SPECIFICATION

560W
Industrial Grade
Switching Power Supply
With Active PFC

Model: P6560PS PF

Specification subject to change without prior notice.

TOP MICROSYSTEMS

3261 Keller St.
Santa Clara, CA 95054
Tel: 408-980-9813
Fax: 408-980-8626
E-mail: info@topmicro.com

1.Input Characteristics:

1.1 Input Voltage Range ---------- 90 to 264Vac full range,
with active PFC, PF=90% min

1.2 Input Frequency Range ---------- 47Hz to 63Hz.

1.3 Input Ac Current (Max) ---------- 10A max. @115Vac, 5A 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 ---------- 70% 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 Min.	Load Range Max.		Regulation Min.	Regulation Max.	Ripple Max mV P-P	Ripple & Noise Max. mV P-P
1. +3.3 V	0.2 A	40.0 A		- 5 %	+ 5 %	50 mV	100 mV
2. +5.0 V	2.5 A	60.0 A		- 5 %	+ 5 %	50 mV	100 mV
3. +12.0 V	0.5 A	32.0 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	2.0 A		- 5 %	+ 5 %	100 mV	100 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 60A.
5. The total output power shall not exceed 560W.

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 circuit to limit the output. Power against excessing +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.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 :

Comply with IEC 801-2 (1984).

5.3 Radio-Frequency Electromagnetic Field (RS) :
Comply with IEC 801-3 (1984).

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

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

6.Product Safety: This power supply is designed can 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.

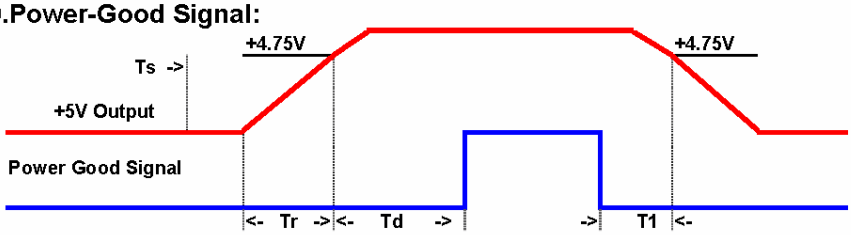
7.6 Vibration ---------- 0.38mm. 5-55-5Hz, 1 minutes per cycle; 30 minutes for each axis (X,Y,Z).

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: Tr ≤ 100 ms, T1 ≥ 1 ms, Td = 100 - 500 ms.

11.Dimension

11.1 W x H x D ---------- 150.0 x 86.0 x 140.0 (mm)

Note: See the mechanical drawing.