



75W Power over Ethernet Adapter Ultra Power over Ethernet Single Port Injector



Shown here in standard on the left and with NIC option on the right

Features

- Gigabit Compatible
- Diagnostic LEDs
- Limited Power Source
- Full Power Cisco AP1250 Support
- SNMP Management Option
- 1 Year Warranty
- Full Protection OCP, OVP
- Single Source 4 Pair Power Current Sharing
- Not IEEE BT Compliant
- Broken Wire Detection
12.5k or 25k on Datapairs 3, 6, 1, 2 for Detection(Latest Revision)

Applications

- Satellite Receiver
- Wireless Network Access Points
- LCD Displays
- Security Cameras
- Kiosks
- Computer Workstations

Safety Approvals

- cUL/UL
- CE

Mechanical Characteristics (Standard Model)

- Length: 166mm (6.53in)
- Width: 80mm (3.15in)
- Height: 44mm (1.73in)
- Weight: 0.5Kg

Output Specifications

Model	DC Output Voltage*	Load x2 4-pair powering ¹		Regulation	
		Min.	Max.	Line	Load
POE75U-1UP-N ²	+56V	0A	0.67A	54-57V DC under all conditions	

Notes:

1. 4-pair powering for 2 outputs at 56V, 0.67A
2. Consult factory for availability

Reference files:

1. [SNMPv2c_User_Manual-Rev1.7.pdf](#)
2. [SNMPv2c_Firmware-Rev1.7.zip](#)
3. [SNMPv2c_MIB_10_30_2009.zip](#)

Phihong is not responsible for any error, and reserves the right to make changes without notice. Please visit our website at www.phihong.com for the most up-to-date specifications and contact information.

INPUT:**AC Input Voltage Range**

90 to 264VAC

AC Input Voltage Rating

100 to 240VAC, 47-63Hz

AC Input Current

2.0A (RMS) max for 90VAC

1.2A (RMS) max for 240VAC

Leakage Current

3.5mA max @ 254VAC 60Hz

AC Inrush Current

30A (RMS) max for 115VAC

60A (RMS) max for 230VAC

OUTPUT:**Total Output Power**

75W

Ripple and Regulation

250mV max

DC Offset

No data degradation with DC imbalance

18mA per min.

Efficiency

80% (typical) at max load, 120VAC 60Hz

Hold-up Time

10mS min. 120VAC and max load

Transient O/P Voltage Protection

60V max

ENVIRONMENTAL:**Temperature**

Operation -20 to +40°C

Non-operation -25 to +65°C

Humidity 5 to 90%

EMC

FCC Part 15 Class B

EN55022 Class B

Isolation TestPrimary to Secondary: 4242VDC for 1 minute
10mAPrimary to Field Ground: 2121VDC for 1
minute

Output to Field Ground: 2121VDC

Immunity

ESD: EN61000-4-2. Level 3

RS: EN61000-4-3. Level 3

EFT: EN61000-4-4. Level 2

Surge: EN61000-4-5. Level 3

CS: EN61000-4-6. Level 2

Voltage Dips EN61000-4-11

Harmonic: EN61000-3-2 Class A

Insulation ResistancePrimary to Secondary: >10M OHM
500VDCPrimary to Field Ground: >10M OHM
500VDC**IEEE 802.3af/at Interoperability**If 25kohm or 12.5Kohm is detected the unit
operates in 4-pair powering mode delivering
75W.**FEATURES:****Cisco Legacy detection**No external parts required for Legacy
devices:

VoIP Phones: 7910,7912,7940,7960

Access Points: 350,1100,1200,1250

Over Voltage/Current, Short Circuit ProtectionOutputs equipped with short circuit
protection and overload protection as per
802.3af specifications except max average
current is 1.34A. The output can be shorted
permanently without damage.

Indicators

Green LED 1: DC Power “OK”
 Red LED: Fault detected
 Solid Green LED 2: 12.5kohm detected
 “CONNECT” at 75W power.
 Flashing Green LED 2: 25kohm detected
 “CONNECT” at 75W power

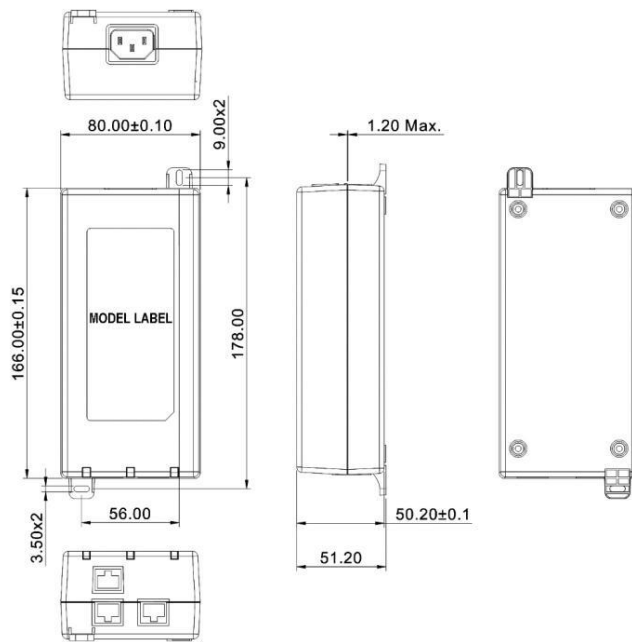
Input Connector

IEC320 inlet 3 pin

Output Connection

4-pair powering for full power
 Pins 3,6, 4,5(+) Pins 1,2, 7,8 (-)

Dimension Diagram Unit:mm





Description of LED Functions for Gigabit Power Injector

Power-up Sequence:

Upon power-up, all 3 LEDs will light for 2 seconds, as part of the self-test for the internal microprocessor software. After the 2 seconds period, the "ON" LED will illuminate green. The DC output voltage is now available for powering a compliant load.

Detection Sequence:

Once a compliant load is attached to the output RJ45 connector, the green "CONNECT" LED will illuminate.

Should the load be non-compliant then the LEDs will blink a code specific to the cause for non-detection.

Detection Failure Codes:

1. Incorrect resistive signature – The green “CONNECT” and red “FAULT” LEDs will blink 3 times.
2. Incorrect capacitive signature – The green “ON” LED will blink 3 times.
3. Incorrect Voffset – The green “CONNECT” and green “ON” LEDs will blink 3 times.
4. Unstable current measurement – The green “ON” LED will blink 3 times
5. Low voltage sensed during detection (overload) – The red “FAULT” LED will blink 3 times

After the LEDs blink 3 times the Power Injector will continue to try to detect a valid load. Until the correct load is applied, the LEDs will continue to blink. If there is an open circuit connected to the output RJ45 then the LEDs will not blink but the Power Injector will continue to try to detect a valid load.

Fault Sequence:

Should there be a fault such as an overload or short circuit then the red "FAULT" LED will illuminate. The red “FAULT” LED will illuminate for 2 seconds and then go off as the power supply tries to re-detect a valid load. If there is a problem detecting the load, the LED will indicate a possible fault as per the codes in the section above.