

## MPM-842:



### 400 Watt Medical ATX Power Supply

#### Features:

- Up to 450 Watt Peak Power
- Universal AC Input with Active PFC
- Thermally Controlled Fan
- ATX 12V V2.0 Compliant
- 2 Year Warranty

#### INPUT:

Input Voltage	Universal Input (90~264 VAC)
Input Frequency	47-63Hz
Inrush Current	80A @ 240 VAC Cold Start
Input Current	8 Amps Max Continuous
Input Protection	Dual Fuse
Hold-Up Time	16mS minimum
Leakage	300µA max

#### GENERAL:

Efficiency	75% Typical
Operating Temperature	0-50°C Full Load (derate 2.5%/°C up to 70°C max)
Storage Temperature	-20°C to +85°C
Over-Temp Protection	Included
Cooling	23.5 CFM for full load, 120W Convection)
Operating Humidity	10-90% RH, Non-Condensing
Vibration	5 ~ 50 Hz, acceleration 7.35 m/s*s on X,Y and Z Axis

#### OUTPUT:

Adjustment Range	See Output Table
Minimum Load	None
Regulation	See Output Table
Ripple & Noise	See Output Table
Overload Protection	Auto-Recovery
Over Voltage	3.3 / 5 / 12Vout only (latching)
Short Circuit Protection	Trip without damage & auto-recovery

#### EMC:

Electrostatic Discharge	EN61000-4-2, ±4KV Contact / ±8KV Air Discharge
Radiated Susceptibility	EN61000-4-3, 26-1000MHz, 10V/M, 80% AM
EFT / Bursts	EN61000-4-4, ±2KV
Surges	EN61000-4-5, ±2KV Line-Earth, ±1KV Line-Line
Conducted Immunity	EN61000-4-6, 0.15-800MHz, 10V, 80% AM
Voltage Dips	EN61000-4-100, 95% Dip & 10ms, 30% Dip & 500ms
Voltage Interruptions	EN61000-4-11, 95% reduction, 5s
Fluctuations & Flicker	EN61000-3-3

#### STATUS & CONTROL:

Power Good	High = DC in Regulation
Power Fail	Goes low >1ms before loss of regulation
5VSB	Always Present and on when AC is present
Remote On/Off	P/S is on when pin is connected to ground
Fan Speed	Thermal switch on secondary heatsink

#### APPROVALS:

Emissions	EN55011 / EN55022 "B" FCC Part 15 Subject J Class B
Safety Approvals	UL 60601-1 EN 60601-1 CB Report (IEC60601-1) CE Mark (LVD)

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### Output Specifications:

Output Voltage	Mini. Output Current	Rated Output Current	Max output Current	Peak output Current <sup>(Note 1)</sup>	Line Regulation	Load Regulation	Ripple & Noise p-p <sup>(Note 2)</sup>	Initial Setting Accuracy <sup>(Note 3)</sup>
+5V	1A	16A	21A		±1%	±5%	50mV	4.75V to 5.25V
+12V	1A	21A	22A	25A	±1%	±5%	120mV	11.4V to 12.6V
-12V	0A	0.8A			±1%	±10%	120mV	-10.80V to -13.20V
+3.3V	0.5A	16A	22A		±1%	±5%	50mV	3.14V to 3.47V
+5Vsb	0A	0.75A	1.5A		±1%	±5%	120mV	4.75V to 5.25V

**Total Output Power:** 450W peak and continue at 400W at 50°C environment temperature <sup>(Note 4)</sup>.

Note: 1) +12V Peak current cannot over 10 seconds.

2) Measured by a 20MHz bandwidth limited oscilloscope and the each output is connected with a 10µF Electrolytic Capacitor and a 0.1µF Ceramic Capacitor, output at rated load and nominal input, and environment at 25°C.

3) Initial Setting Accuracy is at Input 110VAC and all output at 60% rated load.

4) The total DC continuous power shall be kept with 400W and peak power at 450W for maximum 10 seconds at input voltage at 100-264VAC. With input voltage 90-99VAC the total DC continuous power shall be kept with 300W max. Maximum 150W for 3.3V and 5V combined output power and maximum 383W for 3.3V, 5V, and 12V.

