

# Passive Power over Ethernet Midspan

Features	
<ul> <li>Compliant with Phihong Proprietary 12.5K Detection</li> <li>Diagnostic LEDs</li> <li>4 Pair Powering +3,6,4,5 / - 1,2,7,8</li> <li>Single Source 4 Pair Power Current Sharing</li> </ul>	<ul> <li>Gigabit Compatible</li> <li>Broken Wire Detection</li> <li>Full Protection OCP, OVP</li> <li>Limited Power Source</li> <li>1 Year Warranty</li> </ul>
Applications	
<ul> <li>Satellite Receiver</li> <li>Wireless Network Access Points</li> <li>LCD Displays</li> </ul>	<ul><li>Security Cameras</li><li>Kiosks</li><li>Computer Workstations</li></ul>
Safety Approvals	
<ul> <li>cUL/UL 60950-1</li> <li>cUL/UL 62368-1</li> </ul>	<ul> <li>IEC60950-1</li> <li>IEC62368-1</li> <li>CE</li> </ul>
Mechanical Characteristics (Standard Model)	
<ul> <li>Length: 166mm (6.53in)</li> <li>Width: 80mm (3.15in)</li> </ul>	<ul> <li>Height: 44mm (1.73in)</li> <li>Weight: 500g (1.11bs)</li> </ul>
Output Specifications	

Model Data Speed	Data Speed	DC Output Voltage	Load		<b>Regulation</b> <sup>1</sup>	
	Data Speeu		Min.	Max. <sup>2</sup>	Line	Load
POE90U-560-R	1G	56V	>15mA	1.6A	56VDC +1V/-2V	
POE90U-560-2	2.5G	56V	>15mA	1.6A	56VDC +1V/-2V	
POE90U-560-5-R	5G	56V	>15mA	1.6A	56VDC +1V/-2V	
POE90U-560-X-R	10G	56V	>15mA	1.6A	56VDC +1V/-2V	

Notes:

- 1. Voltage measured within 2" of the output RJ45 connector on data pairs 3,6(+) and 1,2(-)
- 2. Combined output on data pairs and spare pairs. Otherwise 800mA on data pairs 3,6(+) 1, 2(-) and spare pairs 4,5(+) 7,8(-)

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**INPUT: AC Input Voltage Range** 90 to 264VAC

AC Input Voltage Rating 100 to 240VAC, 47-63Hz

#### AC Input Current 2.5A (RMS) maximum for 900VAC 1.2A (RMS) maximum for 240VAC

Leakage Current 3.5mA maximum @ 264VAC 50Hz

#### AC Inrush Current 50A (RMS) maximum for 115VAC 75A (RMS) maximum for 240VAC

**OUTPUT: Total Output Power** 90W

**Ripple and Regulation** 200mV max @25°C, 100-240VAC

Efficiency<sup>2</sup> 75% (typical) at max load, and 120VAC 60Hz

Hold-up Time 10mS min. 120VAC 60Hz max load

## **ENVIRONMENTAL:**

**Temperature** Operation Non-operation Humidity

-20°C to +60°C -20°C to +65°C 5 to 90%

## EMI

Complies with FCC part 15 Class B Complies with EN55032 Class B

#### **Isolation Test**

Primary to Secondary: 4242VDC for 1 minute 10mA Primary to Field Ground: 2121VDC for 1 minute

### Immunity

 ESD:
 IEC61000-4-2 Level 3

 RS:
 IEC61000-4-3 Level 3

 EFT:
 IEC61000-4-4 Level 2

 Surge:
 IEC61000-4-5 Level 3

 CS:
 IEC61000-4-6 Level 2

 Voltage Dips
 IEC61000-4-11 Class 3

 Harmonic:
 IEC61000-3-2 Class A

## **Insulation Resistance**

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

#### FEATURES: Over Current Protection Output #1(OUT) <1000mA Output #2(OUT) <1000mA Output #1 and #2 combined(OUT) <2000mA

# **Over Voltage Protection**

Conforms to UL60950-1

## Short Circuit Protection

Non-latching auto recovery. The output can be shorted permanently without damage

**LED Indicators** *Blue solid* - Power good, "ON" output active

**Input Connector** IEC320 inlet 3 pin

**Output Connection** +pins 3,6,4,5 / -pins 1,2,7,8

Notes:

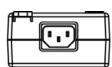
2.

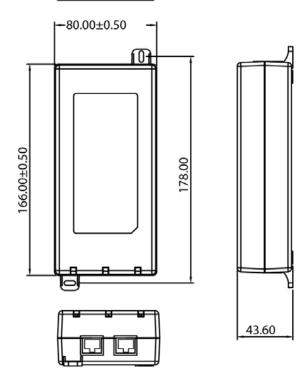
The characteristics defined are at ambient temperature of 25°C unless otherwise specified Efficiency is measured after 30 minutes burn-in

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# POE90U-560 Dimensions (mm)





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