



**19.6W Power over Ethernet Adapter
POE20U High Power Single Port Injector**



Features

- Fully Compliant Detection, Disconnect, IEEE802.3af
- Diagnostic LEDs
- Overload and Voltage Control
- Full Protection OCP, OVP
- Gigabit Compatible
- 1 Year Warranty

Applications

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

Safety Approvals

- cUL/UL
- CE
- S-Jet

Mechanical Characteristics

- Length: 140mm (5.51in)
- Width: 65mm (2.55in)
- Height: 36mm (1.42in)
- Weight: 0.2Kg (0.44lb.)

Output Specifications

Model	DC Output Voltage	Load		Regulation	
		Min.	Max.	Line	Load
POE20U-560(G) ¹	56V	0A	0.35A	±4%	

Notes: (1) Consult factory for availability

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INPUT:**AC Input Voltage Range**

90 to 264V AC

AC Input Voltage Rating

100 to 240V AC

AC Input Current

0.75A (RMS) maximum for 90V AC

0.45A (RMS) maximum for 240V AC

Leakage Current

1.0mA maximum at 254V AC, 50Hz

AC Input Frequency

47 to 63Hz

AC Inrush Current

15A (RMS) maximum for 115V AC

20A (RMS) maximum for 230V AC

OUTPUT:**Total Output Power**

19.6W at 56V DC

Efficiency

65% at maximum load, and 120V AC 60Hz

Hold-up Time

16mS minimum at 120V AC and maximum load

Transient O/P Voltage Protection

60V max at switch on/off at any AC line phase

ENVIRONMENTAL:**Temperature**

Operation 0 to +40°C

Non-Operation -25 to +65°C

Humidity 10 to 90%

EMC

FCC Part 15 Class B

EN55022 Class B

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

Output to Field Ground: 2121V DC

Immunity

ESD: EN61000-4-2 Level 3

RS: EN61000-4-3 Level 2

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 Resistance

Primary to Secondary: >10M OHM 500V DC

Primary to Field Ground: >10M OHM 500V
DC**FEATURES:****Over Voltage/Current, Short Circuit Protection**

Outputs equipped with short circuit protection and overload protection as per 802.3af specifications. The output can be shorted permanently without damage.

Indicators

Green LED 1: Input power "ON"

Red LED: Fault detected

Green LED 2: Valid IEEE802.3af load detected and connected

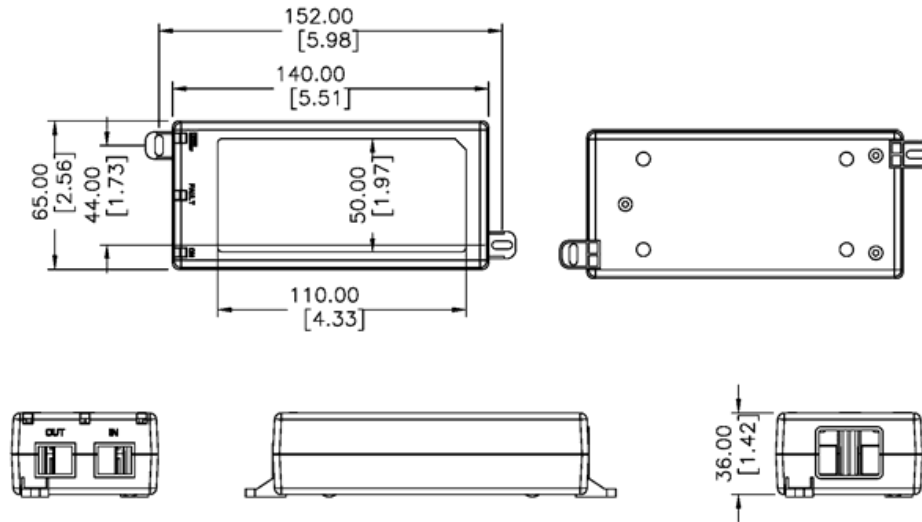
Input Connector

IEC320 inlet 3 pin

Warranty

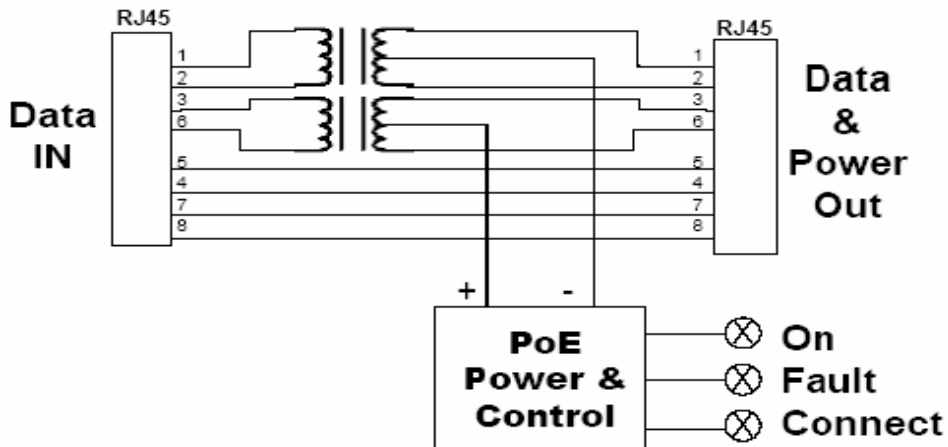
1 Year

Dimension Diagram Unit: mm (inch)



Diagnostic LED Functions and Schematic Block Diagram

POE20U-560(G) Schematic Block Diagram



Description of LED Functions for POE20U-560(G)

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 end of the 2 seconds, the "ON" LED will illuminate green, signifying that the DC output voltage is available for powering a compliant load (to the 802.3af 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. Therefore, 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 redetect a valid load. If there is a problem in detecting, the LED will indicate what is wrong with the load as per the codes in the section above.