



## 60W Single Port Multi -Gig Power over Ethernet Midspan IEEE802.3bt Compliant Power Injector



### Features

- Compliant with IEEE802.3bt Standard
- Compliant with Pihong Proprietary 12.5K Detection
- Non-Vented Case
- 4 Pair Powering +3,6,4,5 / - 1,2,7,8
- Full Protection OVP, OCP
- Limited Power Source
- Single Source 4 Pair Power Current Sharing
- Broken Wire Detection
- Gigabit Compatible
- 1 Year Warranty

### Applications

- IP Telephones
- Wireless Access Points
- Bluetooth® Access Points
- Security Cameras
- IP Print Servers
- WiMAX® Access Points

### Safety Approvals

- UL/cUL 60950-1
- UL/cUL 62368-1
- IEC60950-1
- IEC62368-1
- CE

### Mechanical Characteristics

- Length: 163.25mm (6.43in.)
- Width: 65mm (2.56in.)
- Height: 36mm (1.42in.)
- Weight: 500g (17.64oz)

### Output Specifications

Model	AC Input	Data Speed	DC Output Voltage	Load		Regulation <sup>1</sup>	
				Min.	Max. <sup>2</sup>	Line	Load
POE60U-1BTE-R	3 Wire C14	1G	56V	10mA	1.07A	+56VDC +1V/-3V (57-53VDC)	
POE60U-1BT6-R <sup>3</sup>	3 Wire C14	1G	56V	10mA	1.07A	+56VDC +1V/-3V (57-53VDC)	
POE60U-1BT-2-R	3 Wire C14	2.5G	56V	10mA	1.07A	+56VDC +1V/-3V (57-53VDC)	
POE60U-1BT-5-R	3 Wire C14	5G	56V	10mA	1.07A	+56VDC +1V/-3V (57-53VDC)	
POE60U-1BT-X-R	3 Wire C14	10G	56V	10mA	1.07A	+56VDC +1V/-3V (57-53VDC)	

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 535mA on data pairs 3,6(+) 1, 2(-) and spare pairs 4,5(+) 7,8(-)
3. No shielded RJ45 connector

