

POE90U-BTAX460-R



90W High Surge IEEE802.3bt PoE Injector



Features

- Meets 4kV L-L and 4kV L-PE Surge; 6kV Output Surge
- DoE Level VI Compliant
- Compliant with IEEE802.3bt Standard
- 10G Data Speed
- Non-Vented Case
- Full Protection Short-Circuit, Over-Current and Over-Voltage Protections
- Limited Power Source (LPS)
- 1-year Warranty

Applications

- Pan-Tilt-Zoom Cameras with Heaters
- Information Kiosks
- Thin Clients
- Wireless Access Devices
- Point of Sales

Description

Phihong POE90U-BTAX460-R 90W high surge IEEE802.3bt compliant Power-over-Ethernet (PoE) injector is a reliable solution designed to meet the demands of modern networking infrastructure. This injector serves as a vital component in PoE systems, offering robust power delivery alongside data transmission over Ethernet cables — meeting 4kV Line-to-Line, 4kV L-to-Earth IEC61000-4-5 surge and 6kV Output surge.

The POE90U-BTAX460-R supports up to 10G data speed, is IEEE802.3bt compliant and is backwards compatible with IEEE802.3at and IEEE802.3af devices. Phihong, a reputable manufacturer known for its high-quality power solutions, has integrated safeguards such as short circuit, over-current and over-voltage protections, providing peace of mind for user applications.

