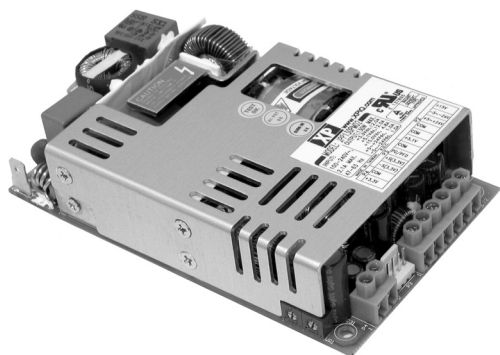


JPP130 Series



- High Power Density
- Small Footprint
- Up to Five DC Outputs
- Wide Adjustment on Two Outputs
- Short Circuit Protection with Auto Recovery
- Power Fail Signal
- Active Power Factor Correction

Specification

Input

Input Voltage	• 90-264 VAC
Input Frequency	• 47-63 Hz
Input Current	• 2.10 A at 115 VAC, 1.10 A at 230 VAC
Inrush Current	• 35 A at 115 VAC, 70 A at 230 VAC
Power Factor	• 0.98 typical

Output

Output Voltage	• See table
Output Voltage Trim	• User adjustable (see note 3)
Initial Set Accuracy	• 2% except V2: 3%
Minimum Load	• See note 4
Start Up Delay	• 2 s max
Start Up Rise Time	• 12 ms max
Hold Up Time	• 15 ms min
Line Regulation	• $\pm 0.5\%$ max
Transient Response	• 4% max. deviation, 500 μ s recovery time for a 25% load change
Ripple & Noise	• 65 mV for V1, 1% pk-pk on all other outputs, 20 MHz BW
Overvoltage Protection	• V1, V2 & V5 only: 112-132% of nominal
Temperature Coefficient	• 0.04% / $^{\circ}$ C
Remote Sense	• On 3.3 V output only: Compensates for up to 0.5 V drop

General

Efficiency	• 75% typical
Isolation	• 3000 VAC Input to Output 1500 VAC Input to Ground 500 VAC Output to Ground
Power Density	• 7.2 W/In ³
Signals	• PFD = TTL Level (see note 5)
MTBF	• 200 kHrs per MIL-STD-217F

Environmental

Operating Temperature	• -10 $^{\circ}$ C to +60 $^{\circ}$ C, derate from 100% load at +40 $^{\circ}$ C to 50% load at +60 $^{\circ}$ C
Cooling	• 10 CFM
Operating Humidity	• 5-95% RH, non-condensing
Storage Temperature	• -40 $^{\circ}$ C to + 85 $^{\circ}$ C
Shock	• 20 G on 3 axis, 3 times each
Vibration	• 10-55 Hz, 0.15 at 1 octave/min for 30 mins on each 3 axis

EMC & Safety

Emissions	• EN55022 FCC part 15 and VCCI level B conducted and level A radiated
Harmonic Currents	• EN61000-3-2
Voltage Flicker	• EN61000-3-3
EFT/Burst	• EN61000-4-4, level 2 Perf Criteria A
Surge	• EN61000-4-5, level 3 Perf Criteria A
Conducted Immunity	• EN61000-4-6, 3 V Perf Criteria A
Magnetic Field	• EN61000-4-8, 1 A/m Perf Criteria A
Dips & Interruptions	• EN61000-4-11, 30% 10 ms, 60% 100 ms, 100% 5000 ms, Perf Criteria A, B, B
Safety Approvals	• UL60950, CSA C22.2 No. 60950, EN60950, CE Mark LVD

