

AC/DC Industrial Type

120 Watts

JPM120 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 • 2.2 A max at 115 VAC
- Inrush Current • 40 A at 230 VAC cold start
- Start-Up time • 600 ms
- Rise Time • 30 ms

Output

- Output Voltage • 3.3 V to 48 V single outputs
- Output Power • 120 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 • 100mV typical, see table
- Transient Response • 5% max deviation, 500 μ 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 • 140-170%, constant current auto restart

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 50 mm
- Weight • 750 grams

Environmental

- Operating Temperature • -10 °C to +50 °C (see derating curves)
- Cooling • Convection cooled
- 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

Safety and EMC

- Safety • 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

JPM120

Output Voltage	Output Current	Output Power ⁽¹⁾	Ripple & Noise (Pk-Pk)	Load Regulation	Efficiency	Model Number ^(2,3)
3.3 V	24.0 A	79 W	100 mV	±1.0%	67%	JPM120PS03
5.0 V	24.0 A	120 W	100 mV	±1.0%	75%	JPM120PS05
7.5 V	16.0 A	120 W	100 mV	±1.0%	79%	JPM120PS07
12.0 V	10.0 A	120 W	100 mV	±0.5%	80%	JPM120PS12
13.5 V	8.9 A	120 W	100 mV	±0.5%	80%	JPM120PS13
15.0 V	8.0 A	120 W	100 mV	±0.5%	81%	JPM120PS15
24.0 V	5.0 A	120 W	150 mV	±0.5%	83%	JPM120PS24
27.0 V	4.4 A	120 W	150 mV	±0.5%	84%	JPM120PS27
48.0 V	2.5 A	120 W	250 mV	±0.5 %	84%	JPM120PS48

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 40°C convection cooled or 47°C with 18°C FM airflow.
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: JPM120PS03R On=3~15VDC, Off=<3VDC

Mechanical Details - 120 Watts

Dimensions (mm)

TERMINAL Pin No. Assignment

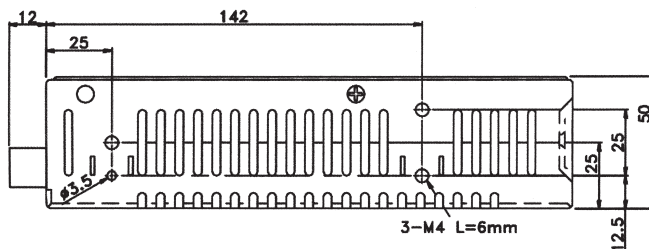
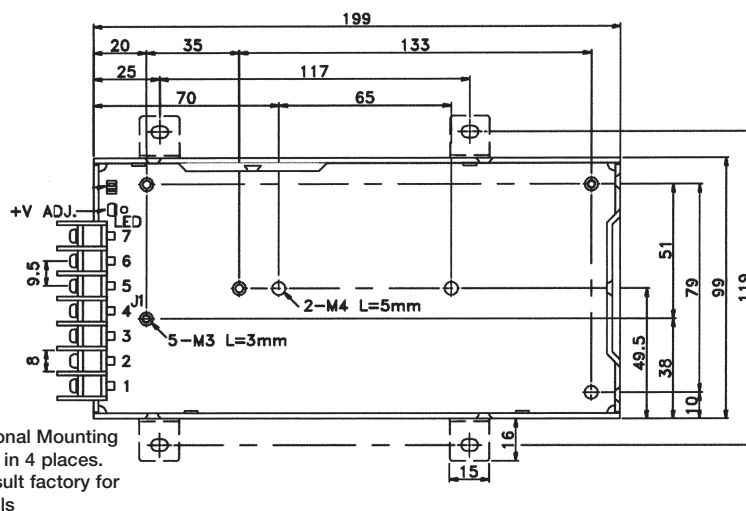
PIN 1,2: AC Input

Pin 3: FG \oplus

Pin 4,5: DC Output -V

Pin 6,7: DC Output +V

Weight: approx 750 grams



Derating Graph 120 Watts