**INPUT:****AC Input Voltage Range**

90VAC to 264VAC

**AC Input Voltage Rating**

100 to 240VAC

**AC Input Current**

2.0A (RMS) max for 90VAC

1.2A (RMS) max for 240VAC

**Leakage Current**

3.5mA max @ 264VAC/50Hz

**AC Inrush Current**

40A (RMS) max for 115VAC

80A (RMS) max for 230VAC

**OUTPUT:****Total Output Power**

60W @40°C

30W @50°C

**Output Ripple**

100mV max @25°C, 100-240VAC

**Efficiency<sup>2</sup>**

DOE Level VI

COC V5 Tier 2

**Hold-up Time**

10mS min. 120VAC/60Hz max load

**ENVIRONMENTAL:****Temperature**

Operation -10°C to +40°C for 60W  
 >40°C to +50°C for 30W

Non-operation -20°C to +65°C

Humidity 5 to 90%

**EMC**

Complies with FCC Class B

Complies with EN55032 Class B

**Isolation Test**

Primary to Secondary: 4242VDC for 1min

10mA

Primary to Field Ground: 2121VDC for 1min,

10mA

**Immunity**

ESD: IEC61000-4-2. Level 3

RS: IEC61000-4-3. Level 3

EFT: IEC61000-4-4. Level 2

Surge: IEC61000-4-5. Level 4

CS: IEC61000-4-6. Level 2

Voltage Dips IEC61000-4-11

Harmonic: IEC61000-3-2 Class A

**Insulation Resistance**

Primary to Secondary: &gt;10M OHM 500VDC

Primary to Field Ground: &gt;10M OHM

500VDC

**FEATURES:****Over Current Protection**

Output #1(OUT) &lt;650mA

Output #2(OUT) &lt;650mA

Output #1 and #2 Combined(OUT) &lt;1300mA

**Over Voltage Protection**

Meets UL requirements

**Short Circuit Protection**

Output can be shorted permanently without damage

**LED Indicators**

No LED - Power failure

Amber LED short/slow Blinking - POE power ready

but no connection

Green LED solid - POE output power good

Amber/Green LED alternate blinking -

POE detection failure

Amber LED long/fast blinking - POE

output over power or short

Green LED Blink – Invalid load condition

**Notes:**

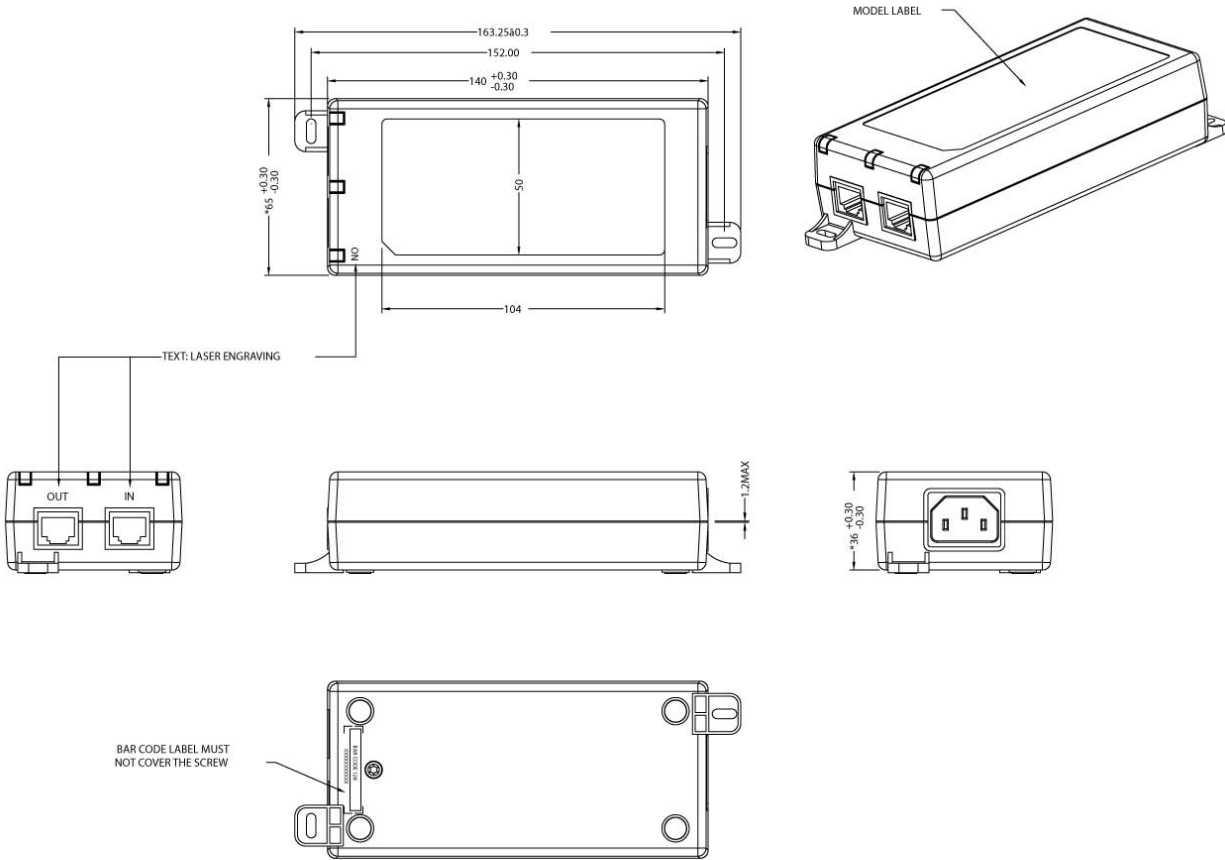
1. The characteristics defined are at ambient temperature of 25°C unless otherwise specified
2. Efficiency is measured after 30 minutes burn-in

