

SPECIFICATION

4-Output 500W AVS
Industrial Grade Power Supply

Model No.: P4500P AV

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



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1.Input Characteristics:

- 1.1 Input Voltage Range -----90Vac To 132Vac / 180Vac to 264Vac,
Auto voltage switch.
- 1.2 Input Frequency Range -----47Hz To 63Hz.
- 1.3 Input Ac Current (Max) -----8A Max. @115Vac, 5A Max. @230Vac Full Load.
- 1.4 Inrush Current -----At 132Vac / 264Vac, Full Load Condition,
No damage shall occur. Input fuse shall not blow.
- 1.5 Efficiency -----70% Min, at Nominal Line Input Full Load.
- 1.6 Input Leakage Current -----Leakage Current from Line to Ground
Will be less than 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	0.2 A	36.0 A	- 5 %	+ 5 %	50 mV	100 mV
2.	+5.0 V	2.5 A	50.0 A	- 5 %	+ 5 %	50 mV	100 mV
3.	+12.0 V	0.5 A	12.0 A	- 5 %	+ 5 %	100 mV	150 mV
4.	-12.0 V	0.0 A	5.0 A	- 10 %	+ 10 %	150 mV	200 mV

Note:1. Noise Test ----- Noise Bandwidth is from Dc to 20MHz.

2. Ripple Frequencies greater than 1 MHz shall be attenuated by the measurement system.
3. Add 0.1uF / 10uF Capacitor at output connector terminals for ripple & noise measurements.
4. Combined Total Power from +3.3V and +5V rails shall not exceed 300W.
5. The Total Output Power shall not exceed 500W.

2.2 Dynamic Output Characteristics:

- 2.2.1 Initial Delay Time ----- 35mS Max. at Nominal Line Full Load.
- 2.2.2 Rise Time ----- 100 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 ----- 20mS Max. 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 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 circuitry to limit the output power against exceeding +150% of full load, or protect 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. Electromagnetic Compatibility

5.1 Electromagnetic Interference (EMI) :

- a. FCC Part 15, subject j, class B.
- b. EN55022 (CISPR 22), class B.
- c. VCCI Class " 2 ".

5.2 Electrostatic Discharge (ESD) / 8KV :

Complies with IEC 801-2 (1984).

5.3 Radio-Frequency Electromagnetic Field (RS) :

Complies with IEC 801-3 (1984).

5.4 Harmonics Current :
Complies with EN61000-3-2.

5.5 Fast Transient Burst (EFT) / 2KV :
Complies with IEC 801-4 (1988).

6.Product Safety: This power supply is designed to meet the following spec.

6.1 UL/CUL ----- UL60950

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.

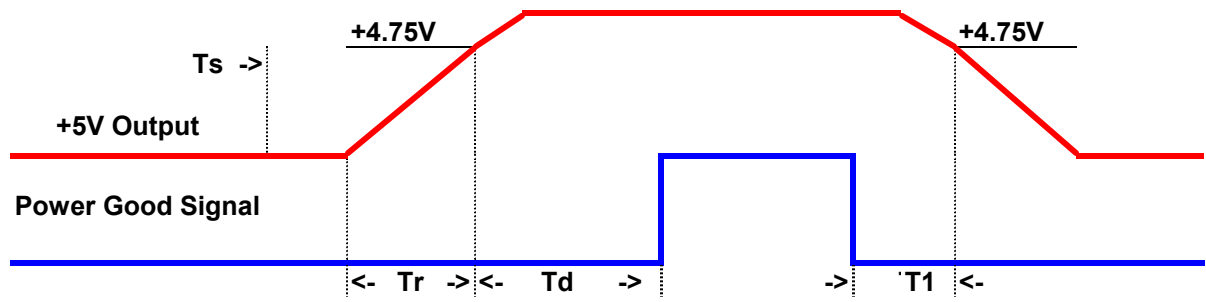
7.6 Vibration ----- 0.38mm. 5-55-5Hz, 1 Minutes per cycle;
30 Minutes for each axis (X,Y,Z).

8.Burn-In

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

9.Mean Time Between Failure ----- 50 KHrs Minimum at Full 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 ----- 150.0 x 86.0 x 140.0 (mm)

Note: See the mechanical drawings

