



30W Power over Ethernet Adapter High Power, High Temperature Single Port Injector



Features

- Fully Compliant IEEE802.3at
- Diagnostic LEDs
- Non-Vented Case
- Wide Temperature Range: -20 to +55°C
- Full Protection OCP, OVP
- Gigabit Compatible
- Cisco AP1250 Full Power Support

Applications

- IP Telephones
- Wireless Network Access Points
- Blue Tooth Access Points
- Security Cameras
- IP Print Servers

Safety Approvals

- cUL/UL
- CE

Mechanical Characteristics

- Length: 166mm (6.48in)
- Width: 80mm (3.15in)
- Height: 44mm (1.73in)
- Weight: 0.2Kg (0.44lb)

Output Specifications

Model	DC Output Voltage	Load		Regulation	
		Min.	Max.	Line	Load
POE30U-560(G)-HT ¹	56V	0A	0.55A	54-57V DC under all conditions	

Notes: Consult factory for availability

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INPUT:**AC Input Voltage Range**

85 to 264VAC

AC Input Voltage Rating

100 to 240VAC

AC Input Frequency

47-63Hz

AC Input Current

0.95A (RMS) 90VAC at max. load

0.55A (RMS) 240VAC at max. load

Leakage Current

0.25mA max 264VAC 50Hz, input to PE

3.5mA max 264VAC 50Hz ,input to output

AC Inrush Current

15A (RMS) max for 115VAC

20A (RMS) max for 230VAC

OUTPUT:**Total Output Power**

30W at 56V DC

Efficiency

75% (typical) at max load, 120VAC 60Hz

Hold-up Time

16mS min. and 120VAC at max load

Transient O/P Voltage Protection

60V max switch on/off any AC line phase

ENVIRONMENTAL:**Temperature**

Operation -20°C to +55°C

Non-operation -40°C to +85°C

Humidity 10 to 90%

EMI

EN55022 Class B

CISPR22 Class B

Dielectric withstand (HI-POT) test

Pri to Sec: 4242VDC for 1 minute, 10mA

Pri to F.G.: 2121VDC for 1 minute, 10mA

Immunity

ESD: IEC61000-4-2

RS: IEC61000-4-3

EFT: IEC61000-4-4

Surge: IEC61000-4-5

CS: IEC61000-4-6

Voltage Dips IEC61000-4-11

Harmonic: IEC61000-3-2

Insulation Resistance

Pri to Sec: >10M OHM 500VDC

Pri to F.G.: >10M OHM 500VDC

FEATURES:**Over Voltage Protection**

120VDC shall not be exceeded- latching

Over Current Protection

685mA max

Short Circuit Protection

The output can be shorted permanently without damage

Thermal Protection

Auto-recover

Indicators

Green LED 1: Power detected "ON"

Green LED 2: Valid "PoE Plus" load detected and connected

Green LED 3: Valid IEEE802.3at load detected and connected

Input Connector

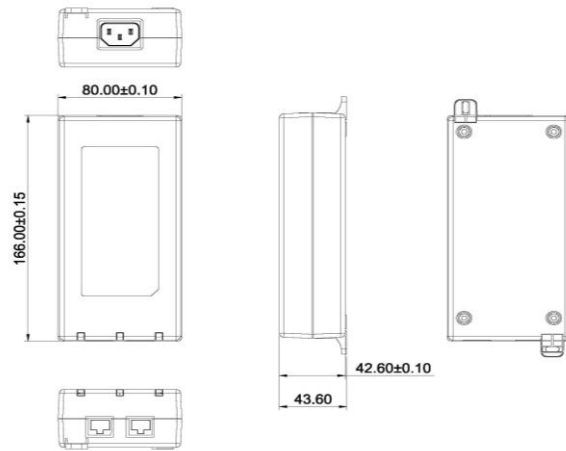
IEC320 C14 inlet receptacle

Output Connection

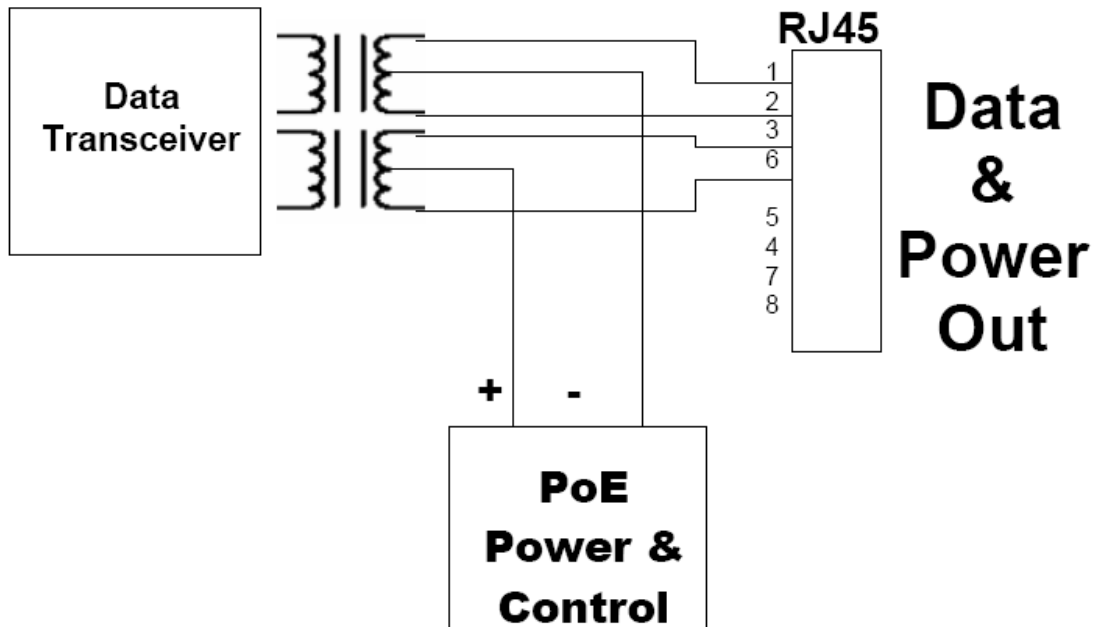
+pins 3, 6

- pins 1, 2

Dimension Diagram Unit: mm



POE30U-560(G) -HT-R Schematic Block Diagram



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, the "ON" LED will illuminate green. The DC output voltage is now available for powering a compliant load (to the 802.3at PoE standards).

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 signifying 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 a fault occur 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 the possible fault as per the codes in the section above.