

# PM-20 Series

## 20W Single Output AC/DC Module



### FEATURES

- Universal AC input / full range
- Low leakage current <200 $\mu$ A
- Short circuit, Overload & Overvoltage Protections
- Ultra-miniature size, light weight
- Cooling by free air convection
- Medical safety approved
- No load power consumption <0.75W
- 100% full load burn-in test
- High reliability

### ENVIRONMENTAL

Operating Temp: -20 to +60°C  
With de-rating

Storage Temp: -40 to +85°C

### SAFETY / EMC

UL60601-1, EN60601-1, IEC60601-1

EN55011, EN55022 Class B  
EN61000-3-2, -3  
EN61000-4-2, 3, 4, 5, 6, 8, 11  
ENV50204, EN55024, EN60601-1-2  
EN61204-3, medical level, criteria A

### ELECTRICAL SPECIFICATIONS

Model No.	PM-20-XX				
XX	3.3	5	12	15	24
AC Input	85 - 264VAC, 47-440Hz				
DC Input	120 - 370VDC				
DC Output					
Voltage	3.3V	5V	12V	15V	24V
Current	0-4.5A	0-4.4A	0-1.8A	0-1.4A	0-0.92A
Rated Power	14.85W	22W	21.6W	21W	22.08W
Ripple & noise (p-p)	80mV	80mV	150mV	150mV	240mV
Voltage Tolerance	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%
Line Regulation	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
Load Regulation	±1.5%	±1.5%	±1.0%	±1.0%	±0.5%

Overload	Above 105% of rated output power Hiccup mode. Recovers automatically when fault removed.				
Over Voltage	3.8-4.46	5.75-6.75	13.8-16.2	17.25-20.25	27.6-32.4
Dimensions	94(L) x 56(W) x 22.7(H)mm				
Weight	0.18Kg				

- Notes:**
1. All parameters *NOT* specially mentioned are measured at 230VAC input, rated load and 25°C ambient temperature.
  2. Ripple and noise are measured at 20MHz bandwidth by using a 12" twisted pair wire terminated with a 0.1 $\mu$ F and 47 $\mu$ F parallel capacitor.
  3. Tolerance includes set up tolerance, line and load regulation.
  4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC Directives.

Specifications subject to change without notice

### Safety Power Group Ltd

9, Farnborough Business Centre, Eelmoor Road, Farnborough, Hampshire. GU14 7QN

Tel: +44 (0) 1252 515565 Fax: +44 (0) 1252 546021

e-mail: sales@safety-power.com web: www.safety-power.com