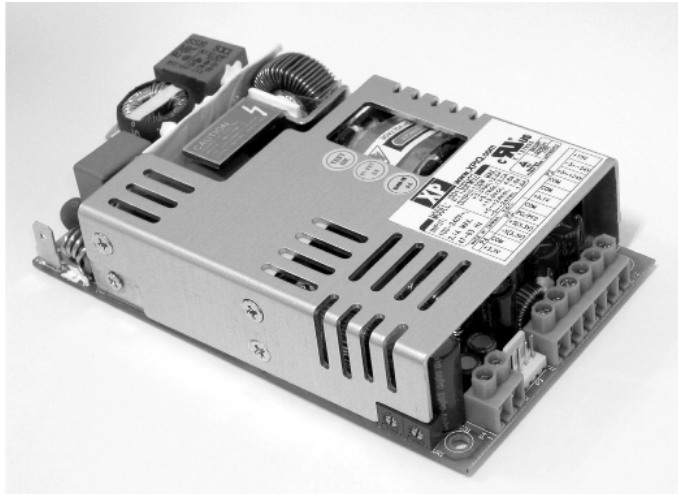


AC/DC Open Frame

130 Watts JPP130 Series

XPiQ inc.

Intelligent Design Quality Product



- High Power Density
- Small Footprint
- Up to Five DC Outputs
- Wide Adjustment on 2 Outputs
- Short Circuit Protection
- Power Fail Detect Signal
- Active PFC - Meets EN61000-3-2, -3

Specification

Input

- AC Input Voltage • 90-264 VAC (120-370 VDC)
- Input Frequency • 47-63 Hz
- Power Factor • 0.98 typical
- Inrush Current • 35 A at 115 VAC, 70 A at 230 VAC
- Input Current • 2.1 A max at 115 VAC, 1.1 A max at 230 VAC

Output

- Output Voltage • See Table
- Output Voltage Adjustment • User adjustable, See Note 3
- Output Power • 130 Watts
- Minimum Load • 0.8 A for V1 output to regulate V5
- Line Regulation • $\pm 0.5\%$ max
- Total Regulation • $\pm 3\%$ for V2, $\pm 2\%$ for all other outputs
- Ripple & Noise • 65 mV for V1, 1% peak-peak on all other outputs
- Transient Response • 4% max deviation, 500 μ s recovery time for a 25% load change
- Temperature Coefficient • 0.04%/°C
- Hold Up Time • >15 ms min
- Remote Sense • On 3.3 V output only, compensates for up to 0.5 V drop
- Overvoltage Protection • On V1 & V5 only, 112% to 132% of nominal
- Overcurrent Protection • On V1 and V5 only, Re-cycle input to reset

General

- Efficiency • 75% typical
- Power Density • 7.2 W/in³
- MTBF • 200,000 hrs min
- Isolation Voltage • 3000 VAC Input to Output, 1500 VAC Input to Ground, 500 VAC Output to Ground
- Signals • PFD = TTL low gives warning of at least 10 ms before V1 output drops below 95% of nominal. This signal also provides a minimum of 100 ms delay after V1 is within regulation.
- Size • 3.0" x 5.0" x 1.2"
- Weight • 320 g (0.71 lbs) approx.

Environmental

- Operating Temperature • -10 °C to +60 °C with derating, Derate linearly from 100% load at +40 °C to 50% load at +60 °C
- Cooling • 10 CFM from two 40mm diameter fans required.
- Humidity • 5 to 95% RH, non-condensing
- Storage Temperature • -40 °C to +85 °C

EMC & Safety

- Safety Approvals • UL60950, CSA C22.2 No 60950, EN60950, CE Mark LVD
- EMC • Meets EN61000-3-2, -3, EN61000-4-2, -3, -4, -5, -6, -8, -11, EN55022 FCC Part 15 & VCCI Class B conducted, Class A radiated

