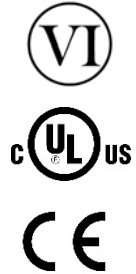




# 65W Desktop C14 Adapter Series



## 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

## Applications

- Networking
- Peripherals
- Consumer Electronics



# PPL65U Series Specifications<sup>1</sup>

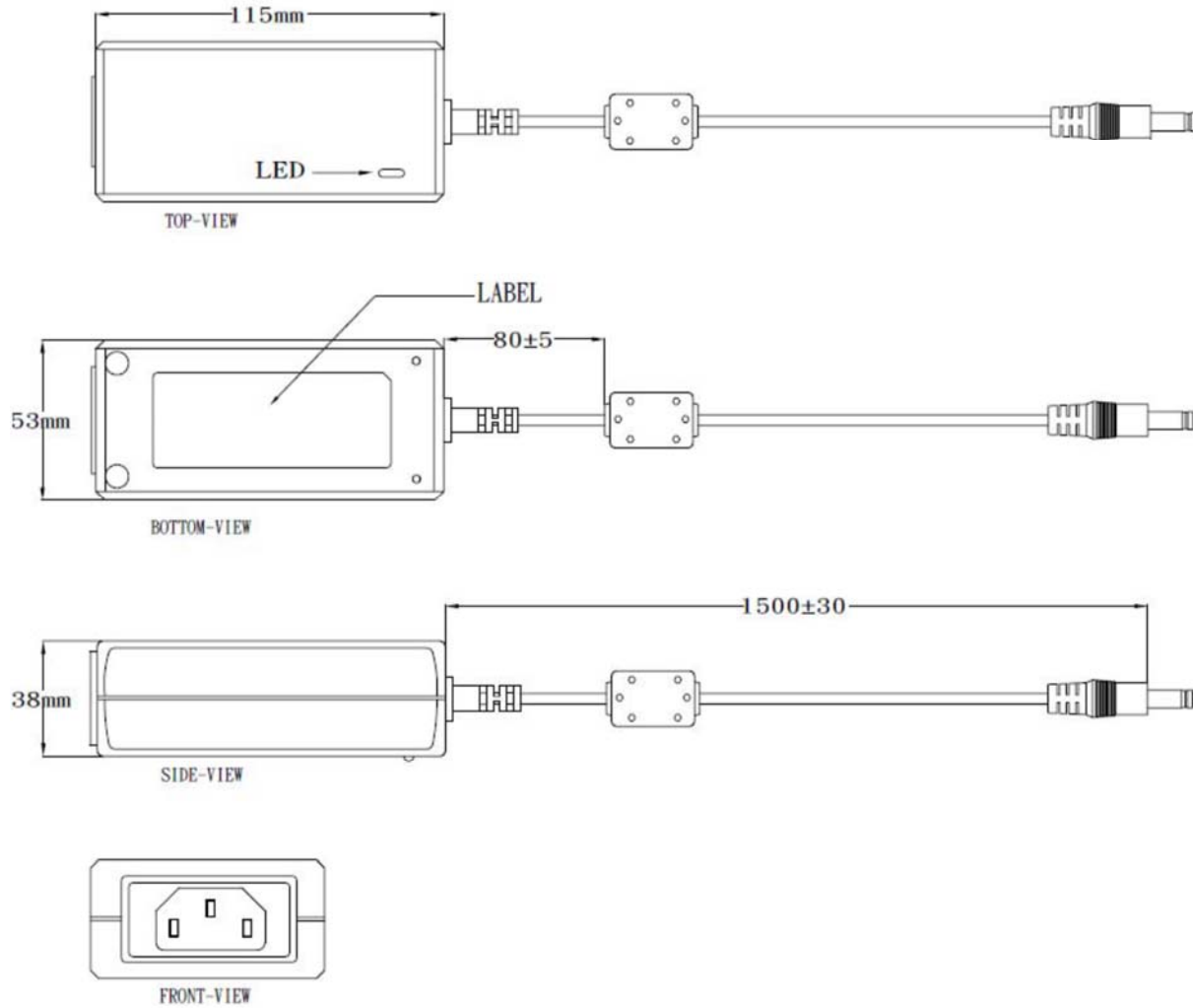
| Model                    |   | PPL65U-120  | PPL65U-135 | PPL65U-150 | PPL65U-160 |
|--------------------------|---|---|------------|------------|------------|
| Output                   | DC Output Voltage                         | 12.0V   | 13.5V      | 15.0V      | 16.0V      |
|                          | 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) <sup>2</sup>      | 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 <sup>3</sup>    | 88.4%   | 89.1%      | 89.5%      | 89.4%      |
|                          | 230VAC Average Efficiency <sup>3</sup>    | 89.1%   | 90.0%      | 90.3%      | 89.8%      |
|                          | 230VAC 10% Load Efficiency <sup>3</sup>   | 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) <sup>2</sup>      | 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 <sup>3</sup>    | 88.7%   | 88.5%      | 88.9%      | 89.7%      |
|                          | 230VAC Average Efficiency <sup>3</sup>    | 89.6%   | 89.4%      | 89.4%      | 90.3%      |
|                          | 230VAC 10% Load Efficiency <sup>3</sup>   | 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      | 30.0V      |
|                          | Max Current  | 2.17A   | 2.04A      | 1.36A      | 2.17A      |
|                          | Output Power   | 65.1W   | 65.3W      | 65.3W      | 65.1W      |
|                          | Regulation   | ± 5%  | ± 5%       | ± 5%       | ± 5%       |
|                          | Ripple & Noise P-P(max) <sup>2</sup>   | 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 <sup>3</sup>   | 88.9%   | 89.2%      | 90.4%      | 90.7%      |
|                          | 230VAC Average Efficiency <sup>3</sup>   | 89.5%   | 89.9%      | 91.1%      | 91.3%      |
|                          | 230VAC 10% Load Efficiency <sup>3</sup>  | 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"> <li>The specifications defined are at ambient temperature of 25C, 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> |   |            |            |            |



