

SPECIFICATION

230W ATX
1U Narrow Body
Industrial Grade Power Supply

Model: P6230P-48 1U

Specification subject to change without prior notice
unless we have a written agreement.



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Introductions

P6230P-48 1U is a 48V DC input ATX output 1U form factor closed frame switching power supply.

1. Input Characteristics

- 1.1 Input voltage range ----- -38Vdc to -72Vdc,
 1.2 Input DC current (Max) ----- 9.0A Max. Full load.

2. Output Characteristics

2.1 Static output characteristics.

	Output Voltage	Load Range		Regulation		Ripple Max mV P-P	Ripple & Noise Max. mV P-P
		Min.	Max.	Min.	Max.		
1.	+3.3 V	0.3 A	15.0 A	- 5 %	+ 5 %	50 mV	100 mV
2.	+5.0 V	2.5 A	25.0 A	- 5 %	+ 5 %	50 mV	100 mV
3.	+12.0 V	0.5 A	9.0 A	- 5 %	+ 5 %	100 mV	150 mV
4.	-5.0 V	0.0 A	1.0 A	- 10 %	+ 10 %	150 mV	200 mV
5.	-12.0 V	0.0 A	1.0 A	- 10 %	+ 10 %	150 mV	200 mV
6.	SB +5.0 V	0.0 A	1.5 A	- 5 %	+ 5 %	100 mV	100 MV

Note:

- Noise test ----- Noise bandwidth is from DC to 20MHz.
- Ripple frequencies greater than 1 MHz shall be attenuated by the measurement system.
- Add 0.1uf / 10uf capacitor at output connector terminals for ripple & noise measurements.
- Combined total power from +3.3v and +5v rails shall not exceed 125w.

2.2 Dynamic Output Characteristics:

- 2.2.1 Rise time ----- 100 ms Max. at nominal line full load.
 2.2.2 Turn-on delay time ----- 600mS Max. at nominal line full load.
 2.2.3 Hold-up time ----- 16 ms Min. For + 5V output at nominal line full load.
 2.2.4 Transient overshoot ----- 10% Max. of delay state after load change of 25% within the range of 50% to 100% of full load.
 2.2.5 Temperature coefficient ----- 0.03% Per °C Max.

3. Protections

- 3.1 Over Voltage Protection ----- Standard On +3.3V output set at 4.10Vdc at +/-0.40Vdc.
+5.0V output set at 6.25Vdc at +/-0.75Vdc.
+12.0V output set at 14.6Vdc at +/-1.0Vdc.
- 3.2 Short Circuit Protection ----- A short circuit placed between DC return and output shall cause no damage and the power supply shall shutdown.
- 3.3 Over Power Protection ----- The power supply can use electronic circuit to limit the output power against exceeding +150% of full load or protected against excessive power delivery due to short circuit of any output or over total power.
- 3.4 No load Operation ----- No parts damaged on power supply.

4. Dielectric Withstand Voltage

- 4.1 Primary to Secondary ----- 1500Vac for 1 minute or 1800Vac for 1 sec.
- 4.2 Primary to Safety Ground ----- 1500Vac for 1 minute or 1800Vac for 1 sec.
- 4.3 Insulation Resistance ----- Primary to safety ground - 500Vdc, 50M ohms min.

5. Environment

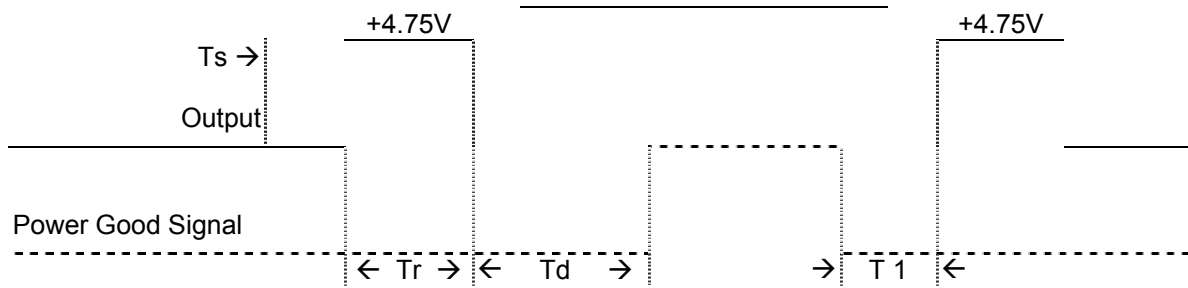
- 5.1 Operation Temperature ----- Air temperature 0 °C to 50 °C.
- 5.2 Operation Relative Humidity ----- 20% to 90%.
- 5.3 Storage Temperature ----- Air temperature -20 °C to 60 °C.
- 5.4 Storage Relative Humidity ----- 5% to 95%.
- 5.5 Altitude ----- Operate properly at any altitude between 0 to 100,000 feet. storage 40,000 feet.
- 5.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 minutes per cycle;
30 minutes for each axis (X, Y, Z).

6. Burn-In

- 6.1 Burn-In ----- At 45 °C, Max. load, 4 hours.

7. Mean Time Between Failure ---100 KHrs minimum at full load for 25°C ambient temperature.

8. Power-Good Signal



Note: $T_r \leq 100$ ms, $T_1 \geq 1$ ms, $T_d = 100 - 500$ ms.

9.Dimension

9.1 W x H x D ----- 100 W x 40.6 H x 205 D (mm)