

# **POE-xxi** Power-Over-Ethernet

## Innovative **Technology** for a **Connected** World

# **POWER-OVER-ETHERNET**

### Power Supply / Inserter

The POE-xxi is an advanced power supply / power inserter. The power supply is autoranging on the input and has a regulated voltage output. It has overload and short circuit protection in addition to Ethernet surge suppression built-in. The POE-xxi is not a proprietary unit. It will function with any equipment that is compliant with the IEEE 802.3af POE standards. For all "i" models, the power is supplied on ethernet pins 4/5 (V+) and 7/8 (V-). For the "iR" models, the power is supplied on Ethernet pins 4/5 (V+) and 7/8 (V-). For the "iR" models, the power is supplied on Ethernet pins 4/5 (V-) and 7/8 (V+). The POE-xxi comes complete with a standard North American 115 VAC power cord. International cords are available upon request. A Current Indicator (-CI) model is available. The LED will be AMBER until >35 mA current flows to the end device which will turn the LED to GREEN. This is a good way to remotely monitor the connection between the Power-Over-Ethernet (POE) and the end device, and to indicate that the end device is turned on. To order this model, add a "-CI" suffix to the standard part number.

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" power over ethernet system
- Auto ranging power supply/ inserter
- 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

# global solutions: local support ...

Americas: +1.847 839.6907 IAS-AmericasEastSales@lairdtech.com

Europe: +1.32.80.7866.12 IAS-EUSales@lairdtech.com

Asia: +1.65.6.243.8022 IAS-AsiaSales@lairdtech.com

www.lairdtech.com



# Innovative **Technology** for a **Connected** World

# **POE-xxi** Power-Over-Ethernet

POE-xxi 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	POE-48i 48 VDC @ 0.50 A POE-24i 24 VDC @ 0.8 A POE-24iR 24 VDC @ 0.8 A POE-18i 18 VDC @ 0.9 A POE-12i 12 VDC @ 1.3 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	(Amber) Green
Surge Protection	Common Mode
Clamping Voltage	11 V Data, 775 V Power
Max Surge Discharge Current	1200 A (8/20 uS) Power
Peak Pulse Current	36 A (10/1000 uS) Data
Shunt Capacitance	<5 pf Data
Response Time	<1 nS

# 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-48i 48 VDC @ .50 A POE Power Supply / Inserter POE-24i 24 VDC @ .8 A POE Power Supply / Inserter POE-18i 18 VDC @ .9 A POE Power Supply / Inserter POE-12i 12 VDC @ 1.3 A POE Power Supply / Inserter POE-24iR Reverse Polarity

24 VDC @ .8 A POE Power Supply / Inserter (Pins 4/5 V-, Pins 7/8 V+)

\* All include AC Power Cord

#### **NOTES:**

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



 Power Supply Inserter AC Power IN (90-264 VAC)

Power Supply Inserter Data IN

 Power Supply Inserter Data/POE OUT

-

#### 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-xxi 0612

Any information furnished by Laird Technologies, 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 Technologies materials rests with the end user, since Laird Technologies materials or products for any specific or general uses. Laird Technologies makes no warranties as to the fitness, metchantability or suitability of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be lable for indetential dranages of any find. All Laird Technologies models are sold pursuant to the Laird Technologies. and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. O Copyright 2012 Laird Technologies, func. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies. (Daird other marks are trade marks or registred trade marks of Laird Technologies, func. and Rifliate company thered. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.

# **Mouser Electronics**

Authorized Distributor

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

Laird Connectivity:

 POE-12S-AFI
 POE-48I
 POE-12i
 POE-18i
 POE-18i-EU
 POE-24i
 POE-24i-CI
 POE-24i-EU
 POE-24i-L
 POE-24iR

 POE-24iR-CI
 POE-24S-AFI
 POE-48I12S-AFI
 POE-48I5S-AFI
 POE-48i-CI
 POE-48I-CI-EU
 POE-48ID-EU
 POE-48I 

 EU
 POE-4x18i
 POE-4x24i
 POE-4x48i
 POE-4x48i-afi
 POE-55iG-ATI
 POE-55-AFI-B
 POE-PS-150-001