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## 90W Single Port Multi-Gig **Passive Power over Ethernet Midspan**





#### **Features**

- Compliant with Phihong Proprietary 12.5K Detection
- Diagnostic LEDs
- 4 Pair Powering +3,6,4,5 / 1,2,7,8
- Single Source 4 Pair Power Current Sharing
- Gigabit Compatible
- **Broken Wire Detection**
- Full Protection OCP, OVP
- **Limited Power Source**
- 1 Year Warranty

### **Applications**

- Satellite Receiver
- Wireless Network Access Points
- LCD Displays

- **Security Cameras**
- **Kiosks**
- Computer Workstations

## **Safety Approvals**

- cUL/UL 60950-1
- cUL/UL 62368-1

- IEC60950-1
- IEC62368-1
- CE

## **Mechanical Characteristics (Standard Model)**

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

• Height: 44mm (1.73in) Weight: 500g (1.1lbs)

## **Output Specifications**

Model	Data Speed	DC Output Voltage	Load		Regulation <sup>1</sup>	
			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:

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

#### POE90U-560 Characteristics<sup>1</sup>

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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 -20°C to +60°C Non-operation -20°C to +65°C Humidity 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
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) <

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**

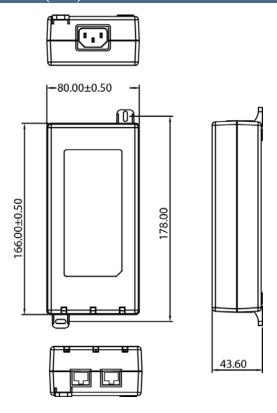
IEC320 inlet 3 pin

#### **Output Connection**

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

#### Notes:

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



# **Supplier's Declaration of Conformity 47 CFR § 2.1077 Compliance Information**

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NOTE: This model has/The models in this products series have been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- —Reorient or relocate the receiving antenna.
- —Increase the separation between the equipment and receiver.
- —Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- —Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to equipment not expressly approved by PHIHONG could void the user's authority to operate the equipment.