# PPL65U Outline Drawing



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

**PPL65U-120  
PPL65U-135  
PPL65U-150  
PPL65U-160  
PPL65U-180  
PPL65U-190  
PPL65U-200  
PPL65U-240  
PPL65U-300  
PPL65U-320  
PPL65U-480  
PPL65U-560**

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



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.



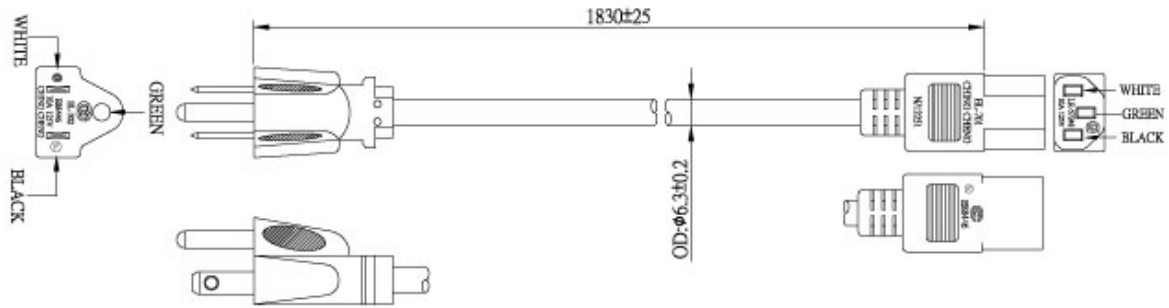
# PPL65U Line Cords Sold Separately

| Model            |                 | AC30UNA-R   | AC30UEU-R  | AC30UUK-R   |
|------------------|-----------------|---|--|---|
| Specifications   | Plug Type       | North America<br>NEMA 5-15P   | Continental Europe<br>CEE 7VIII  | United Kingdom<br>BS 1363   |
|                  | Connector       | IEC320 C13  | IEC320 C13   | IEC320 C13  |
|                  | Wire Size       | 18 AWG  | 0.75mm   | 1.0mm   |
|                  | 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;<br>DVE; FIMKO; GOST;<br>IMQ; KEMA;<br>NEMKO; NF; OVE;<br>SEMKO         | BSI; Safety Mark  |
| Photos           |                 |  |  |  |

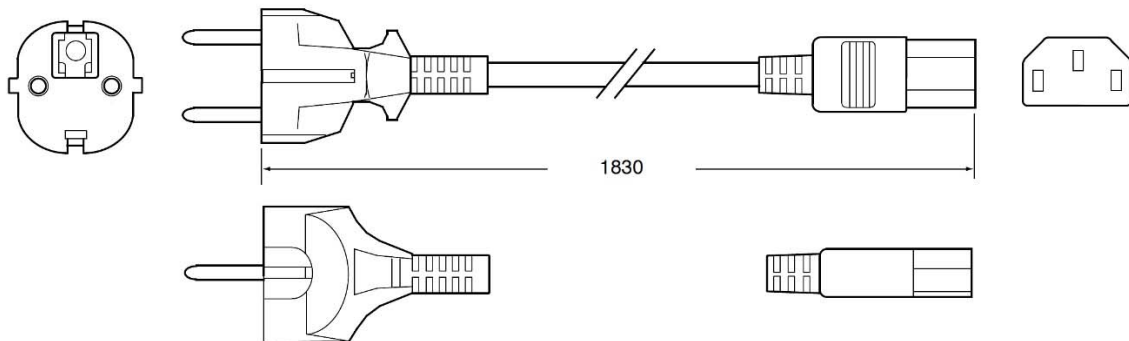


# PPL65U Line Cords Outline Drawings

## AC30UNA-R



## AC30UEU-R



## AC30UUK-R

