



# 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 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 48V inserter, the installer doesn't need to worry about voltage drops due to cable length. Typically in 100MB 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 power over Ethernet 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.

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#### **Features and Benefits:**

- "Carrier class" power over ethernet system
- 48VDC 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**

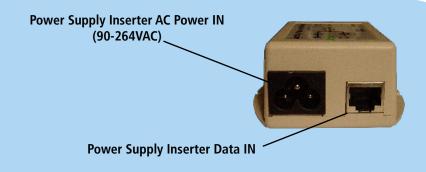
- Remote routers, access points and bridges
- Remote networking equipment
- SOHO equipment
- IP camera systems
- 400MHz to 10GHz systems
- IP phone systems

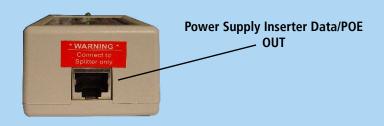


## **Specifications**

POE-48iD Power Supply/Injector		
Input Voltage	90 – 264VAC @ 47 – 63Hz	
Input Current	0.3A @ 120VAC 0.2A @ 230VAC	
Inrush Current	<15A peak @ 120VAC <30A peak @ 230VAC	
Efficiency	70% Min.	
Output Voltage	48VDC @ 0.35A	
Output Ripple	1% Max	
Switching Frequency	200KHz Typ	
Line Regulation	+/- 0.5%	
Load Regulation	+/- 1%	
Operating Temperature	-10 to +60 deg C	
Storage Temperature	-20 to +85 deg C	
Operating Humidity	5% to 90% non condensing	
Size (L x W x H)	3.25" x 3" x 1.5" (83 x 76 x 38mm)	
Weight	5.2oz (147gm)	
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	EN55022 ( CISPR22) class B Meets CE
EMS	EN61000-4-2,3,4,5,6,8,11





### **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

### **System Ordering:**

POE-48iD 48VDC POE Power Supply / Inserter module with Midspan 802.3af

Intelligent Interface (Includes AC Power Cord)

#### **Notes:**

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

• All antennas carry a 2 Year Warranty



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