

SPECIFICATION

300W ATX
1U Narrow Body
Industrial Grade Power Supply
(With Auto Input Voltage Select)

Model: P6300P 1A

Specification subject to change without prior notice.



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This specification is for a closed frame 1U 300W switching power supply with ATX output and fan forced cooling.

1. Input Characteristics:

- 1.1 Input Voltage Range ----- 90Vac To 132Vac /180VacTo264Vac Auto Switching Single Phase.
- 1.2 Input Frequency Range ----- 47Hz To 63Hz.
- 1.3 Input Ac Current (Max) ----- 6.3A Max. @115Vac, 3A Max. @230Vac Full Load.
- 1.4 Inrush Current ----- At 132Vac / 264Vac, Full Load Condition, No Damage Occur. Input Fuse Shall Not Blow.
- 1.5 Efficiency ----- 63% Min, At Nominal Line Input Full Load.
- 1.6 Input Leakage Current ----- Leakage Current From Line to Ground Will Be Less 3.5mA rms. Measurement Will Be Made At 240Vac/60Hz.

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	22.0 A	- 5 %	+ 5 %	50 mV	100 mV
2.	+5.0 V	2.5 A	30.0 A	- 5 %	+ 5 %	50 mV	100 mV
3.	+12.0 V	0.5 A	11.0 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 160W.
- The Total Output Power Shall Not Exceed 300W.

2.2 Dynamic Output Characteristics:

2.2.1 Initial Delay Time ----- NONE.

2.2.2 Rise Time ----- 50 mS Max. At Nominal Line Full Load.

2.2.3 Turn-on Delay Time ----- 600mS Max. At Nominal Line Full Load.

2.2.4 Hold-up Time ----- 16mS min. For + 5V Output At Nominal Line Full Load.

2.2.5 Transient Overshoot --- 10% Max. Of Delay State After Load Change Of 25%
Within The Range Of 50% To 100% Of Full Load.

2.2.6 Temperature Coefficient ----- 0.03% Per °C Max.

3. Protections:

3.1 Over Voltage Protection --- Standard On +3.3V Output Set At 3.7Vdc – 4.5Vdc.
+5.0V Output Set At 5.7Vdc – 6.5Vdc.
+12.0V Output Set At 13.5Vdc – 14.5Vdc.

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 Excessing +120% - 170% 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 2200Vdc For 3 Sec.

4.2 Primary to Safety Ground --- 1500Vac For 1 Minute. Or 2200Vdc For 3 Sec.

4.3 Insulation Resistance ----- Primary To Safety Ground - 500Vdc, 100M ohms Min.

5. Conducted EMI: Internal Filter Can Meet.

5.1 FCC Requirement --- Part15, SUB-Part J, Computing Devices “ Class A “ Limits.

5.2 VDE Requirement --- Class " A " (General Operating Permit) Requirements Of VFG 234/1991.

5.3 CISPR Requirement --- Class " A " Requirements Of CLSPR 22.

6. Product Safety: This Power Supply Is Designed to Meet The Following Spec.

6.1 UL/CUL ----- UL1950

6.2 TUV ----- EN 60950

7. Environment:

7.1 Operation Temperature ----- Air Temperature 0 °C To 50 °C.

7.2 Operation Relative Humidity ----- 20% To 90%.

7.3 Storage Temperature ----- Air Temperature -20 °C To 60 °C.

7.4 Storage Relative Humidity ----- 5% To 95%.

7.5 Altitude ----- Operate Properly At Any Altitude Between 0 To 100,000 Feet. Storage 40,000 Feet.

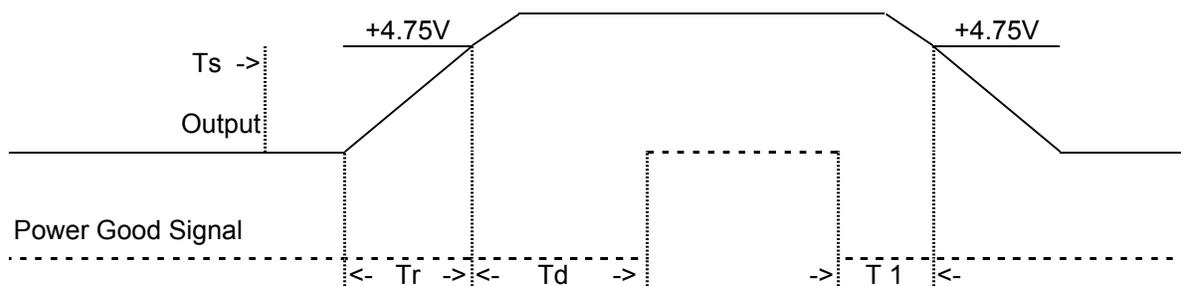
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 Minutes Per Cycle; 30 Minutes For Each Axis (X,Y,Z).

8. Burn-In

8.1 Burn-In ----- At 45 °C, Max. Load, 4 Hours.

9. Mean Time Between Failure ----- 100 KHrs Minimum At 75% Load For 25 °C Ambient Temperature.

10. Power-Good Signal:



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

11. Dimension

11.1 W x H x D ----- 100.0 x 40.6 x 228.5 (mm)

