

### 60W Single Port Multi-Gig Power-over-Ethernet Passive Power Injector



### **Features**

- 4 Pair Powering +3, 6, 4, 5/ -1, 2, 7, 8
- Non-Vented Case
- Multi-Gigabit Data Rates (1G, 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<sup>®</sup> Access Points
- WiMAX<sup>®</sup> Access Points





### POE60U-560 Specifications<sup>1</sup>

	Model	POE60U-560-R <sup>2</sup>	POE60U-560E-R <sup>3</sup>	POE60U-560-2-R <sup>3</sup>	
	DC Output Voltage		56.0V		
Output	Max Current <sup>₄</sup>	1.07A			
	Output Power	59.92W			
	Data Speed	1G	1G	2.5G	
	<b>Regulation⁵</b>	53-57VDC			
	Ripple & Noise P-P(max) <sup>6</sup>	200mV			
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	0.2A (RMS) max for 900VAC, 1.2A (RMS) max for 240VAC			
	No Load Power Consumption at 115VAC Input	0.082W	0.082W	0.093W	
	No Load Power Consumption at 230VAC Input	0.110W	0.111W	0.132W	
	115VAC Average Efficiency <sup>7</sup>	90.12%	90.12%	90.12%	
	230VAC Average Efficiency <sup>7</sup>	93.54%	92.53%	94.01%	
	230VAC 10% Load Efficiency <sup>7</sup>	90.01%	89.64%	91.57%	
	Leakage Current	3.5mA max at 254VAC/50Hz			
	Over-Voltage	<120V, Latching			
Protections	Over-Current	≤2A max			
	Short Circuit	Non-latching. Auto-recover.			
Environmental	Operating Temperature	-10°C to +40°C			
	Non-Operating Temperature	-20º to +65ºC			
	Operating Humidity	5 to 90% RH max			
	Dielectric Withstand (HI-POT)	Primary to Secondary: 4242VDC for 1 min, 10mA			
	Insulation Resistance	Primary to Secondary: >10M ohm for 500VDC			
	Standards	cULus 60950-1, cULus 62368-1, IEC 60950-1, IEC 62368-1			
Safety Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32 Class B Conducted and Radiated			
ЕМС	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)	140.0mm (5.50in) x 65.0mm (2.55in) x 36.0mm (1.42in)			
	Weight	250g			
	Input Connector	IEC320 C14			
	Output Connection	+pins 3,6,4,5/ -pins 1,2,7,8			
	Data In/Output Connector	Unshielded RJ45	Shielded RJ45	Shielded RJ45	
	LED Indicators	Green Solid – Power good and output "ON"			

	Model	POE60U-560-5-R <sup>3</sup>	POE60U-560-X-R <sup>3</sup>		
	DC Output Voltage	56.0V			
Output	Max Current⁴	1.07A			
	Output Power	59.92W			
	Data Speed	5G	10G		
	<b>Regulation</b> ⁵	53-57VDC			
	Ripple & Noise P-P(max) <sup>6</sup>	200mV			
	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	0.2A (RMS) max for 900VAC, 1.2A (RMS) max for 240VAC			
	No Load Power Consumption at 115VAC Input	0.093W	0.094W		
Input	No Load Power Consumption at 230VAC Input	0.136W	0.126W		
	115VAC Average Efficiency <sup>7</sup>	89.28%	90.10%		
	230VAC Average Efficiency <sup>7</sup>	92.74%	91.35%		
	230VAC 10% Load Efficiency <sup>7</sup>	84.12%	87.40%		
	Leakage Current	3.5mA max at 254VAC/50Hz			
Protections	Over-Voltage	<120V, Latching			
	Over-Current	≤2A max			
	Short Circuit	Non-latching. Auto-recover.			
Environmental	Operating Temperature	-10°C to +40°C			
	Non-Operating Temperature	-20º to +65ºC			
	Operating Humidity	5 to 90% RH max			
	Dielectric Withstand (HI-POT)	Primary to Secondary: 4242VDC for 1 min, 10mA			
	Insulation Resistance	Primary to Secondary: >10M ohm for 500VDC			
	Standards	cULus 60950-1, cULus 62368-1, IEC 60950-1, IEC 62368-1			
Safety Approvals and	EMI Emissions	FCC Part 15 Class B, CAN ICES-003(B)/NMB-003(B), EN 55032/CISPR 32 Class B Conducted and Radiated			
EMC	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			
	Dimensions (L x W x H)	140.0mm (5.50in) x 65.0mm (2.55in) x 36.0mm (1.42in)			
	Weight	250g			
Maghanisal	Input Connector	IEC320 C14			
Mechanical	Output Connection	+pins 3,6,4,5/ -pins 1,2,7,8			
	Data In/Output Connector	Shielded RJ45 Shielded RJ45			
	LED Indicators	Green Solid – Power good and output "ON"			
Notes	<ol> <li>The specifications defined are at ambient temperature of 25°C, unless otherwise specified.</li> <li>Not recommended for new designs (NRND). Minimum order quantities apply.</li> <li>Built-to-Order. Minimum order quantities apply.</li> <li>Combined output on data pairs and spare pairs. Otherwise 535mA on data pairs 3,6(+) 1, 2(-) and spare pairs 4,5(+) 7,8(-)</li> <li>Voltage to be measured within 5cm of RJ45 output connector</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>				



## POE60U-560 Outline Drawing



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

Phihong USA Corporation 47800 Fremont Boulevard Fremont, CA 94538 Telephone: (510) 445-0100 www.phihong.com

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.



# 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	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			23	
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C14 Line Cords Outline Drawings