POE90U-BTAX460-R

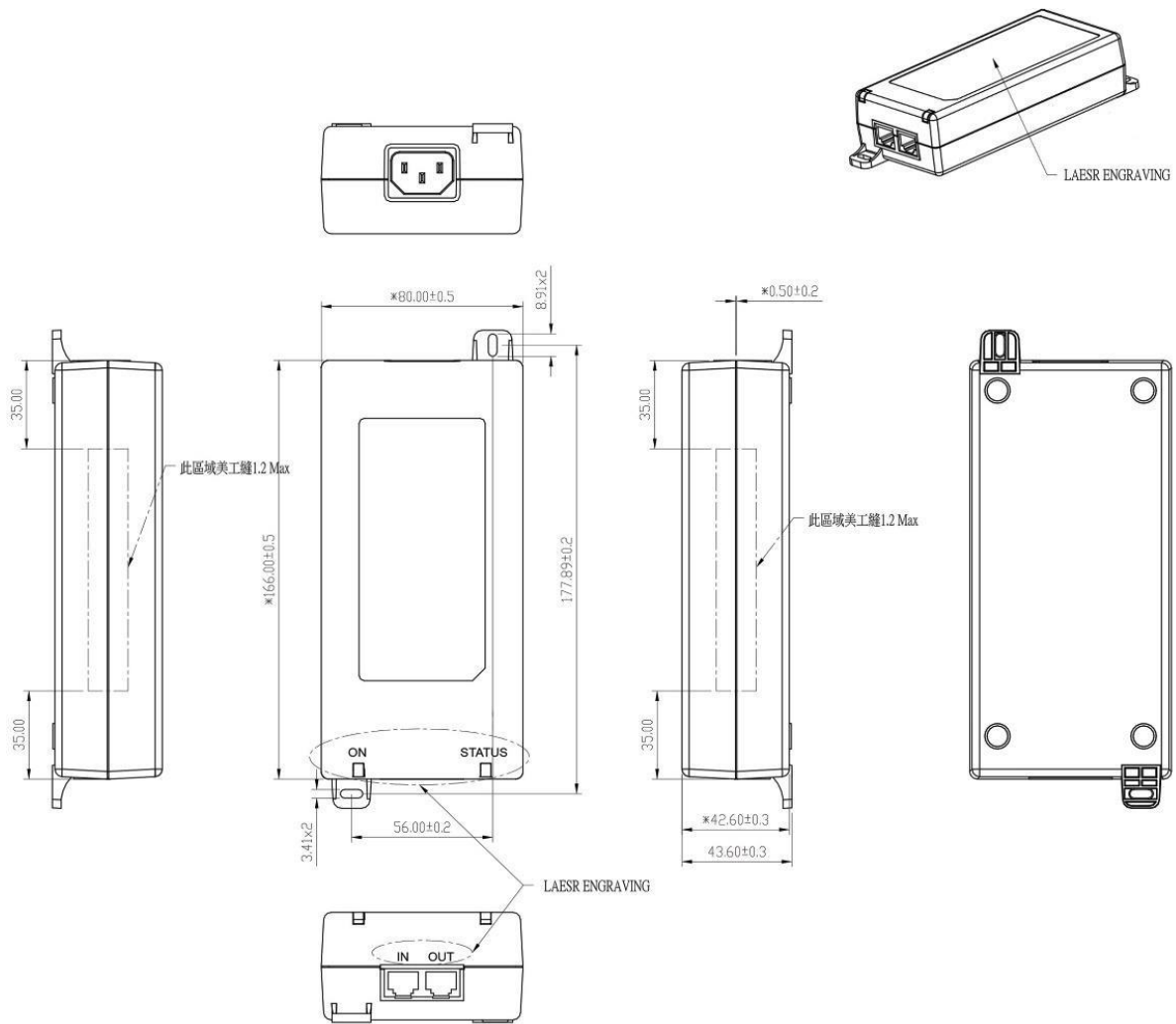
Specifications¹

Model		POE90U-BTA5460-R ²	POE90U-BTAX460-R
Output	DC Output Voltage	56.0V	
	Output Current Minimum Load	10mA	
	Max Current	1.6A	
	Output Power	90W	
	Data Speed	5G	10G
	Regulation ³	54-57V	
	Ripple & Noise P-P(max) ⁴	200mV	
Input	AC Input Voltage Range	90 to 264VAC	
	AC Input Frequency	47 to 63Hz	
	Input Current	2.5 Arms maximum at 90VAC @Max. load	
	No Load Power Consumption at 115VAC Input	≤ 0.210W	
	No Load Power Consumption at 230VAC Input	≤ 0.150W	
	115VAC Average Efficiency ⁵	≥ 88%	
	230VAC Average Efficiency ⁵	≥ 89%	
	230VAC 10% Load Efficiency ⁵	≥ 79%	
	Leakage Current	3.5mA max at 264VAC/50Hz	
Protections	Over-Voltage	Non-latching	
	Over-Current	≤ 2000mA Max for 25K; ≤ 2400mA Max for 12.5K	
	Short Circuit	The output can be shorted permanently. Non-latching	
	Surge	IEC61000-4-5: 4KV L-L, 4KV 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	
Safety and EMC Standards	Dielectric Withstand (HI-POT)	4242VDC for 1 minute, 10mA	
	Insulation Resistance	Primary to secondary: >10M Ohm 500VDC	
	Standards	cULus 62368-1, CAN/CSA C22.2 No.62368-1, IEC 62368-1	
	EMI Emissions	EN 55032/CISPR 32 Class B, FCC Part 15 Class B and CAN ICES-003(B)/NMB-003(B) Issue 7 Class B Conducted & 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 (4kV L-L/4kV L-PE, 6kV Output), IEC 61000-4-6 (3V), IEC 61000-4-11	
Mechanical	Dimensions (L x W x H)	166mm (6.53in) x 80.0mm (3.14in) x 44.0mm (1.72in)	
	Input Connector	IEC320 C14	
	Output Connector	Combined Pairs +3, 6, 4, 5 / -1, 2, 7, 8	
	LED Indications	LED #1 Blue Solid – Power Good “ON” LED # 2 (Bi-Color Amber/Green). LED Amber: Flash short and slow – No Connection; Flash long and fast – Fault Condition; Flash with Green – Invalid Connection/Detection. LED Green: Solid – Valid Connection/Detection and load; Flash – Invalid load condition (<10mA)	
Notes	1. The specifications defined are at ambient temperature of 25°C, unless otherwise specified. 2. Special order model. Minimum order quantity applies. 3. Voltage to be measured within 5cm of the output RJ45 connector. 4. Measured within 2 inches of RJ45 with by-pass capacitors 0/1uf/10uF at output connector terminal & oscilloscope set at 20MHz. 5. Efficiency is measured after 30 minutes burn-in.		

POE90U-BTAX460-R



Outline Drawing (mm)





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

MODEL

POE90U-BTAX460-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



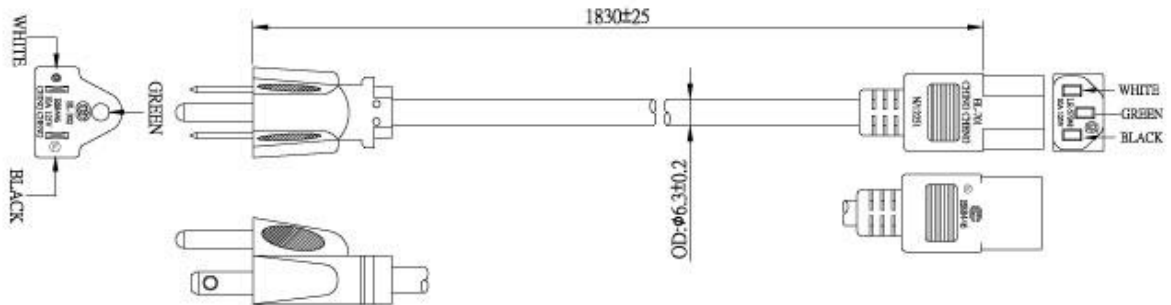
Sold Separately

Model		AC30UNA-R	AC30UEU-R	AC30UUK-R
Specifications	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
	Temperature	60°C	60°C	70 °C
	Amperage Rating	10A	6A	10A
	Voltage Rating	125V	250V	250V
	Cable Length	1830mm	1830mm	2500mm
Safety Approvals		CSA; UL	CEBEC; DEMKO; DVE; FIMKO; GOST; IMQ; KEMA; NEMKO; NF; OVE; SEMKO	BSI; Safety Mark
Photos				

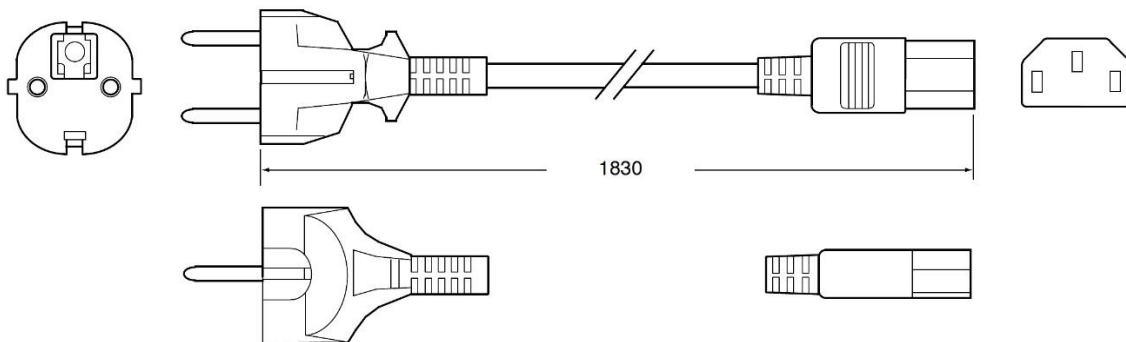
C14 Line Cords

Outline Drawing (mm)

AC30UNA-R



AC30UEU-R



AC30UUK-R

