



65W Desktop C14 Adapter Series



Features

- DOE Level VI Efficiency Compliant
- ErP/Ecodesign Directive 2009/125/EC – Regulation EU 2019/1782 Compliant
- EU CoC Tier 2 Compliant
- Over Voltage, Short Circuit and Over Current Protection
- Non-Vented/Spill-Proof Case
- Class B EMI
- Isolated Output (Earth ground & DC Return Connect Through Isolation Capacitor).
Consult Phihong for Earth Ground tied to DC Return Version

Applications

- Networking
- Peripherals
- Consumer Electronics

*NRCan approval for PPL65U-120, PPL65U-150, PPL65U-180, PPL65U-190, PPL65U-240, PPL65U-480, PPL65U-560 models only





PPL65U Series Specifications¹

Model		PPL65U-120 ¹	PPL65U-135	PPL65U-150 ¹	PPL65U-160
Output	DC Output Voltage	12.0V	13.5V	15.0V	16.0V
	Max Current	5.0A	4.82A	4.34A	4.07A
	Output Power	60.0W	65.1W	65.1W	65.12W
	Regulation	± 5%	± 5%	± 5%	± 5%
	Ripple & Noise P-P(max) ²	120mV	135mV	150mV	160mV
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	1.4A max			
	Inrush Current	80A max., 240VAC (Cold Start at ambient 25°C, full load)			
	No Load Power Consumption at 115VAC Input	0.031W	0.04W	0.037W	0.05W
	No Load Power Consumption at 230VAC Input	0.034W	0.06W	0.031W	0.06W
	115VAC Average Efficiency ³	88.4%	89.1%	89.5%	89.4%
	230VAC Average Efficiency ³	89.1%	90.0%	90.3%	89.8%
	230VAC 10% Load Efficiency ³	87.4%	86.6%	87.7%	86.8%
	Leakage Current	<3.5mA			
Protection	Over-Voltage	150% max	150% max	150% max	150% max
	Short Circuit	Auto-recover after short-circuit fault is removed			
	Over-Current	180% max	180% max	180% max	180% max
Environmental	Operating Temperature	0°C to +40°C			
	Non-Operating Temperature	-20° to +80°C			
	Operating Humidity	20 to +80%			
Safety Approvals and EMC	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			
	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, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11			
Mechanical	Dimensions (L x W x H)	115mm (4.53in) x 53mm (2.09in) x 38mm (1.50in)			
	Weight	310g			
	Cable Length	1500mm			
	DC Cable Type	16 AWG	16 AWG	16 AWG	16 AWG
	DC Output Connector	2.1mm x 5.5mm x 10.0mm			
	DC Plug Pin Assignment	Inner (V+) / Outer GND (V-)			
	Input Connector	IEC 60320 C14			

Model		PPL65U-180*	PPL65U-190*	PPL65U-200	PPL65U-240*
Output	DC Output Voltage	18.0V	19.0V	20.0V	24.0V
	Max Current	3.62A	3.43A	3.25A	2.71A
	Output Power	65.2W	65.2W	65.0W	65.04W
	Regulation	± 5%	± 5%	± 5%	± 5%
	Ripple & Noise P-P(max) ²	180mV	190mV	200mV	240mV
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	1.4A max			
	Inrush Current	80A max., 240VAC (Cold Start at ambient 25°C, full load)			
	No Load Power Consumption at 115VAC Input	0.033W	0.035W	0.05W	0.044W
	No Load Power Consumption at 230VAC Input	0.033W	0.034W	0.07W	0.043W
	115VAC Average Efficiency ³	88.7%	88.5%	88.9%	89.7%
	230VAC Average Efficiency ³	89.6%	89.4%	89.4%	90.3%
	230VAC 10% Load Efficiency ³	87.6%	87.4%	87.4%	87.4%
	Leakage Current	<3.5mA			
Protection	Over-Voltage	150% max	150% max	150% max	150% max
	Short Circuit	Auto-recover after short-circuit fault is removed			
	Over-Current	180% max	180% max	180% max	180% max
Environmental	Operating Temperature	0°C to +40°C			
	Non-Operating Temperature	-20° to +80°C			
	Operating Humidity	20 to +80%			
Safety Approvals and EMC	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			
	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, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11			
Mechanical	Dimensions (L x W x H)	115mm (4.53in) x 53mm (2.09in) x 38mm (1.50in)			
	Weight	310g			
	Cable Length	1500mm			
	DC Cable Type	18 AWG	18 AWG	18 AWG	18 AWG
	DC Output Connector	2.1mm x 5.5mm x 10.0mm			
	DC Plug Pin Assignment	Inner (V+) / Outer GND (V-)			
	Input Connector	IEC 60320 C14			

Model		PPL65U-300	PPL65U-320	PPL65U-480*	PPL65U-560*
Output	DC Output Voltage	30.0V	32.0V	48.0V	56.0V
	Max Current	2.17A	2.04A	1.36A	1.17A
	Output Power	65.1W	65.3W	65.3W	65.5W
	Regulation	± 5%	± 5%	± 5%	± 5%
	Ripple & Noise P-P(max) ²	300mV	320mV	480mV	560mV
Input	AC Input Voltage Range	90 to 264VAC			
	AC Input Frequency	47 to 63Hz			
	Input Current	1.4A max			
	Inrush Current	80A max., 240VAC (Cold Start at ambient 25°C, full load)			
	No Load Power Consumption at 115VAC Input	0.07W	0.07W	0.075W	0.091W
	No Load Power Consumption at 230VAC Input	0.08W	0.08W	0.071W	0.089W
	115VAC Average Efficiency ³	88.9%	89.2%	90.4%	90.7%
	230VAC Average Efficiency ³	89.5%	89.9%	91.1%	91.3%
	230VAC 10% Load Efficiency ³	87.2%	87.8%	87.4%	87.0%
	Leakage Current	<3.5mA			
Protection	Over-Voltage	150% max	150% max	150% max	150% max
	Short Circuit	Auto-recover after short-circuit fault is removed			
	Over-Current	180% max	180% max	180% max	180% max
Environmental	Operating Temperature	0°C to +40°C			
	Non-Operating Temperature	-20° to +80°C			
	Operating Humidity	20 to +80%			
Safety Approvals and EMC	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			
	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, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11			
Mechanical	Dimensions (L x W x H)	115mm (4.53in) x 53mm (2.09in) x 38mm (1.50in)			
	Weight	310g			
	Cable Length	1500mm			
	DC Cable Type	18 AWG	18 AWG	22 AWG	22 AWG
	DC Output Connector	2.1mm x 5.5mm x 10.0mm			
	DC Plug Pin Assignment	Inner (V+) / Outer GND (V-)			
	Input Connector	IEC 60320 C14			
Notes	<ol style="list-style-type: none"> 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. 				

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PPL65U Outline Drawing

