



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



## Features

- Compliant with IEEE802.3bt Standard
- Compliant with Phihong Proprietary 12.5K Detection
- 4 Pair Powering +3, 4, 5, 6 / -1, 2, 7, 8
- Non-Vented Case
- Multi-Gigabit Data Rates (1G, 2.5G, 5G, 10G) models available
- DoE Level VI Compliant
- ErP/Ecodesign Directive 2009/125/EC – Regulation EU 2019/1782 Compliant
- Full Protection OCP, OVP
- Limited Power Source (LPS)
- 1-year Warranty

## Applications

- IP telephones
- Wireless Network Access Points
- Security Cameras
- Bluetooth® Access Points
- WiMAX® Access Points



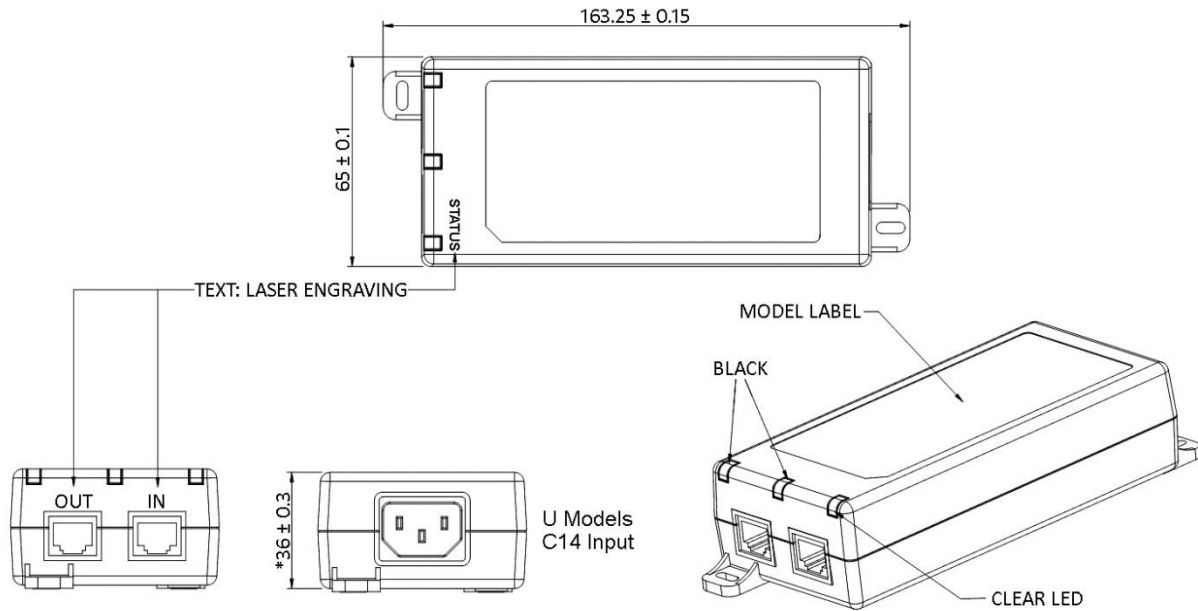
# POE60U-1BT Specifications<sup>2</sup>

Model		POE60U-1BTE-R	POE60U-1BT-2-R	POE60U-1BT-5-R	POE60U-1BT-X-R
Output	DC Output Voltage	56.0V			
	Max Current	1.07A			
	Output Power	60W @40°C; 30W @50°C			
	Data Speed	1G	2.5G	5G	10G
	Regulation	53-57VDC			
	Ripple & Noise P-P(max) <sup>3</sup>	200mV			
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	2.0A (RMS) max for 90VAC, 1.2A (RMS) max for 240VAC			
	In-rush Current	40A for 115VAC, max load; 80A for 230VAC, max load			
	No Load Power Consumption at 115VAC & 230VAC Input	≤ 0.21W			
	115VAC & 230VAC Average Efficiency <sup>4</sup>	≥ 88%			
	230VAC 10% Load Efficiency <sup>4</sup>	≥ 79%			
	Leakage Current	3.5mA max at 264VAC/50Hz			
Protections	Over-Voltage	<120V			
	Over-Current	Output #1 <650mA; Output #2 <650mA; Output #1 and #2 <1300mA; Output #1 and #2 <1500mA for 12.5K detection			
	Short Circuit	The output can be shorted permanently without damage			
Environmental	Operating Temperature	-10°C to +60°C			
	Non-Operating Temperature	-20° to +65°C			
	Operating Humidity	5 to 90% RH max			
Safety Approvals and EMC	Dielectric Withstand (HI-POT)	Primary to Secondary: 4242VDC for 1 min, 10mA Primary to Earth Ground: 2121VDC for 1 min, 10mA			
	Insulation Resistance	Primary to Secondary: >10M ohm for 500VDC Primary to Earth Ground: >10M OHM 500VDC			
	Standards	cULus 62368-1, IEC 62368-1, AS/NZS 62368.1, CCC, KC, PSB, NOM, BSMI <sup>1</sup>			
	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: ±6kV, Air: ±8kV), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (± 2kV L-PE), IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11			
Mechanical	Dimensions (L x W x H)	163.25mm (6.43in) x 65.0mm (2.56in) x 36.0mm (1.42in)			
	Weight	300g			
	Input Connector	IEC320 C14			
	Output Connection	+pins 3, 4, 5, 6 / -pins 1, 2, 7, 8			
	Data In/Output Connector	Shielded RJ45			
	LED Indicators	Solid Green – Power good and output "ON" Blink Amber (short, slow) – Waiting for Valid Connection/Detection 4.5.3 Blink Amber (long, fast) – Fault Condition (Over Current or Shorted) 4.5.4 Blink Amber & Green – Detection is Invalid			
Notes	<ol style="list-style-type: none"> <li>BSMI on POE60U-1BT-2-R, POE60U-1BT-5-R and POE60U-1BT-X-R.</li> <li>The specifications defined are at ambient temperature of 25°C, unless otherwise specified.</li> <li>20MHz bandwidth frequency oscilloscope, add a 0.1µF multilayer Cap. and Low ESR Electrolytic Cap. (10µF) at output connector terminals (nominal line voltage, full load).</li> <li>Efficiency is measured after 30 minutes burn-in.</li> </ol>				