OUTPUT VOLTAGE & CURRENT RATINGS

JPP130

Output V1	Output V2	Output ⁽⁴⁾ V3	Output ⁽⁴⁾ V4	Output V5 ⁽²⁾	Model Number
+5.1 V/12.0 A	+12 V/6.0 A				JPP130PD02
+5.1 V/12.0 A	+15 V/4.8 A				JPP130PD03
+5.1 V/12.0 A	+24 V/3.0 A				JPP130PD04
+5.1 V/12.0 A	+12 V/6.0 A			3.3 V/12.0 A	JPP130PT01
+5.1 V/12.0 A	+15 V/4.8 A			3.3 V/12.0 A	JPP130PT02
+5.1 V/12.0 A	+24 V/3.0 A			3.3 V/12.0 A	JPP130PT03
+5.1 V/12.0 A	+12 V/6.0 A	+5 to +24 V/1.0 A			JPP130PT04
+5.1 V/12.0 A	+15 V/4.8 A	+5 to +24 V/1.0 A			JPP130PT05
+5.1 V/12.0 A	+24 V/3.0 A	+5 to +24 V/1.0 A			JPP130PT06
+5.1 V/12.0 A	+12 V/6.0 A		-5 to -24 V/1.0 A		JPP130PT07
+5.1 V/12.0 A	+15 V/4.8 A		-5 to -24 V/1.0 A		JPP130PT08
+5.1 V/12.0 A	+24 V/3.0 A		-5 to -24 V/1.0 A		JPP130PT09
+5.1 V/12.0 A	+12 V/6.0 A	+5 to +24 V/1.0 A		3.3 V/12.0 A	JPP130PQ01
+5.1 V/12.0 A	+15 V/4.8 A	+5 to +24 V/1.0 A		3.3 V/12.0 A	JPP130PQ02
+5.1 V/12.0 A	+24 V/3.0 A	+5 to +24 V/1.0 A		3.3 V/12.0 A	JPP130PQ03
+5.1 V/12.0 A	+12 V/6.0 A		-5 to -24 V/1.0 A	3.3 V/12.0 A	JPP130PQ04
+5.1 V/12.0 A	+15 V/4.8 A		-5 to -24 V/1.0 A	3.3 V/12.0 A	JPP130PQ05
+5.1 V/12.0 A	+24 V/3.0 A		-5 to -24 V/1.0 A	3.3 V/12.0 A	JPP130PQ06
+5.1 V/12.0 A	+12 V/6.0 A	+5 to +24 V/1.0 A	-5 to -24 V/1.0 A		JPP130PQ07
+5.1 V/12.0 A	+15 V/4.8 A	+5 to +24 V/1.0 A	-5 to -24 V/1.0 A		JPP130PQ08
+5.1 V/12.0 A	+24 V/3.0 A	+5 to +24 V/1.0 A	-5 to -24 V/1.0 A		JPP130PQ09
+5.1 V/12.0 A	+12 V/6.0 A	+5 to +24 V/1.0 A	-5 to -24 V/1.0 A	3.3 V/12.0 A	JPP130PM01
+5.1 V/12.0 A	+15 V/4.8 A	+5 to +24 V/1.0 A	-5 to -24 V/1.0 A	3.3 V/12.0 A	JPP130PM02
+5.1 V/12.0 A	+24 V/3.0 A	+5 to +24 V/1.0 A	-5 to -24 V/1.0 A	3.3 V/12.0 A	JPP130PM03

Notes

1. Minimum 10 CFM required for 130 W operation.
2. V1 & V5 combined output power not to exceed 65 W, V2 & V3 & V4 combined output power not to exceed 65 W, V3 & V4 combined output power not to exceed 30 W.
3. Adjustment range: V1 & V5 are adjustable $\pm 10\%$, V3 & V4 are trimmable 5-24 VDC and are factory set to 12 VDC nominal. Accessible trim pots are assigned as VR1 for V1, VR2 for V5, VR3 for V3, VR4 for V4 and V2 is fixed. VR3 & VR4 trim pots are SMD types and are located underneath PCB.
4. Zener diodes on underside of PCB run hot during operation. Supply should be mounted on 8mm/0.32" standoffs or greater and 20% of the 10 CFM airflow should be directed below the supply.
5. Part numbers in bold are standard stock models, others are build to order.

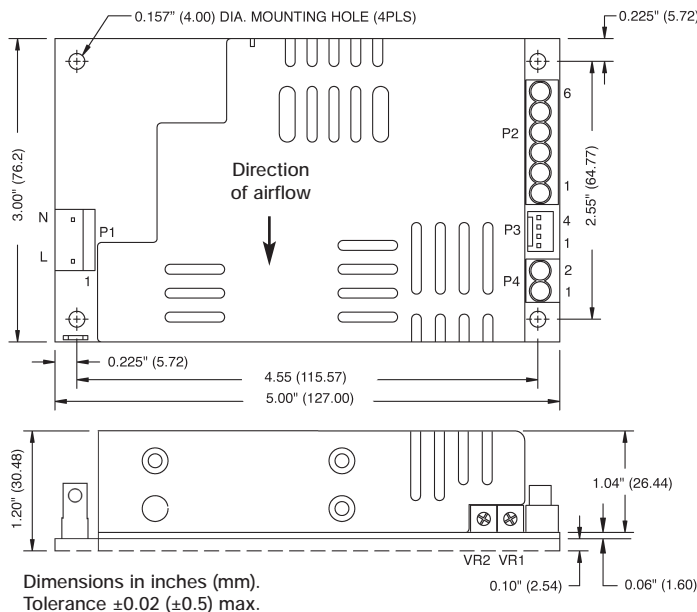
Mechanical Details

P1 CONNECTIONS	
Pin	Function
1	Live
2	Neutral

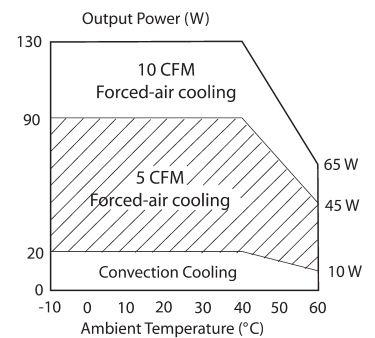
P2 CONNECTIONS	
Pin	Function
1	V1
2	Com
3	Com
4	V3 or N/C
5	V4 or N/C
6	V2 or N/C

P3 CONNECTIONS	
Pin	Function
1	- Sense (V0)
2	+ Sense (V0)
3	PFD Signal
4	Com

P4 CONNECTIONS	
Pin	Function
1	V5
2	Com



Derating Chart



NOTE: P4 only applies to models which have an Output 5 shown in the Output Voltage & Current Ratings table above.

Connectors

- P1 Mating Connector : Molex 09-50-3031 and 2878 series crimp terminal or equivalent.
- P2 & P4 Connectors can accept 18-12 AWG electric wires.
- P3 Mating Connector : Molex 22-01-1043 and 40445 series crimp terminals or equivalent.

