

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







### WWW.PHIHONG.COM



## 160 Watt Low Cost Open Frame Power Supply **PSA160U 1U Switching Power Supply for IT Solutions**





#### **Features**

- 2" x 4" footprint
- Class B EMI

#### **Applications**

- IT Equipment
- Cable TV

#### **Safety Approvals**

• CE

## Mechanical Characteristics (1)

- Length: 101.6mm (4in)
- Width: 50.8mm (2in)

- Fits 1U height requirements
- OCP, OVP and Short Circuit Protection
- Networking Equipment
- Multimedia Equipment
- cUL/UL
- Height: 34.5mm (1.36in)
- Weight: 184-195g (6.49-6.88oz)

### **Output Specifications**

Model	DC Output	Load		Ripple	Regulation	Max
	Voltage	Min.	Max. (2)	P-P (max.)	Line Load	Power (3)
PSA160-210-R	12V	50mA	13.34A	200mV	±5%	159.6W
	12V-fan	50mA	0.4A		+30% -20%	4.8W
PSA160-212-R	24V	50mA	6.67A	270mV	±5%	160.1W
	12V-fan	50mA	0.4A		+30% -20%	4.8W
PSA160-218-R	48V	50mA	3.34A	400mV	±5%	160.3W
	12V-fan	50mA	0.4A		+30% -20%	4.8W
PSA160-216-R	56V	50mA	2.86A	480mV	±5%	160.2W
	12V-fan	50mA	0.4A		+30% -20%	4.8W

Notes (1) – 12V model has a weight of 184g, while all other models weigh 195g

Notes (2) – CFM forced air required, load drops to 56.3% of maximum without fan

Notes (3) – CFM forced air required for full power – 90W without fan

Phihong is not responsible for any error, and reserves the right to make changes without notice. Please visit our website at www.phihong.com for the most up-to-date specifications and contact information.

#### **PSA160 Characteristics**

#### **WWW.PHIHONG.COM**

**INPUT:** 

**AC Input Range** 

90 to 264VAC

**AC Input Rating** 

100 to 240VAC

**AC Input Frequency** 

47-63Hz

**AC Input Current** 

2.2A (RMS) maximum at 115VAC 1.2A (RMS) maximum at 230VAC

**AC Inrush Current** 

40A maximum at 115VAC

70A maximum at 230VAC

**Leakage Current** 

1mA maximum

**OUTPUT:** 

**Output Power** 

160W with fan

90W without fan

4.8W – Fan output

**Efficiency (at full power)** 

86-88% at 115VAC

88-90% at 230VAC

**ENVIRONMENTAL:** 

Operating temperature -20°C to 70°C

Storage Temperature -40°C to 85°C Humidity 20 to 90% RH

**Cooling** 

12.6 CFM for full power

w/ fan - 160W, 100% load at maximum 45°C

w/o fan - 90W, 56.3% load with 35°C

**EMC** 

EN55022 Class B

**EMI** 

EN61000-4-2

EN61000-4-3

EN61000-4-4

EN61000-4-5

EN61000-4-6

EN61000-4-100

EN61000-4-11

EN01000-4-11

EN61000-3-2 Class D

EN61000-3-3

**Dielectric Withstand (HI-POT) Test** 

Primary to Secondary: 3000VAC for 1 minute

Primary to Ground: 1500VAC for 1 minute

**Insulation Resistance:** 

Primary to Secondary: >7M ohm 500VDC

**Over-Voltage Protection** 

135% maximum

**Over Current Protection** 

105~150%, Auto recovery

**Short Circuit Protection** 

Output can be shorted permanently without

damage

**AC Input Connector** 

3 Pin 3.96mm, PIN 2 N.C.

**DC Output Connector** 

8 Pin 3.96mm

**Fan Output Connector** 

2 Pin 2.00mm