# Outline Drawing

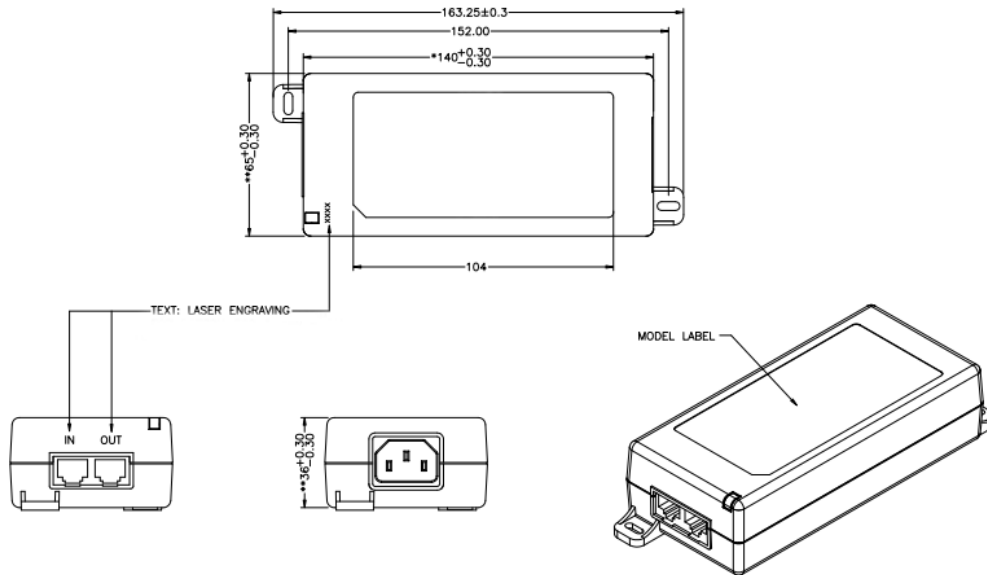
## POE60U-1BTE-R





# Outline Drawing

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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*This device complies with/The devices in this product series comply 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.*



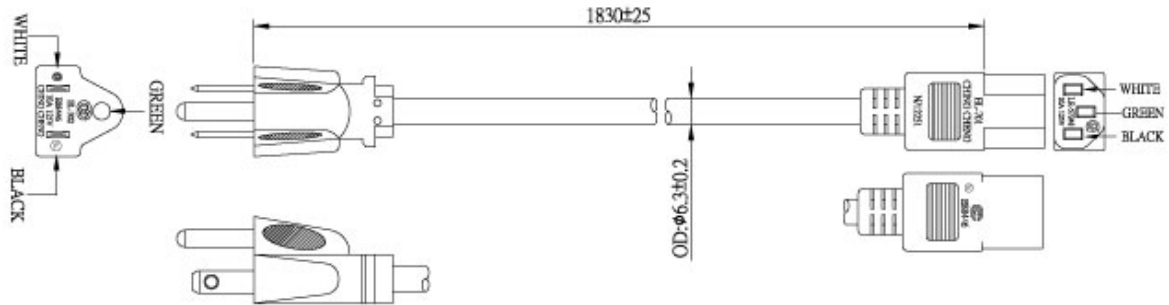
# C14 Line Cords - Sold Separately

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	70°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				

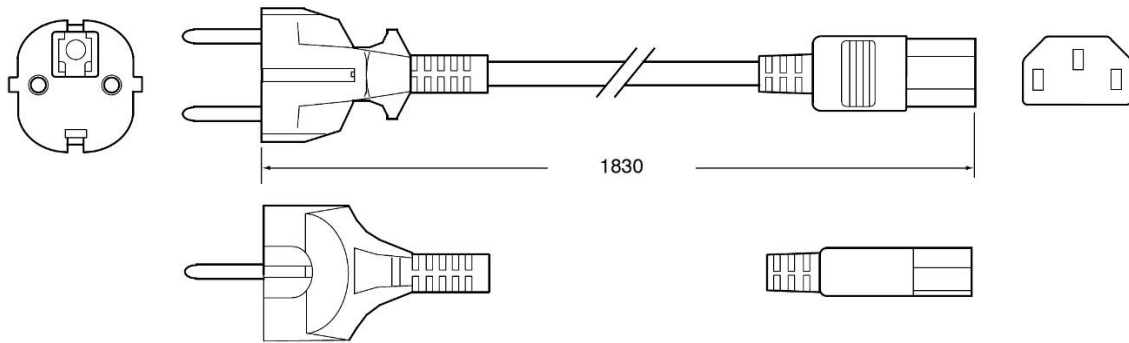


# C14 Line Cords Outline Drawings

## AC30UNA-R



## AC30UEU-R



## AC30UUK-R

