WWW.PHIHONG.COM



75W DC Input Power over Ethernet Midspan Ultra Power over Ethernet Single Port Injector



CE

OVP
ower Current Sharing
n
18

Length: 166mm (6.53in)Width: 80mm (3.15in)

- Height: 44mm (1.73in)
- Weight: 0.5Kg (1.1lbs)

Output Specifications

Model	DC Output Voltage	Load		Regul	ation
POE75D-1UP	+56V	Min.	Max.	Line	Load
		15mA	1.34A	54-57V DC unde	er all conditions

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.

POE75D Characteristics

INPUT: DC Input Voltage Rating 36 to 72V DC

DC Input Current

4.0A, 32V DC at maximum load 2.0A. 72V DC at maximum load

OUTPUT: Total Output Power

75W

Ripple and Regulation 250mV maximum

DC Offset

No data degradation with DC imbalance 18mA per min.

Efficiency

85% (typical) at maximum load, at 48V DC

Transient O/P Voltage Protection 60V maximum

ENVIRONMENTAL:

Temperature Operation

-20 to +40°C Non-operation -25 to +65°C

5 to 90%

Humidity

Operation

EMI

FCC Part 15 Class B EN55022 Class B

Isolation Test

Primary to Secondary: 2121VDC for 1 minute 10mA Primary to Field Ground: 2121VDC for 1 minute, 10mA Secondary to Field Ground: 2121VDC for 1 minute, 10mA (4 Second Ramp up Time)

WWW.PHIHONG.COM

Immunity

EN61000-4-2	Level 3
EN61000-4-3	Level 3
EN61000-4-4	Level 2
EN61000-4-5	Level 2
	EN61000-4-3 EN61000-4-4

Insulation Resistance

Primary to Secondary: >10M OHM 500VDC Primary to Field Ground: >10M OHM 500VDC

Over Voltage Protection

Conforms to UL 60950-1 paragraph 2.2.3

Over Current, Short Circuit Protection

Outputs equipped with short circuit protection and overload protection as per 802.3at specifications except max average current is 1.34A. The output can be shorted permanently without damage

MTBF

150K Hours minimum at maximum load, 48VDC, and ambient 25°C

Indicators

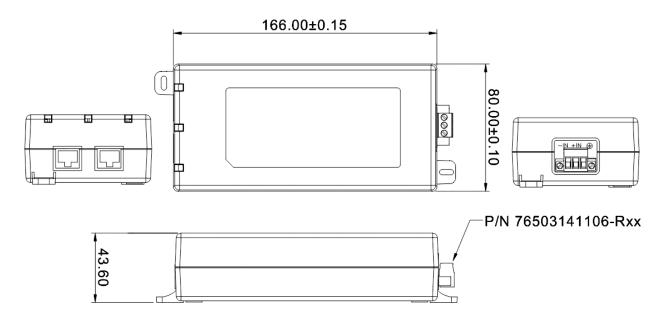
Green LED 1: DC Power "OK" Red LED: Fault detected Solid Green LED 2: Power detected "CONNECT" at 75W

Input Connector

-- Anytek OQ0355510000G Mate - Anytek TJ0350520000G OR TJ035152000G Anytek is part of Giga-Way Technology Corp.

POE75U Design Dimensions (mm)

WWW.PHIHONG.COM



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. This LED will be solid if connected at 75W.

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.