



## **Features**

- DOE Level VI Efficiency Compliant
- ErP/Ecodesign Directive 2009/125/EC Regulation EU 2019/1782 Compliant
- Over Voltage, Short Circuit and Over Current Protection
- Non-Vented/Spill-Proof Case
- Class B EMI

## **Applications**

- Networking
- Peripherals
- Consumer Electronics



# PPL250U Series Specifications<sup>1</sup>

	Model	PPL250U-120L6	PPL250U-190L6	PPL250U-240L6	PPL250U-480L6	
Output	DC Output Voltage	12.0V	19.0V	24.0V	48.0V	
	Max Current	20.0A	13.2A	10.4A	5.2A	
	Output Power	240.0W	250.8W	249.6W	249.6W	
	Regulation	± 5%	± 5%	± 5%	± 5%	
	Ripple & Noise P-P(max) <sup>2</sup>	150mV	190mV	240mV	480mV	
	AC Input Voltage Range	90 to 264VAC				
Input	AC Input Frequency	47 to 63Hz				
	Input Current	3.3A max				
	Inrush Current	120A max., 230VAC (Cold start at ambient 25°C, full load)				
	No Load Power Consumption at 115VAC Input	0.154W	0.128W	0.134W	0.145W	
	No Load Power Consumption at 230VAC Input	0.154W	0.136W	0.164W	0.163W	
	115VAC Average Efficiency <sup>3</sup>	91.2%	92.6%	91.5%	92.0%	
	230VAC Average Efficiency <sup>3</sup>	92.2%	91.9%	92.7%	93.3%	
	230VAC 10% Load Efficiency <sup>3</sup>	86.9%	89.4%	88.4%	91.8%	
	Leakage Current		<3.5	mA		
	Over-Voltage	150% max	150% max	150% max	150% max	
Protection	Short Circuit	Shutdown				
	Over-Temperature	Latch				
	Over-Current	150% max	150% max	150% max	150% max	
	Operating Temperature	0°C to +40°C				
Environmental	Non-Operating Temperature	-20° to +80°C				
	Operating Humidity	20 to +80%				
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA				
	Insulation Resistance	Primary to Secondary: 10M ohm for 500VDC				
Cafatri	Standards	cULus 62368-1, 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, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11				
	Dimensions (L x W x H)	204mm (8.03in) x 94mm (3.70in) x 43.5mm (1.71in)				
	Weight	1040g				
	Cable Length	1200mm				
Mechanical	DC Cable Type	16AWG*6C	16AWG*4C	16AWG*4C	18AWG*4C	
	DC Output Connector	6-Position Molex housing 39-01-2060 with terminals 39-00-077 Mates with Molex housing 39-01-2061 with terminals 39-00-0081				
	DC Plug Pin Assignment	12V: P1(+); P2(+); P3(+); P4(-); P5(-); P6(+) 19V, 24V, 48V, 56V: P1(+); P3(+); P4(-); P6(-)				
	Input Connector	IEC 60320 C14				

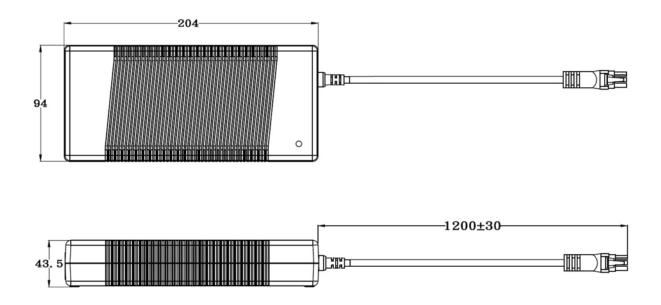
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	Model	PPL250U-560L6			
	DC Output Voltage	56.0V			
Output	Max Current	4.48A			
	Output Power	250.9W			
	Regulation	± 5%			
	Ripple & Noise P-P(max) <sup>2</sup>	560mV			
	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	3.3A max			
	Inrush Current	120A max., 230VAC (Cold start at ambient 25°C, full load)			
	No Load Power Consumption at 115VAC Input	0.143W			
Input	No Load Power Consumption at 230VAC Input	0.172W			
	115VAC Average Efficiency <sup>3</sup>	92.4%			
	230VAC Average Efficiency <sup>3</sup>	93.7%			
	230VAC 10% Load Efficiency <sup>3</sup>	90.9%			
	Leakage Current	<3.5mA			
	Over-Voltage	150% max			
Protection	Short Circuit	Shutdown			
Protection	Over-Temperature	Latch			
	Over-Current	150% max			
	Operating Temperature	0°C to +40°C			
Environmental	Non-Operating Temperature	-20° to +80°C			
	Operating Humidity	20 to +80%			
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA			
	Insulation Resistance	Primary to Secondary: 10M ohm for 500VDC			
Cofety	Standards	cULus 62368-1, 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, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11			
	Dimensions (L x W x H)	204mm (8.03in) x 94mm (3.70in) x 43.5mm (1.71in)			
	Weight	1040g			
	Cable Length	1200mm			
Mechanical	DC Cable Type	18AWG*4C			
	DC Output Connector	6-Position Molex housing 39-01-2060 with terminals 39-00-077 Mates with Molex housing 39-01-2061 with terminals 39-00-0081			
	DC Plug Pin Assignment	12V: P1(+); P2(+); P3(+); P4(-); P5(-); P6(+) 19V, 24V, 48V, 56V: P1(+); P3(+); P4(-); P6(-)			
	Input Connector	IEC 60320 C14			
Notes	<ol> <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>				

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# PPL250U Outline Drawing



FRONT-VIEW

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

PPL250U-120L6 PPL250U-190L6 PPL250U-240L6 PPL250U-480L6 PPL250U-560L6

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NOTE: This model has/The models in this product 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.



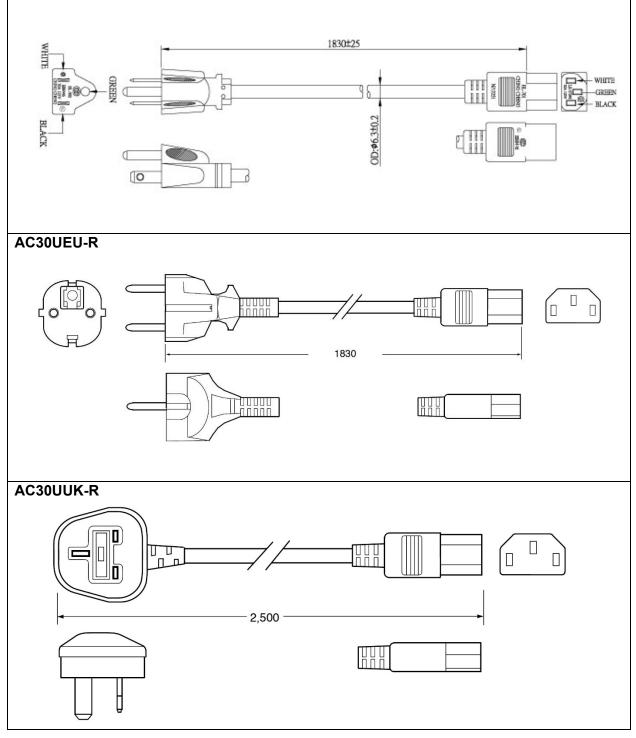
## PPL250U Line Cords Sold Separately

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
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## PPL250U Line Cords Outline Drawings

AC30UNA-R



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