Models and Ratings

JPP130 **XP**

Output V1 ^(5, 4)	Output V2	Output V3 ⁽³⁾	Output V4 ⁽³⁾	Output V5 ^(2, 3)	Model Number
+5.1 V/12.0 A	+12.0 V/6.0 A				JPP130PD02
	+15.0 V/4.8 A				JPP130PD03
	+24.0 V/3.0 A				JPP130PD04
+5.1 V/12.0 A	+12.0 V/6.0 A			3.3 V/12.0 A	JPP130PT01
	+15.0 V/4.8 A			3.3 V/12.0 A	JPP130PT02
	+24.0 V/3.0 A			3.3 V/12.0 A	JPP130PT03
	+12.0 V/6.0 A	+5.0 to 24.0 V/1.0 A			JPP130PT04
	+15.0 V/4.8 A	+5.0 to 24.0 V/1.0 A			JPP130PT05
	+24.0 V/3.0 A	+5.0 to 24.0 V/1.0 A			JPP130PT06
	+12.0 V/6.0 A		-5.0 to -24.0 V/1.0 A		JPP130PT07
	+15.0 V/4.8 A		-5.0 to -24.0 V/1.0 A		JPP130PT08
	+24.0 V/3.0 A		-5.0 to -24.0 V/1.0 A		JPP130PT09
+5.1 V/12.0 A	+12.0 V/6.0 A	+5.0 to 24.0 V/1.0 A		3.3 V/12.0 A	JPP130PQ01
	+15.0 V/4.8 A	+5.0 to 24.0 V/1.0 A		3.3 V/12.0 A	JPP130PQ02
	+24.0 V/3.0 A	+5.0 to 24.0 V/1.0 A		3.3 V/12.0 A	JPP130PQ03
	+12.0 V/6.0 A		-5.0 to -24.0 V/1.0 A	3.3 V/12.0 A	JPP130PQ04
	+15.0 V/4.8 A		-5.0 to -24.0 V/1.0 A	3.3 V/12.0 A	JPP130PQ05
	+24.0 V/3.0 A		-5.0 to -24.0 V/1.0 A	3.3 V/12.0 A	JPP130PQ06
	+12.0 V/6.0 A	+5.0 to 24.0 V/1.0 A	-5.0 to -24.0 V/1.0 A		JPP130PQ07
	+15.0 V/4.8 A	+5.0 to 24.0 V/1.0 A	-5.0 to -24.0 V/1.0 A		JPP130PQ08
	+24.0 V/3.0 A	+5.0 to 24.0 V/1.0 A	-5.0 to -24.0 V/1.0 A		JPP130PQ09
+5.1 V/12.0 A	+12.0 V/6.0 A	+5.0 to 24.0 V/1.0 A	-5.0 to -24.0 V/1.0 A	3.3 V/12.0 A	JPP130PM01
	+15.0 V/4.8 A	+5.0 to 24.0 V/1.0 A	-5.0 to -24.0 V/1.0 A	3.3 V/12.0 A	JPP130PM02
	+24.0 V/3.0 A	+5.0 to 24.0 V/1.0 A	-5.0 to -24.0 V/1.0 A	3.3 V/12.0 A	JPP130PM03

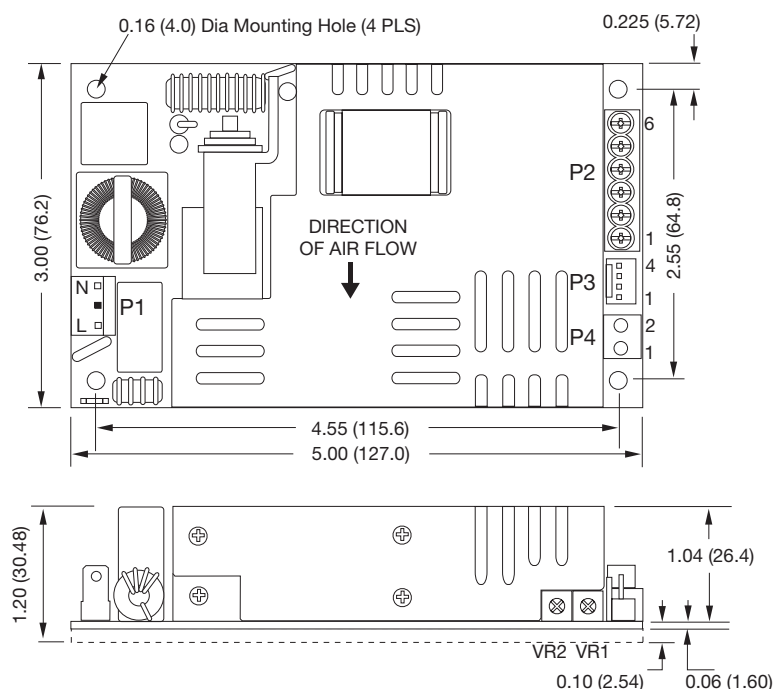
Notes

1. Minimum 10 CFM required for 130 W operation.
2. V1 and V5 combined output power not to exceed 65 W; V2, V3 and V4 combined output power not to exceed 65 W; V3 and V4 combined output power not to exceed 30 W.
3. Adjustable range: V1 and V5 are adjustable $\pm 10\%$, V3 and V4 can be trimmed 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 and VR4 trim pots are SMD types are located underneath PCB.
4. Minimum load of 0.8 A is required on V1 to regulate V5 where fitted.
5. 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.

Mechanical Details

All dimensions are in inches (mm), tolerance: ± 0.02 (± 0.5) max

Weight: 0.71 lbs (320 g)



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

PIN CONNECTIONS

Pin	P1	P2	P3	P4 ⁽¹⁾
1	Live	V1	-Sense (V5)	V5
2	Neutral	Com	+Sense (V5)	Com
3	-	Com	PFD signal	-
4	-	V3 or N/C	Com	-
5	-	V4 or N/C	-	-
6	-	V2 or N/C	-	-

Note:

1. P4 only applies to models which have an Output V5 in the Models and Rating table.

Derating Curve

