

# AC/DC Industrial Type

## 160 Watts JPM160 Series

**XPiQ inc.**

Intelligent Design Quality Product



CE Marked LVD

•  
Low Cost

•  
High Reliability

•  
Power Factor Corrected

•  
Low Ripple Noise

•  
Adjustable Output

## Specification

### Input

AC Input Voltage	• 85-264 VAC
Input Frequency	• 47-63 Hz
DC Input Voltage	• 120-370 VDC
Power Factor	• 0.98 at 115 VAC, 0.96 at 230 VAC
Input Current	• 2.8 A max at 115 VAC
Inrush Current	• 40 A at 230 VAC cold start
Set-Up time	• 600 ms
Rise Time	• 30 ms

### Output

Output Voltage	• 3.3 V to 48 V single outputs
Output Power	• 160 Watts, see table
Output Voltage Adjustment	• +10%, -5%
Minimum Load	• 0 minimum load required
Tolerance	• $\pm 2\%$ max
Line Regulation	• $\pm 0.5\%$
Load Regulation	• $\pm 1\%$ max, see table
Ripple & Noise	• 100 mV typical, see table
Transient Response	• 5% max deviation, 500 $\mu$ s recovery time for a 50% load change
Temperature Coefficient	• 0.05%/°C
Hold Up Time	• 20 ms minimum at 230 VAC
Overvoltage Protection	• 110-135 %
Overcurrent Protection	• 130-170%, constant current auto restart
Overtemperature Protection	• Shutdown at +95 °C $\pm 5$ °C with auto recovery

### General

Efficiency	• See Table
MTBF	• 100,000 hrs min
Leakage Current	• <2 mA at 240 VAC
Isolation Voltage	• 3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Size	• 199 x 99 x 50mm
Weight	• 800 grams

### Environmental

Operating Temperature	• -10 °C to +60 °C (see derating curves)
Cooling	• Internal fan
Humidity	• 20-90% RH non condensing
Storage Temperature	• -20 °C to +85 °C
Shock & Vibration	• 10-500 Hz 2G 10 min/cycle for 60 min each axis

### EMC & Safety

Safety Approvals	• UL1950, CSA C22.2 No. 950 per cUL, EN60950, CE Mark LVD
EMI/EMC	• Meets EN61000-3-2, -3, ENV50204, CISPR22 (EN55022) Class B
Immunity & Surge	• Meets EN61000-4-2, -3, -4, -5, -6, -8, -11

## OUTPUT VOLTAGE & CURRENT RATINGS

**JPM160**

Output Voltage	Output Current	Output Power <sup>1</sup>	Ripple & Noise (Pk-Pk)	Load Regulation	Efficiency	Model Number <sup>2</sup>
3.3 V	32.0 A	105 W	100 mV	±1.0%	65%	JPM160PS03
5.0 V	32.0 A	160 W	100 mV	±1.0%	71%	<b>JPM160PS05</b>
7.5 V	21.0 A	160 W	100 mV	±1.0%	77%	JPM160PS07
12.0 V	13.4 A	160 W	100 mV	±0.5%	79%	<b>JPM160PS12</b>
13.5 V	11.8 A	160 W	100 mV	±0.5%	81%	JPM160PS13
15.0 V	10.6 A	160 W	100 mV	±0.5%	81%	<b>JPM160PS15</b>
24.0 V	6.7 A	160 W	150 mV	±0.5%	83%	JPM160PS24
27.0 V	6.0 A	160 W	150 mV	±0.5%	83%	JPM160PS27
48.0 V	3.3 A	160 W	250 mV	±0.5%	84%	<b>JPM160PS48</b>

### Notes

1. Max output increases to 125% of rated power when input voltage is between 180 VAC to 264 VAC and ambient temperature is less than +50 °C.
2. Part numbers in bold type are standard stock models, all others are build to order.
3. For optional Remote On/Off, add suffix "R" to part number. Example: JPM160PS03R On=3-15VDC, Off=<3VDC

## Mechanical Details - 160 Watts

Dimensions (mm)

TERMINAL Pin No. Assignment

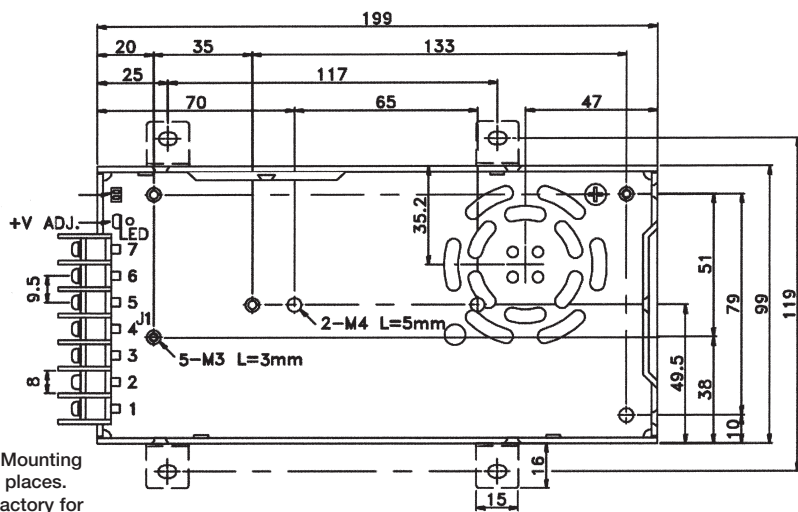
PIN 1,2: AC Input

Pin 3: FG  $\oplus$

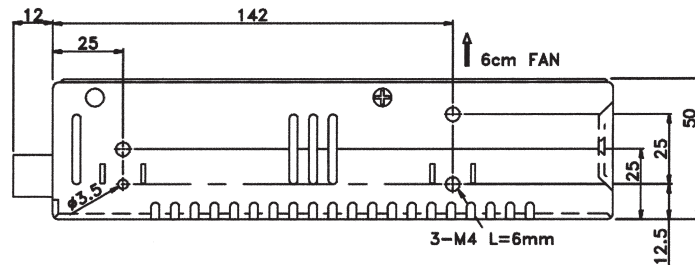
Pin 4,5: DC Output -V

Pin 6,7: DC Output +V

Weight: approx 800 grams



Optional Mounting Tabs in 4 places. Consult factory for details



## Derating Graph 160 Watts