**Input Connector**  
IEC320 inlet 3 pin

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

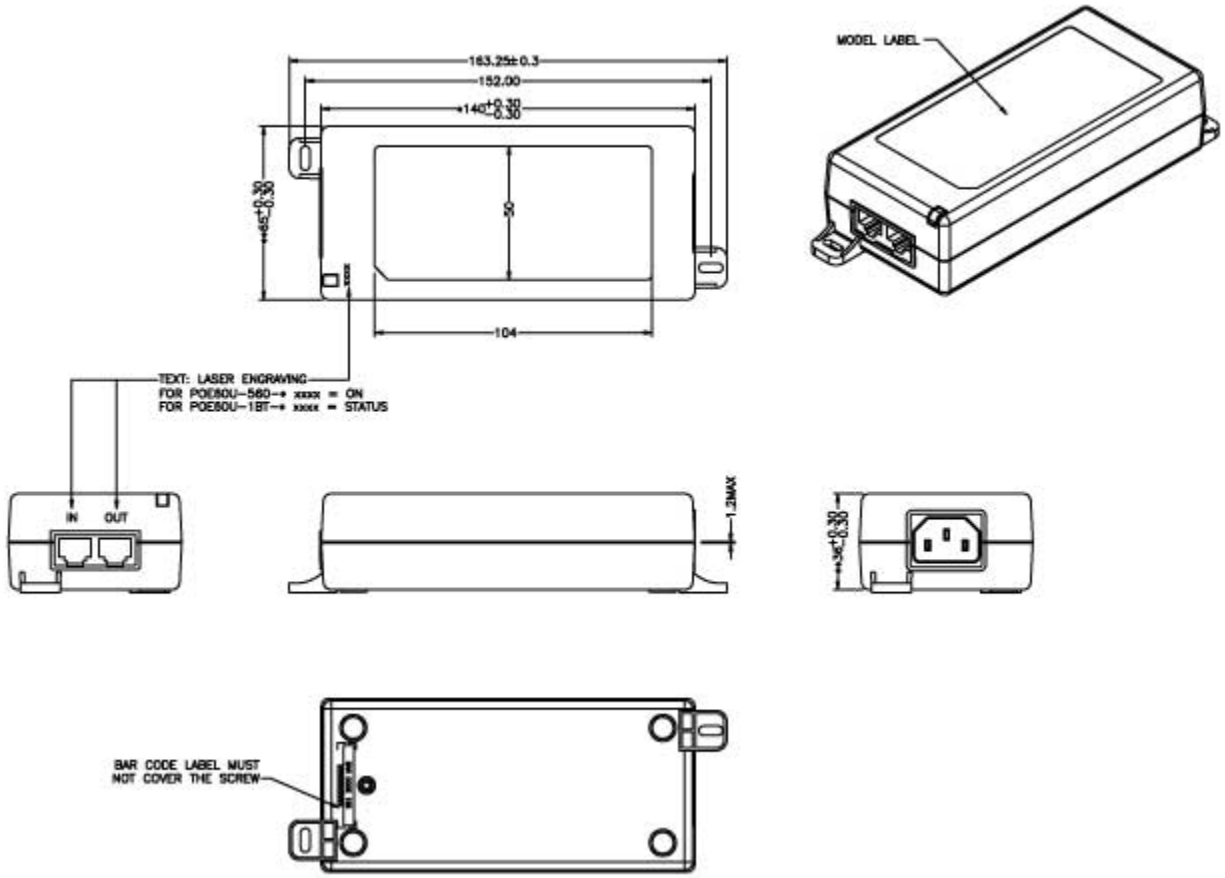
**Dimension Diagram Unit: mm**

**POE60U-1BTE-R, POE60U-1BT6-R**



Dimension Diagram Unit: mm

POE60U-1BT-2-R, POE60U-1BT-5-R, POE60U-1BT-X-R



**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.