#### POE60U-BTBx660-R



#### 60W High Surge IEEE802.3bt PoE Injector



#### **Features**

- Meets 6kV L-L, 6kV L-PE Surge; 6kV Output Surge
- Compliant with IEEE802.3bt Standard
- Compliant with Phihong Proprietary 12.5K Detection
- 4 Pair Powering +3, 6, 4, 5 / -1, 2, 7, 8
- Multi-Gigabit Data Rates (1G, 2.5G, 5G, 10G) Models
- DoE Level VI Compliant
- Non-Vented Case
- Over-Current, Over-Voltage & Short Circuit Protections
- Limited Power Source (LPS)
- 1-year Warranty

#### **Applications**

- Pan-Tilt-Zoom IP Cameras
- Wireless Network Access Points
- Bluetooth® Access
   Points
- Point of Sales
- Information Kiosks

#### Description

Phihong POE60U-BTBx660-R series 60W high surge Power-over-Ethernet (PoE) injectors are reliable solutions designed to meet the demands of modern networking infrastructure. The POE60U-BTBx660-R series is IEEE802.3bt compliant and backwards compatible with IEEE802.3at and IEEE802.3af powered devices. These injectors are available in data speeds from 1G to 10G and serve as a vital component in PoE systems, offering robust power delivery alongside data transmission over Ethernet cables — meeting 6kV Line-to-Line, 6kV L-to-Earth IEC 61000-4-5 surge and 6kV Output surge.

Phihong, a reputable manufacturer known for its high-quality power solutions, has integrated safety features such as short-circuit, over-current and over-voltage protections into the injectors, providing peace of mind for user applications.

### POE60U-BTBx660-R



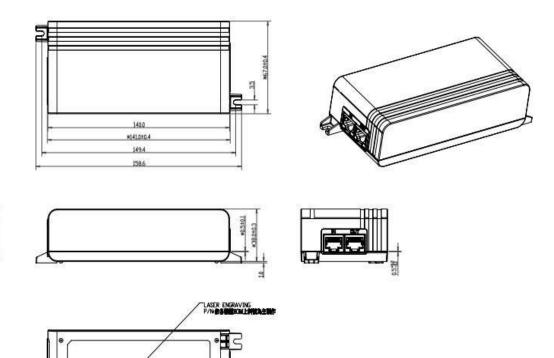
### Specifications<sup>1</sup>

Model		POE60U- BTB1660-R <sup>2</sup>	POE60U- BTB2660-R <sup>2</sup>	POE60U- BTB5660-R	POE60U- BTBX660-R <sup>2</sup>	
	DC Output Voltage	56.0V				
Output	Output Current Minimum Load	10mA				
	Max Current	Output #1: 535mA (3,6+/1,2-); Output #2: 535mA (4,5+/7,8-); Output #1 and #2 Combined: 1:07A				
	Output Power	60W				
	Data Speed	1G	2.5G	5G	10G	
	Regulation <sup>3</sup>	53-57VDC				
	Ripple & Noise P-P(max) <sup>4</sup>	200mV				
Input	AC Input Voltage Range	90 to 264VAC				
	AC Input Frequency	47 to 63Hz				
	Input Current	1.5 (RMS) max for 90VAC				
	No Load Power Consumption at 115VAC Input	≤ 0.21W				
	No Load Power Consumption at 230VAC Input	≤ 0.21W				
	115VAC Average Efficiency <sup>5</sup>	≥ 88%				
	230VAC Average Efficiency <sup>5</sup>		≥ :	88%		
	Leakage Current	3.5mA max at 264VAC/50Hz				
Protections	Over-Voltage	Non-latching				
	Over-Current	Output #1 <650mA; Output #2 <650mA; Output #1 and #2 <1300mA; Output #1 and #2 (12.5K) <1500mA				
	Short Circuit	The output can be shorted permanently. Non-latching				
	Surge	IEC 61000-4-5: 6kV L-L; 6kV L-PE; 6kV Output				
Environmental	Operating Temperature	-20°C to +40°C				
	Non-Operating Temperature	-20°C to +70°C				
	Operating Humidity	10 to 90% RH max				
	Dielectric Withstand (HI-POT)	Primary to Secondary: 4242VDC for 1 min, 10mA Primary to Earth Ground: 2121VDC for 1 min, 10mA				
	Insulation Resistance	>10M ohm for 500VDC				
	Standards	cULus 62368-1, CAN/CSA C22.2 No.62368-1, IEC 62368-1, BSM				
Safety and EMC Standards (Designed to meet)	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32 Class B Conducted and Radiated				
	Harmonic Current Emissions	IEC 61000-3-2				
	Voltage Fluctuations & Flicker		IEC 61000-3-3			
	Immunity	EN 55035/CISPR 35: IEC 61000-4-2 (Contact: ±8KV, Air: ±15KV) IEC 61000-4-3 (3V), IEC 61000-4-4 (1kV Input/0.5kV Output), IEC 61000-4-5 (6kV L-L/6kV L-PE, 6kV Output Surge ), IEC 61000-4-6 (3V), IEC 61000-4-11				
Mechanical	Dimensions(L x W x H) / Weight	140mm (5.12in) x 67.0mm (2.64in) x 38.0mm (1.49in) / 270g				
	Input Connector	IEC320 C14				
	Output Connector	Shielded RJ45 +3, 6, 4, 5 / -1, 2, 7, 8				
	LED Indications	Solid Green: Connection ON, Blink Red (short, slow): Awaiting Valid Connection, Blink Red (long, fast): Faulty Condition (Over Current or Shorted), Blink Red & Green: Detection is Invalid				
Notes	<ol> <li>The specifications defined are at ambient temperature of 25°C, unless otherwise specified.</li> <li>Special order model. Minimum order quantity applies.</li> <li>Voltage to be measured within 5cm of the RJ45 output connector.</li> <li>Measured within 2 inches of RJ45 with by-pass capacitors 0.1uF/10uF at output connector terminal &amp; oscilloscope set at 20MHz.</li> <li>Efficiency is measured after 30 minutes burn-in.</li> </ol>					

### POE60U-BTBx660-R



### Outline Drawing (mm)





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

#### **MODELS**

POE60U- BTB1660-R POE60U- BTB2660-R POE60U- BTB5660-R POE60U- BTBX660-R

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

### **C14 Line Cords**



## Sold Separately

Model		AC30UNA-R	AC30UEU-R	AC30UUK-R
	Plug Type	North America NEMA 5-15P	Continental Europe CEE 7VIII	United Kingdom BS 1363
	Connector	IEC320 C13	IEC320 C13	IEC320 C13
	Wire Size	18 AWG	0.75mm	1.0mm
Specifications	Temperature	60°C	60°C	70 °C
	Amperage Rating	10A	6A	10A
	Voltage Rating	125V	250V	250V
	Cable Length	1830mm	1830mm	2500mm
Safety Appro	ovals	CSA; UL	CEBEC; DEMKO; DVE; FIMKO; GOST; IMQ; KEMA; NEMKO; NF; OVE; SEMKO	BSI; Safety Mark
Photos				

### **C14 Line Cords**



### Outline Drawing (mm)

