



FEATURES

- 3" x 5" x 1.38" Compact Open Frame
- 240W Convection & 508W Forced-Cooled Ratings
- -40°C to +70°C Operating Temperature
- Up to 92% Efficiency
- Remote On/Off, 5V Standby & Fan Power
- IEC/EN/UL 60601-1 Ed. 3.1 Approved



INPUT SPECIFICATIONS

Input Voltage Range	90-264 VAC
Input Frequency	47-63Hz
Input Current	5.6A rms @ 115 VAC, 2.4A rms @ 240 VAC
Inrush Current	60A @ 115V or 120A @ 240V AC input, full load, 25°C cold start
Earth Leakage Current	100 µA max. @ 240 VAC, 60 Hz
No Load Power Consumption...	1W typical

OUTPUT SPECIFICATIONS

Output Power Ratings	See models list
Output Regulation	±3% for 12-36V, ±2% for 48V
Ripple and Noise*	1% Vp-p max. for main output
Overvoltage Protection	Set at 112-132% of its nominal output voltage; Latch off
Overload Protection	Set at 110-150% of its nominal output voltage; Auto recovery
Short Circuit Protection	Auto recovery
Temperature Coefficient	±0.04%/°C max.
Transient Response	4 ms @ 115 VAC, full load
Hold-up Time	12 ms min. @ 508W output

* Ripple & Noise is measured with 20MHz bandwidth at nominal line and rated output load ranges, with a 0.1µF ceramic capacitor and a 47µF electrolytic capacitor across the output.

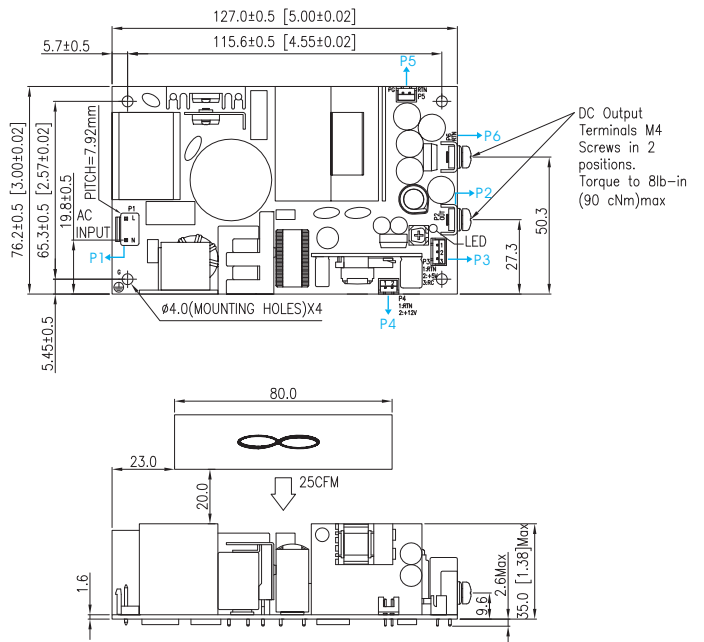
GENERAL SPECIFICATIONS

Power Factor	0.95 min.
Efficiency	90-92% typical
Hold-up Time	12ms min. for 500W
Line Regulation	±1% max. at full load
Operating Temperature	-40°C to +70°C
Derating	Derate from 100% load at +50°C linearly to 50% load at +70°C
Storage Temperature	-40°C to +85°C
Relative Humidity	0% to 95% non-condensing
Withstand Voltage	4,000 VAC, Input to output 2,000 VAC, input to PE
Operating Altitude	5,000 meters max.
MTBF	200K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F

STANDARDS & COMPLIANCE

IEC/EN 60601-1-2:2014	EMC & Immunity Performance
EN 55011, CISPR11	Class B conducted, Class A radiated
FCC, VCCI	Class B, conducted & radiated
EN 61000-3-2	Harmonic distortion, Class B & D
EN 61000-3-3	Line flicker
EN 61000-4-2	ESD, ±8 KV air and ±6 KV contact
EN 61000-4-3	Radiated immunity, 3V/m
EN 61000-4-4	Fast transient/burst, ±2 KV
EN 61000-4-5	Surge, ±1 KV diff., ±2 KV com.
EN 61000-4-6	Conducted immunity, 3 Vrms
EN 61000-4-8	Magnetic field immunity, 3A/m
EN 61000-4-11	Voltage dips, 30% reduction for 500ms, 60% reduction for 100ms, 100% reduction for 10ms
Safety Standards	IEC/EN/UL 60601-1 Ed. 3.1, ANSI/AAMI ES 60601-1:2012, CSA C22.2 No. 60601-1:14
Agency Approvals	UL, cUL, TUV, CE, CB
Other Compliance	RoHS2

MECHANICAL SPECIFICATIONS



Unit: mm [inch]
Tolerance: 0.02 [0.5] max.
Weight: 450g (0.99 lb) approx.

TSM500 Series

Medical Grade 508W AC/DC Power Supplies

MODELS LIST

Product No.	@ Convection					@ 25 CFM Forced Air					Typical Efficiency
	Main Output	Current	Fan Power	Stanby Power	Max. Output Power	Main Output	Current	Fan Power	Standby Power	Max. Output Power	
TSM500-12	12V	19.69A	12V@0.1A	5V@0.5A	240W	12V	41.67A	12V@0.3A	5V@1A	508.6W	90%
TSM500-15	15V	15.75A			240W	16V	33.33A			508.6W	90%
TSM500-19	19V	12.44A			240W	19V	26.31A			508.6W	90%
TSM500-24	24V	9.85A			240W	24V	20.83A			508.6W	91%
TSM500-30	30V	7.88A			240W	30V	16.66A			508.6W	91%
TSM500-36	36V	6.56A			240W	36V	13.88A			508.6W	92%
TSM500-48	48V	4.92A			240W	48V	10.41A			508.6W	92%