



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, 6, 4, 5/ -1, 2, 7, 8
- Non-Vented Case
- Multi-Gigabit Data Rates (2.5G, 5G, 10G)
- DoE Level VI Compliant
- ErP/Ecodesign Directive 2009/125/EC – Regulation EU 2019/1782 Compliant
- CoC Version 5 Tier 2 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 Specifications¹

Model		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	2.5G	5G	10G
	Regulation	53-57VDC		
	Ripple & Noise P-P(max) ²	200mV		
Input	AC Input Voltage Range	90 to 264VAC		
	AC Input Frequency	47 to 63Hz		
	Input Current	0.2A (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 Input	0.071W	0.076W	0.068W
	No Load Power Consumption at 230VAC Input	0.114W	0.118W	0.115W
	115VAC Average Efficiency ³	88.17%	89.78%	89.55%
	230VAC Average Efficiency ³	89.84%	89.04%	90.45%
	230VAC 10% Load Efficiency ³	84.43%	83.01%	85.39%
Leakage Current	3.5mA max at 264VAC/50Hz			
Protections	Over-Voltage	<120V		
	Over-Current	Output #1 <650mA; Output #2 <650mA; Output #1 and #2 <1500mA		
	Short Circuit	The output can be shorted permanently.		
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 60950-1, cULus 62368-1, IEC 60950-1, IEC 62368-1		
	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 55024/CISPR 24: IEC 61000-4-2 (Contact: ±6KV, Air: ±8KV), IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5 (± 2kV), 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	500g		
	Input Connector	IEC320 C14		
	Output Connection	+pins 3,6,4,5/ -pins 1,2,7,8		
	Data In/Output Connector	Shielded RJ45	Shielded RJ45	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">1. The specifications defined are at ambient temperature of 25°C, unless otherwise specified.2. 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).3. Efficiency is measured after 30 minutes burn-in.
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Outline Drawing

