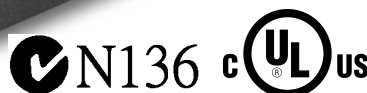




## 20-30 Watt Universal 3-Wire Input Adapter PSA31U Single Output Switching Power Supply



### Features

- Low Cost
- Class B EMI
- Non-vented/Spill-proof Case
- Low Profile Design

### Applications

- Portable Equipment
- Peripherals
- Networking
- Gaming Machines

### Safety Approvals

- cUL/UL
- CE
- C-Tick
- TUV
- SAA
- Meeting Cal. Prop. 65

### Mechanical Characteristics

- Length: 113mm (4.45in)
- Width: 61mm (2.4in)
- Height: 34mm (1.34in)
- Weight: 242g (8.5oz.)

### Output Specifications

| Model      | DC Output Voltage | Load |        | Ripple (1)<br>P-P (max.) | Regulation L-L |
|------------|-------------------|------|--------|--------------------------|----------------|
|            |                   | Min. | Max.   |                          |                |
| PSA31U-050 | +5V               | 0A   | 4A     | 50mV                     | ±5%            |
| PSA31U-090 | +9V               | 0A   | 2.2A   | 90mV                     | ±5%            |
| PSA31U-120 | +12V              | 0A   | 2.5A   | 120mV                    | ±5%            |
| PSA31U-150 | +15V              | 0A   | 2A     | 150mV                    | ±5%            |
| PSA31U-180 | +18V              | 0A   | 1.6A   | 180mV                    | ±5%            |
| PSA31U-240 | +24V              | 0A   | 1.25A  | 240mV                    | ±5%            |
| PSA31U-480 | +48V              | 0A   | 0.625A | 200mV                    | ±5%            |

(1) Measured with by-pass capacitors 0.1uf/10uf at output connector terminal and oscilloscope set at 20 Mhz.  
PhiHong is not responsible for any error and change. Please consult the factory and visit [www.phihong.com](http://www.phihong.com) for the most up-to-date specifications.

**INPUT:****AC Input Voltage Rating**

100 to 240VAC

**AC Input Voltage Range**

90 to 264VAC

**AC Input Frequency**

47 to 63Hz

**Input Current**

1A (rms) Max. @ 115VAC

0.5A (rms) Max. @ 230VAC

**Leakage Current**

3.5mA Max.

**Inrush Current (cold)**

30A for 115VAC at Max. load

60A for 230VAC at Max. load

(Cold start @ ambient 25°C)

**OUTPUT:****Efficiency**

70% typical

**Hold-up Time**

12mS Min. @ 120VAC and Max. load

**Over-voltage Protection**

&gt;130% over-voltage detection, adapter will be shut down

**Over-current Protection**

Output equipped with short circuit protection – auto restart

**Short Circuit Protection**

Output can be shorted without damage

**ENVIRONMENTAL:****Temperature**

Operation 0 to +45°C

Non-operation -30 to +85°C

**Humidity**

Operation 8 to 90%

**Emissions**

FCC Class B

EN55022 Class B

VCCI Class B

**Immunity**

61000-4-2 Level 4 ESD

61000-4-4 Level 2 FET/Burst

61000-4-5 (L-N) Level 2 Surge

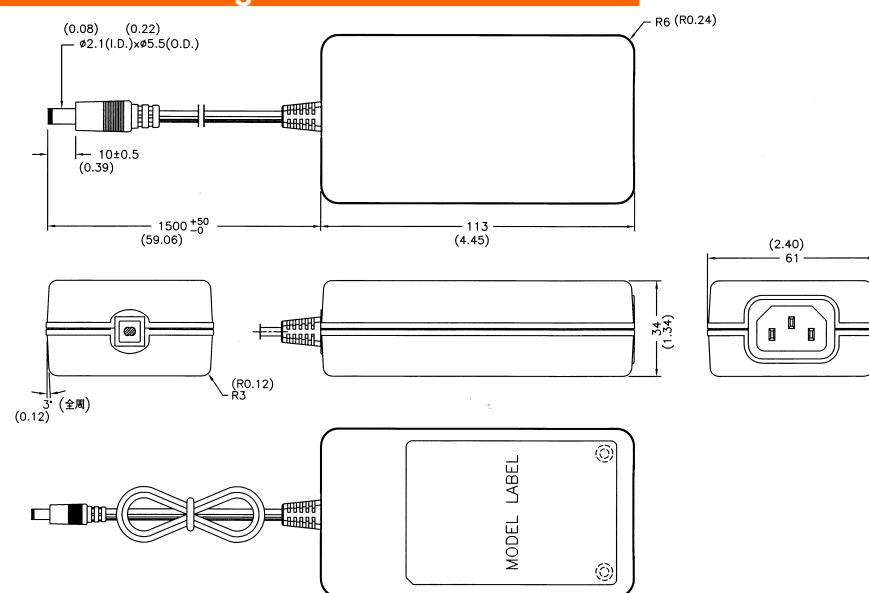
(L-G) Level 3

**Dielectric Withstand (Hi-pot) Test**

Primary to Secondary: 1500VAC for 1 minute, 10mA

**DC Output Connector**

2.1x5.5mm Center Positive Standard

**Dimension Diagram Unit: mm**

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