



POWER OVER ETHERNET MIDSPAN

Power Supply / Inserter

The POE-48iD is an advanced 802.3af compliant device with Midspan Intelligent Detection. The device does not turn on power until it detects a valid Power-Over-Ethernet (POE) signature from the devices attached downstream on the Ethernet cable. This protects against damage to non-compliant equipment which may be connected to the Ethernet cable. Because of this intelligent detection, only an 802.3af compliant device can be powered with the POE-48iD. Because of its 48 V inserter, the installer doesn't need to worry about voltage drops due to cable length. Typically in 100 MB networks, the maximum allowable CAT5 cable run is about 100 meters. This is not a limitation of the POE equipment, but rather a limitation of the Ethernet standards. The POE-48iD is not a proprietary unit. It will function with any equipment which is fully compliant with the IEEE 802.3af POE standards. Note: The equipment being powered must be fully 802.3af compliant in order for the power supply to be able to sense the devices signature and apply power. Power is supplied on Ethernet pins 4/5 (V+) and 7/8 (GND).

Using POE to power remote devices has several advantages including:

- The power supply can be centrally located, where it can be attached to an uninterruptible power supply.
- The user has the ability to easily power on reset the attached equipment from a remote location.
- There is no need to run additional power cabling to the device, as power can be supplied over the CAT5 Ethernet cable.

FEATURES AND BENEFITS:

- "Carrier class" POE system
- 48 VDC auto ranging power supply / inserter
- 802.3af Midspan Intelligent Detection - extra safety
- Built-in Ethernet surge protection to prevent equipment damage
- Overload and short circuit protection
- Minimum cross-talk and insertion loss
- Advanced switching technology – runs cool
- Powers clients which accept power on unused Ethernet pins 4, 5, 7, 8
- FCC and CE approved
- Current indicator (CI) option available

APPLICATIONS:

- Remote routers, access points and bridges
- Remote networking equipment
- SOHO equipment
- IP camera systems
- 400 MHz to 10 GHz systems
- IP phone systems
- WiMAX

Americas: +1.847.839.6907
IAS-AmericasEastSales@lairdtech.com

Europe: +44.1628.858941
IAS-EUSales@lairdtech.com

Asia: +86.21.5855.0827.127
IAS-AsiaSales@lairdtech.com

www.lairdtech.com

| POE-48iD POWER SUPPLY/INJECTOR | |
|--------------------------------|-----------------------------------------------------|
| Input Voltage | 90 – 264 VAC @ 47 – 63 Hz |
| Input Current | 0.3 A @ 120 VAC 0.2 A @ 230 VAC |
| Inrush Current | <15 A peak @ 120 VAC <30 A peak @ 230 VAC |
| Efficiency | 70% Min. |
| Output Voltage | 48 VDC @ 0.35 A |
| Output Ripple | 1% Max |
| Switching Frequency | 200 KHz Typ |
| Line Regulation | +/- 0.5% |
| Load Regulation | +/- 1% |
| Operating Temperature | -10 to +60°C |
| Storage Temperature | -20 to +85°C |
| Operating Humidity | 5% to 90% non condensing |
| Size (L x W x H) | 3.25 x 3 x 1.5 in (83 x 76 x 38 mm) |
| Weight | 5.2 oz (147 gm) |
| AC Connector | IEC-320 C6 (Supercom SC-14) |
| Data IN Conn. | RJ45 Shielded Socket |
| Data/POE OUT Conn. | RJ45 Shielded Socket |
| LED | RED – AC Power / ALARM Orange – Channel Power |

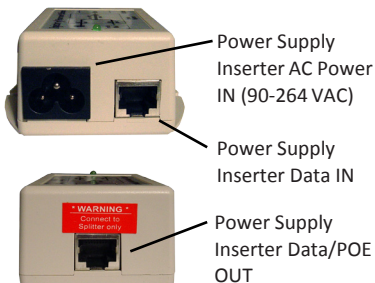
| COMPLIANCE: | |
|-------------|-----------------------------------------|
| IEEE | 802.3af POE Standard Mode B |
| EMI | EMI EN55022 (CISPR22) class B Meets CE |
| EMS | EN61000-4-2,3,4,5,6,8,11 |

SYSTEM ORDERING:

POE-48iD 48 VDC POE Power Supply / Inserter module with Midspan
802.3af Intelligent Interface (Includes AC Power Cord)

NOTES:

- All shipments F.O.B. Schaumburg, IL 60173



802.3af POE Power Up Sequence

- 1.Detection – Look for 802.3af compliant signature
- 2.Startup – Ramp power safely
- 3.Operation – Continuously monitor for short circuit or overload

ANT-DS-POE-48iD 0915

Any information furnished by Laird Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird materials rests with the end user, since Laird and its agents cannot be aware of all potential uses. Laird makes no warranties as to the fitness, merchantability or suitability of any Laird materials or products for any specific or general uses. Laird shall not be liable for incidental or consequential damages of any kind. All Laird products are sold pursuant to the Laird Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2015 Laird Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Logo, and other marks are trade marks or registered trade marks of Laird Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird or any third party intellectual property rights.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Laird:](#)

[POE-48iD](#)