



## 90W Single Port Power over Ethernet Midspan IEEE802.3BT Compliant Power Injector



### Features

- IEEE802.3BT Compliant
- Diagnostic LEDs
- Compliant with Phihong Proprietary 12.5K Detection
- 1 Year Warranty
- SNMP Management Option
- Gigabit Compatible
- 4 Pair Powering +3,6,4,5 / - 1,2,7,8
- Full Protection OCP, OVP
- Single Source 4 Pair Power Current Sharing
- Broken Wire Detection
- Limited Power Source

### Applications

- Satellite Receiver
- Wireless Network Access Points
- LCD Displays
- Security Cameras
- Kiosks
- Computer Workstations

### Safety Approvals

- cUL/UL
- CE

### Mechanical Characteristics (Standard Model)

- Length: 166mm (6.53in)
- Width: 80mm (3.15in)
- Height: 44mm (1.73in)
- Weight: 500g(1.1lbs)

### Output Specifications

Model	DC Output Voltage	Load		Regulation <sup>2</sup>	
		Min.	Max. <sup>3</sup>	Line	Load
POE90U-1BT	56V	>15mA	1.6A	56VDC +1V/-2V	
POE90U-1BT-N <sup>1</sup>	56V	>15mA	1.6A	56VDC +1V/-2V	

Notes:

1. SNMP option
2. Voltage measured within 2" of the output RJ45 connector on data pairs 3,6(+) and 1,2(-)
3. 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 90VAC

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 230VAC

**OUTPUT:**

**Total Output Power**

90W

**Ripple and Regulation**

300mV max @25C, 100-240VAC

**Efficiency**

75% (typical) at maximum load, and

120VAC 60Hz

**Hold-up Time**

10mS min. 120VAC 60Hz max load

**ENVIRONMENTAL:**

**Temperature**

Operation -20°C to +40°C

Non-operation -20°C to +65°C

Humidity 5 to 90%

**EMC**

FCC Part 15 Class B

EN55022/EN55032 Class B

**Input Connector**

IEC320 inlet 3 pin

**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

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**

Meets UL requirements

**Short Circuit Protection**

The output can be shorted permanently

without damage

**LED Indicators**

Solid Green – detection & connection is valid and output power is “On”

Slow Blinking Green – input power is “On” and connection is open

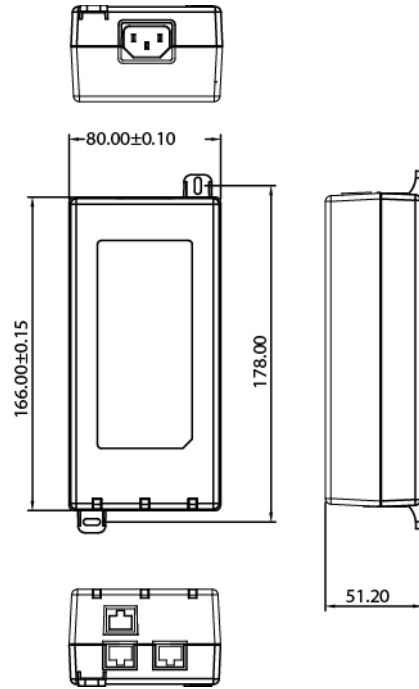
Blinking Red – fault (over current or short current)

Blinking Red & Green – detection is invalid

**Output Connection**

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

**Case as featured with the SNMP Management option**



**Case without the SNMP Management Option**

