

160W Desktop C6 Adapter Series



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



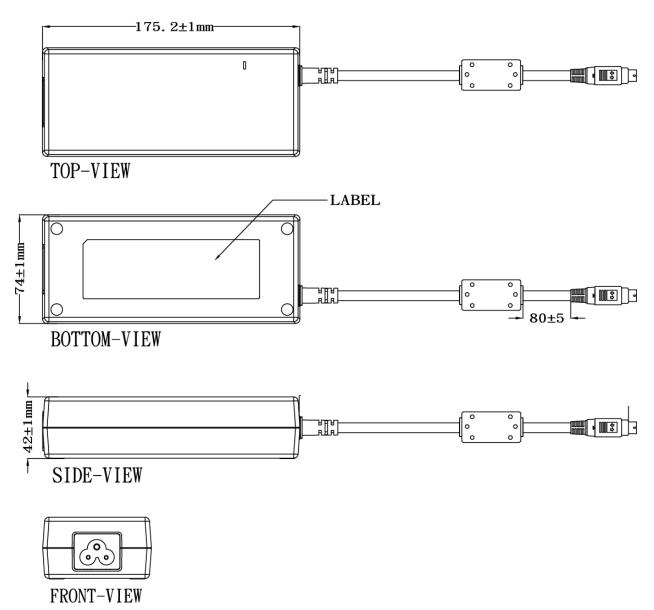
PPL160M Series Specifications¹

	Model	PPL160M-120	PPL160M-150	PPL160M-190	PPL160M-240
Output	DC Output Voltage	12.0V	15.0V	19.0V	24.0V
	Max Current	12.5A	10.0A	8.4A	6.6A
	Output Power	150.0W	150.0W	159.6W	158.4W
	Regulation	± 5%	± 5%	± 5%	± 5%
	Ripple & Noise P-P(max) ²	120mV	150mV	190mV	240mV
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	2.2A max			
	Inrush Current	140A max., 230VAC (cold start at 25 °C, full load)			
	No Load Power Consumption at 115VAC Input	≤ 0.210W	≤ 0.210W	≤ 0.210W	≤ 0.210W
	No Load Power Consumption at 230VAC Input	≤ 0.210W	≤ 0.210W	≤ 0.210W	≤ 0.210W
	115VAC Average Efficiency ³	≥ 88.0%	≥ 88.0%	≥ 88.0%	≥ 88.0%
	230VAC Average Efficiency ³	≥ 88.0%	≥ 88.0%	≥ 88.0%	≥ 88.0%
	230VAC 10% Load Efficiency ³	≥ 79.0%	≥ 79.0%	≥ 79.0%	≥ 79.0%
	Leakage Current	<3.5mA			
	Over-Voltage	150% max	150% max	150% max	150% max
Protection	Short Circuit	Shutdown			
	Over-Current	150% max	150% max	150% max	150% max
Environmental	Operating Temperature	0°C to +40°C			
	Non-Operating Temperature	-20° to +80°C			
	Operating Humidity	20 to +80%			
	Dielectric Withstand (HI-POT)	Primary to Secondary: 3000VAC for 1min, 10mA			
Safety Approvals and	Insulation Resistance	Primary to Secondary: 10M ohm for 500VDC			
	Standards	cULus 62368-1, 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			
EMC	Harmonic Current Emissions	IEC 61000-3-2			
	Voltage Fluctuations & Flicker	IEC 61000-3-3			
	Immunity	EN 55035/CISPR 35: 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)	175.2mm (6.90in) x 74mm (2.91in) x 42mm (1.65in)			
Mechanical	Weight	700g			
	Cable Length	1200mm 1500mm			
	DC Cable Type	16AWG*4C	16AWG*4C	16AWG	16AWG*4C
	DC Output Connector	4 pin DIN			
	DC Plug Pin Assignment	P1(+); P2(+); P3(-); P4(-)			
	Input Connector	IEC 60320 C6			

	Model	PPL160U-480	PPL160U-560	
Output	DC Output Voltage	48.0V	56.0V	
	Max Current	3.3A	2.86A	
	Output Power	158.4W	160.2W	
	Regulation	48.0V	56.0V	
	Ripple & Noise P-P(max) ²	480mV	560mV	
	AC Input Voltage Range	90 to 264VAC		
	AC Input Frequency	47 to 63Hz		
	Input Current	1.4A max		
	Inrush Current	140A max., 230VAC (cold start at 25 °C, full load)		
	No Load Power Consumption at 115VAC Input	≤ 0.210W	≤ 0.210W	
Input	No Load Power Consumption at 230VAC Input	≤ 0.210W	≤ 0.210W	
	115VAC Average Efficiency ³	≥ 88.0%	≥ 88.0%	
	230VAC Average Efficiency ³	≥ 88.0%	≥ 88.0%	
	230VAC 10% Load Efficiency ³	≥ 79.0%	≥ 79.0%	
	Leakage Current	<3.51	mA	
	Over-Voltage	150% max	150% max	
Protection	Short Circuit	Shutdown		
	Over-Current	150% max	150% max	
Environmental	Operating Temperature	0°C to +40°C		
	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		
	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 55035/CISPR 35: 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)	175.2mm (6.90in) x 74mm (2.91in) x 42mm (1.65in)		
Mechanical	Weight	700g		
	Cable Length	1500mm		
	DC Cable Type	18 AWG*4C	18 AWG*4C	
	DC Output Connector	4 pin DIN		
	DC Plug Pin Assignment	P1(+); P2(+); P3(-); P4(-)		
	Input Connector	IEC 60320 C6		
Notes	 The specifications defined are at ambient temperature of 25C, unless otherwise specified. 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). Efficiency is measured after 30 minutes burn-in. 			



PPL160M 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

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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.



PPL160M Line Cords Sold Separately

Model		AC30MNA-R	
	Plug Type	North America NEMA 5-15P	
	Connector	IEC320 C6	
	Wire Size	18 AWG	
Specifications	Temperature	60°C	
	Amperage Rating	7A	
	Voltage Rating	125V	
	Cable Length	1829mm	
Safety Appro	ovals	CSA; UL	
Photos			



PPL160M Line Cords Outline Drawings

