

# SPECIFICATION

300W ATX  
1U Narrow Body  
Industrial Grade Power Supply  
(With Active PFC)

Model: P6300P 1F

Specification subject to change without prior notice.



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## 1. Input Characteristics:

- 1.1 Input Voltage Range ----- 90Vac To 264Vac, with Active Power Factor 90% Min.
- 1.2 Input Frequency Range ----- 47Hz To 63Hz.
- 1.3 Input Ac Current (Max) ----- 6.3A Max. @115Vac, 4A Max. @230Vac Full Load.
- 1.4 Inrush Current ----- At 132Vac / 264Vac, Full Load Condition, No Damage Occurred.  
Input Fuse Shall Not Blow.
- 1.5 Efficiency ----- 65% 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 150W.
- 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 ----- 600 ms Max. at nominal line full load.
- 2.2.4 Hold-up Time ----- 16 ms 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 exceeding +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.
- 5.4 Harmonic Requirement ----- IEC10000-3-2 & IEC10000-3-3 class “ D “.

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

- 6.1 UL/CUL ----- UL1950
- 6.2 TUV ----- EN 60950

### 7. Environment:

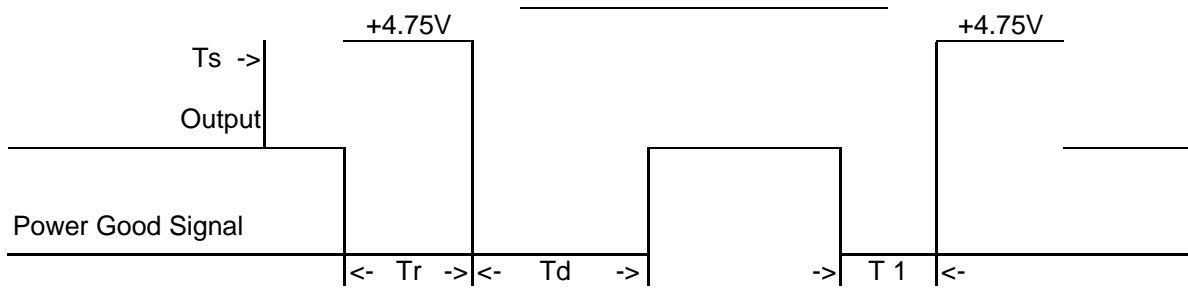
- 7.1 Operation Temperature ----- Air temperature 0 °C to 50 °C.
- 7.2 Operation Relative Humidity ----- 20% to 90%.
- 7.3 Storage Temperature ----- Air temperature -20 °C to 60 °C.
- 7.4 Storage Relative Humidity ----- 5% to 95%.
- 7.5 Altitude ----- Operate properly at any altitude between 0 to 100,000 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. Dimensions

11.1 W x H x D ----- 100.0 x 40.6 x 218.5 (mm)

