



## 50W Universal Input Adapter PSA-50U Single Output Switching Power Supply



### Features

- Low Cost
- Class B EMI
- No Load Power Consumption <1 Watt
- Power On LED
- Low Profile Design

### Applications

- Portable Equipment
- Peripherals
- Networking
- Gaming Machines

### Safety Compliance

- cUL 60950 3rd Edition
- CE
- TUV EN60950

### Mechanical Characteristics

Dimensions: • Length: 125.5±0.1mm (4.94in) • Height: 37.5±0.1mm (1.48in)  
• Width: 62.4±0.1mm (2.46in) • Weight: 0.35Kgs (0.77lbs)

### Output Specifications

Model	DC Output Voltage	Load		Ripple and Noise (1)	Regulation	
		Min.	Max.		Line	Load
PSA-50U-120(S)	+12V	0A	4.2A	120mV p-p	±2%	±5%

(1) Measured by using a 12 inch twisted pair terminated with a 10µf capacitor and a 0.1µf ceramic in parallel.

**INPUT**

**AC Input Voltage Rating**

100-240VAC

**AC Input Voltage Range**

90-264VAC

**AC Input Frequency**

47 to 63Hz

**Input Current**

1.5A(rms) 120VAC at max. Load  
0.75A(rms) 240VAC at max. Load

**Leakage Current**

3.5mA max. for 254VAC/50Hz

**Max. In-rush Current**

40A for 120VAC at max. Load  
80A for 240VAC at max. Load  
(Cold Start @ ambient 25°C)

**OUTPUT**

**Efficiency**

78% typ. @120VAC, 60Hz and max. Load

**Hold-up Time**

16m Sec. min. @120VAC, 60Hz and max. Load

**Overvoltage Protection**

16V max. @ min.Load

**Overcurrent Protection**

Output Equipment with Short Circuit Protection - Auto Restart

**ENVIRONMENTAL**

**Humidity**

Operation 5-80%

**Temperature**

Operation 0 to +40°C  
Non-Operation -20°C to +70°C

**EMI**

EN 55022 Class B  
FCC Class B

**Immunity**

EN61000 4-2: Air Level 3  
Contact Level 2  
EN61000 4-3: Level 2  
EN61000 4-4: Level 2  
EN61000 4-5: (L-G) Level 3  
(L-N) Level 2  
EN61000 4-6: Level 2  
EN61000 4-8:  
EN61000 4-11:  
EN61000 3-2:  
EN61000 3-3:

**Dielectric Withstand (Hipot)**

Primary to secondary: 3000VAC for 1 minute 10mA (without shielding board)  
Primary to F.G. 1500VAC for 1 minute 10mA (with shielding board)

**MTBF**

50K Hrs. min. at max. Load  
25°C ambient temperature

**Output Connector**

2.1 x 5.5 mm Center Positive Standard

**Dimension Diagram Unit: mm (inch)**

