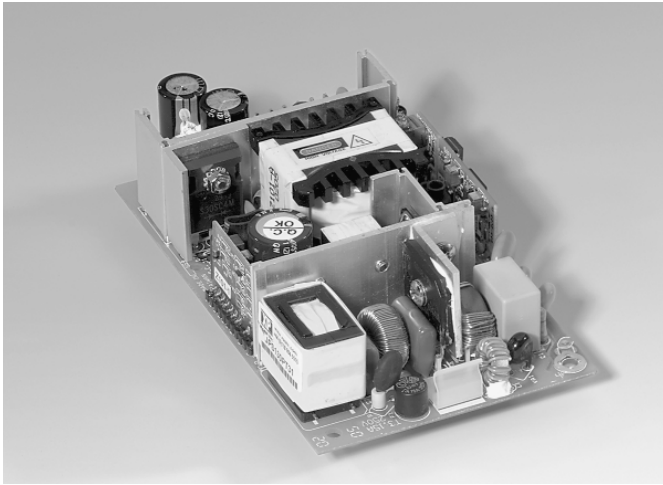


AC-DC Open Frame

130 Watts JPS130 Series



THE XPERTS IN POWER

- High Power Density
- Up to 90% Efficiency
- Zero Voltage Switching Technology
- Small size 3.00" x 5.00" x 1.28"
- 100 W Convection Cooled
- Single & Multiple Outputs

Specification

Input

- AC Input Voltage 85-264 VAC
- Input Frequency 47-63 Hz
- DC Input Voltage 127-370 VDC
- Inrush Current 30 A max at 115 VAC, 60 A max at 230 VAC
- Input Current 2 A max at 115 VAC, 1 A max at 230 VAC
- Power Factor 0.9 typ

Output

- Output Voltage See Table
- Set Point Accuracy V1 $\pm 1\%$, V2 & V3 $\pm 5\%$, measured at 60% load
- Output Power 130 Watts
- Minimum Load No minimum load required (Note 1)
- Line Regulation $\pm 0.5\%$, for nominal line $\pm 10\%$
- Load Regulation $\pm 1\%$, $\pm 5\%$ for all secondary outputs on multiple output models (Note 2)
- Tolerance $\pm 1\%$
- Ripple & Noise $\pm 1\%$ max pk-pk (Note 3)
- Transient Response 4% max deviation, 500 μ s recovery time for a 25% load change
- Temperature Coefficient 0.05%/°C
- Hold Up Time 16 ms typical
- Remote Sense On V1 only, compensates for 0.5 V lead drop
- Overvoltage Protection 115% to 140%, recycle input to reset
- Overcurrent Protection 120% - 150%, foldback with auto recovery

General

- Efficiency (Typical) Up to 90%, nominal line full load
- Power Density 6.7 W/in³
- MTBF 100,000 hrs min to MIL-HDBK-217F
- Isolation Voltage 3000 VAC Input to Output, 1500 VAC Input to Ground, 500 VAC Output to Ground
- Size 3.00" x 5.00" x 1.28", (1.35" for multi output)
- Weight 300 g

Environmental

- Operating Temperature 0 °C to +70 °C See Derating Curve, Full power to 50 °C
- Cooling 130 W with 18 CFM airflow, 100 W with convection cooling
- Storage Temperature -20 °C to +85 °C

EMC & Safety

- Safety Approvals UL1950, CSA C22.2 No 234, EN60950, CE Mark LVD
- Emissions EN55022 Class B and FCC 20780 Level B conducted
- Immunity Meets EN61000-3-2, -3, (EN61000-4-2, -3, -4, -6, -8) Performance criteria A

OUTPUT VOLTAGE & CURRENT RATINGS					JPS130
Output Power	Output Voltage	Output Current		Ripple & Noise Pk-Pk ⁽³⁾	Model Number
		Convection Cooled	Max 18 CFM		
100 W	3.3 V	25.0 A	30.0 A	50 mV	JPS130PS03
130 W	+5.0 V	20.0 A	26.0 A	50 mV	JPS130PS05
130 W	+12.0 V	9.0 A	10.8 A	120 mV	JPS130PS12
130 W	+15.0 V	7.0 A	8.7 A	120 mV	JPS130PS15
130 W	+24.0 V	4.5 A	5.4 A	200 mV	JPS130PS24
130 W	+48.0 V	2.3 A	2.7 A	200 mV	JPS130PS48
130 W	+5.0 V ⁽¹⁾	11.5 A	15.0 A	50 mV	JPS130PT31
130 W	+12.0 V ⁽²⁾	3.0 A	4.0 A	100 mV	
	-12.0 V ⁽²⁾	0.5 A	0.5 A	100 mV	
130 W	+3.3 V ⁽¹⁾	10.0 A	15.0 A	50 mV	JPS130PT30
	+5.0 V ⁽²⁾	8.0 A	15.0 A	50 mV	
	+12.0 V ⁽²⁾	0.5 A	0.5 A	100 mV	

Notes

1. 20% minimum load required on V1 to maintain stated regulation for auxiliary rails.
2. Load regulation of auxiliary rails is defined over the range of 60% of rated output $\pm 40\%$.
3. Ripple & noise is measured by using 15 MHz bandwidth, each output terminated with a 0.47 μF capacitor and a 47 μF electrolytic capacitor at rated load and nominal line.

Mechanical Detail

Notes:

1. Dimensions in inches (mm). Tolerance is $\pm 1\text{mm}$.
2. AC input connector (TB1): Molex 5277-02A or equivalent.
3. DC output connector (TB2): Molex 5273 or equivalent.
4. Remote sense connector (TB3): Molex 5045-02A or equivalent.

TB2 Pins	Models			
	PS03,05	PS12, 15, 24, 48	PT31	PT30
1	+V	+V	+5 V	+3.3 V
2	+V	+V	+5 V	+3.3 V
3	+V	+V	+5 V	+3.3 V
4	+V	RET	RET	RET
5	RET	RET	RET	RET
6	RET	RET	RET	RET
7	RET	N/A	RET	RET
8	RET	N/A	+12 V	+5 V
9	N/A	N/A	-12 V	+5 V
10	N/A	N/A	N/A	+12 V

* Total height of unit 1.28" (32.4 mm) for single output models, 1.35" (34.4 mm) for triple output models.

Derating Curve

