GLOBALCOM Compact Network Amplifier





Description

The 1581NA and 1542NA are compact power amplifier modules capable of driving small loudspeaker loads in a GLOBALCOM system.

The 1581NA provides a single output with 8 watts of power into an 8Ω load. The 1542NA provides two outputs, each with 4 watts of power into an 8Ω load. This makes the module ideal for powering small zones that are made up of only a few low-powered loudspeakers.

The audio inputs to the module are through the Ethernet audio network and are configured from the GLOBALCOM System Management Center. Different models are available that allow the use of either the CobraNet® or Dante® audio networking protocols.

Both models are powered using standard PoE and draw a maximum power of 13 watts. If PoE equipment is not used, an input is provided for an external +48VDC power supply. A green power indicator LED is included to show that the unit is powered on. Each channel has a green LED indicator that illuminates when signal is present and a yellow LED to indicate 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 either mounts to a DIN rail or is screwed down on a panel or wall to allow for convenient installation in remote closets close to the loudspeaker zone.

Available Models

| Model | Channels | Output Power (per channel) | Input Type |
|----------|----------|----------------------------|---------------|
| 1581NA-C | 1 | W8 | CobraNet |
| 1542NA-C | 2 | 4W | CobraNet |
| 1581NA-D | 1 | 8W | Dante |
| 1542NA-D | 2 | 4W | Dante |

Features

- Available in single-channel or two-channel configurations
- Available with either CobraNet® or Dante® audio network interface
- Control and configure using a web browser and GLOBALCOM System Management Center
- Settings storage in non-volatile memory
- Full integration with the IED GLOBALCOM vACS
- Utilizes IEEE 802.af Power over Ethernet (PoE)
- Removable connectors for easy installation
- Rugged DIN-rail or panel/wall mount enclosure



Specifications

Electrical

| Power Output |
|---|
| 1581NA-C*, 1581NA-D (R $_{\rm L}=8~\Omega$)8 Watts |
| 1542NA-C*, 1542NA-D (R $_{\rm L}=8~\Omega$)4 W/ch |
| Efficiency |
| Power Output = 100%75% |
| Nominal Loudspeaker Impedance8 Ω |
| Frequency Response25 Hz – 15 kHz, –3 dB |
| Power Bandwidth (+0 dB, -5 dB) 20 Hz - 20 kHz |
| Signal-to-Noise Ratio (Unweighted, 20 Hz – 20 kHz) > 75 dB |
| THD + Noise (P $_{\rm o}$ = 100% rated output)< 0.05% @ 1 kHz |

Power Requirements

| Voltage (primary) | +48 VDC (PoE) |
|---|---------------|
| PoE Power Factor | < 13 Watts |
| External DC Supply Voltage (not included) |)+48VDC |

Indicators

| Module Power | 1 (Green) |
|--------------------------------|------------|
| Thermal Overload | 1 (Yellow) |
| Signal Present (each channel) | 1 (Green) |
| Signal Clipping (each channel) | 1 (Yellow) |

Connectors

| Outputs | 2-pin Phoenix, 5.08 mm spacing |
|-----------------|--------------------------------|
| Network | RJ-45 |
| Secondary Power | 3-pin Phoenix, 3.81 mm spacing |

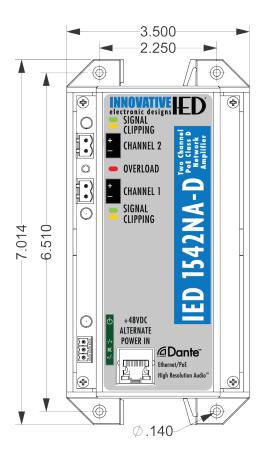
Mechanical

| Height | 7.01" (17.81 cm) |
|--------|------------------|
| Width | 3.50" (8.90 cm) |
| Depth | 2.00" (5.28 cm) |
| Weight | 10.0 oz (284 g) |

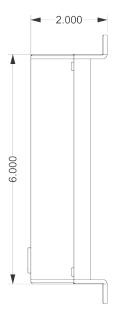
Environmental

Operating Temperature Range –22 $^{\circ}F$ – +149 $^{\circ}F$ (–30 $^{\circ}C$ – +65 $^{\circ}C$)

Product Dimensions (Front)



Product Dimensions (Side)





^{*} Due to the PoE maximum power limitation of 13 W, the 1581NA-C and 1542NA-C are limited to a maximum output power of 6.5 W and 3.25 W/ch when powered using PoE. Full output power is available when the module receives its power from an external 48VDC power supply of sufficient wattage.