



TRUMPower

TMPC-900-1U

900W 1U Medical/ITE Grade ATX PC Power Supply

FEATURES

- Latest Medical 60601-1 & ITE 62368-1 Dual Approvals
- Complies with ATX12V V3.0 Standards
- 5,000 Meters Operating Altitude
- 80PLUS GOLD Efficiency
- BF Class Isolation
- 1,800W Peak Power Capability

INPUT SPECIFICATIONS

Input Voltage Range	90~264 VAC
Input Frequency	47~63Hz
Input Current	9.5A max. @ 115 VAC, 60Hz 4.8A max. @ 230 VAC, 50Hz
Inrush Current	No damage to power supply
Power Factor Correction	0.95 min. @ full load
Earth Leakage Current	400 μ A max. @ 264 VAC, 63Hz
Touch Current	100 μ A max. @ 264 VAC, 63Hz

OUTPUT SPECIFICATIONS

Output Power Ratings	See Rating Chart
Load Regulation	See Rating Chart
Ripple & Noise	See Rating Chart
Line Regulation	$\pm 1\%$ max. @ full load
Short Circuit Protection	Auto-recovery
Over Current Protection, +3.3V	21~50A, Auto-recovery
+5V	21~50A, Auto-recovery
+12V	90~110A, Auto-recovery
Over Temperature Protection	Latch off
Over Voltage Protection, +3.3V	3.76~4.8V, Latch off
+5V	5.75~7V, Latch off
+12V	13.5~15.5V, Latch off
Temperature Coefficient	0.01%/°C max.

OUTPUT VOLTAGE & CURRENT RATING CHART

Output Voltage	Minimum Load	*Maximum Load	Load Regulation	Ripple & Noise P-P (Max.)
+3.3V	0A	20A	$\pm 5\%$	50mV
+5V	0A	20A	$\pm 5\%$	50mV
+12V	0A	74.91A	$\pm 5\%$	120mV
-12V	0A	0.3A	$\pm 10\%$	120mV
+5Vsb	0A	3A	$\pm 5\%$	50mV
*-5V	0A	0.2A	$\pm 10\%$	100mV

*Maximum load for +3.3V and +5V is 120W with overall output limited to 900W.

*Maximum output power for +12V is 899W. Load regulation is -7% minimum at peak load conditions.

*-5V is not for standard model but available upon request.

Peak Power	Time for Peak Power (TE)	Testing Duty Cycle	Time Constant (TC)
900W	Infinite		
1,080W	100 ms	25%	300 ms
1,440W	10 ms	12.5%	70 ms
1,620W	1 ms	8%	11.5 ms
1,800W	100 μ s	5%	1,900 μ s



GENERAL SPECIFICATIONS

Efficiency	87% min. @ full load
Turn-On Delay	2 secs max.
Hold-Up Time	16 mS min. @ 115 VAC, 230 VAC, 80% load
Withstand Voltage	4,000 VAC, input-output (2 MOPP) 1,500 VAC, input-ground (1 MOPP) 1,500 VAC, output-ground
Operating Altitude	5,000 meters max.
Storage Altitude	6,000 meters max.
Operating Temperature	0°C to +50°C
Storage Temperature	-20°C to +80°C
Operating Humidity	10% to 95%, non-condensing
Storage Humidity	10% to 95%, non-condensing
Derating	Derate from 100% at +50°C linearly to 50% at +70°C
MTBF	100K hours minimum at full load, 25°C ambient, calculated per MIL-HDBK-217F
Dimensions	240 x 100 x 41mm

STANDARDS & COMPLIANCES

IEC/EN 60601-1-2, Ed. 4.1	EMC & Immunity Performance
EN 55011	Class B, conducted & radiated
EN 61000-3-2	Harmonic distortion, Class A
EN 61000-3-3	Line fluctuations & flicker
EN 61000-4-2	ESD, ± 15 KV air and ± 8 KV contact
EN 61000-4-3	Radiated immunity, 9~28 V/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, 3~6 Vrms
EN 61000-4-8	Magnetic field immunity, 30 A/m
EN 61000-4-11	Voltage dip immunity, 30% reduction for 500ms, >100% reduction for 10ms
Safety Standards	UL/IEC/EN 60601-1 (Edition 3.2), ANSI/AAMI ES 60601-1 (2021), CSA C22.2 No. 60601-1 (2022), IEC 62368-1 (3rd Edition)
Agency Approvals	UL, cUL, TUV, CB, CE
Other Standards	RoHS

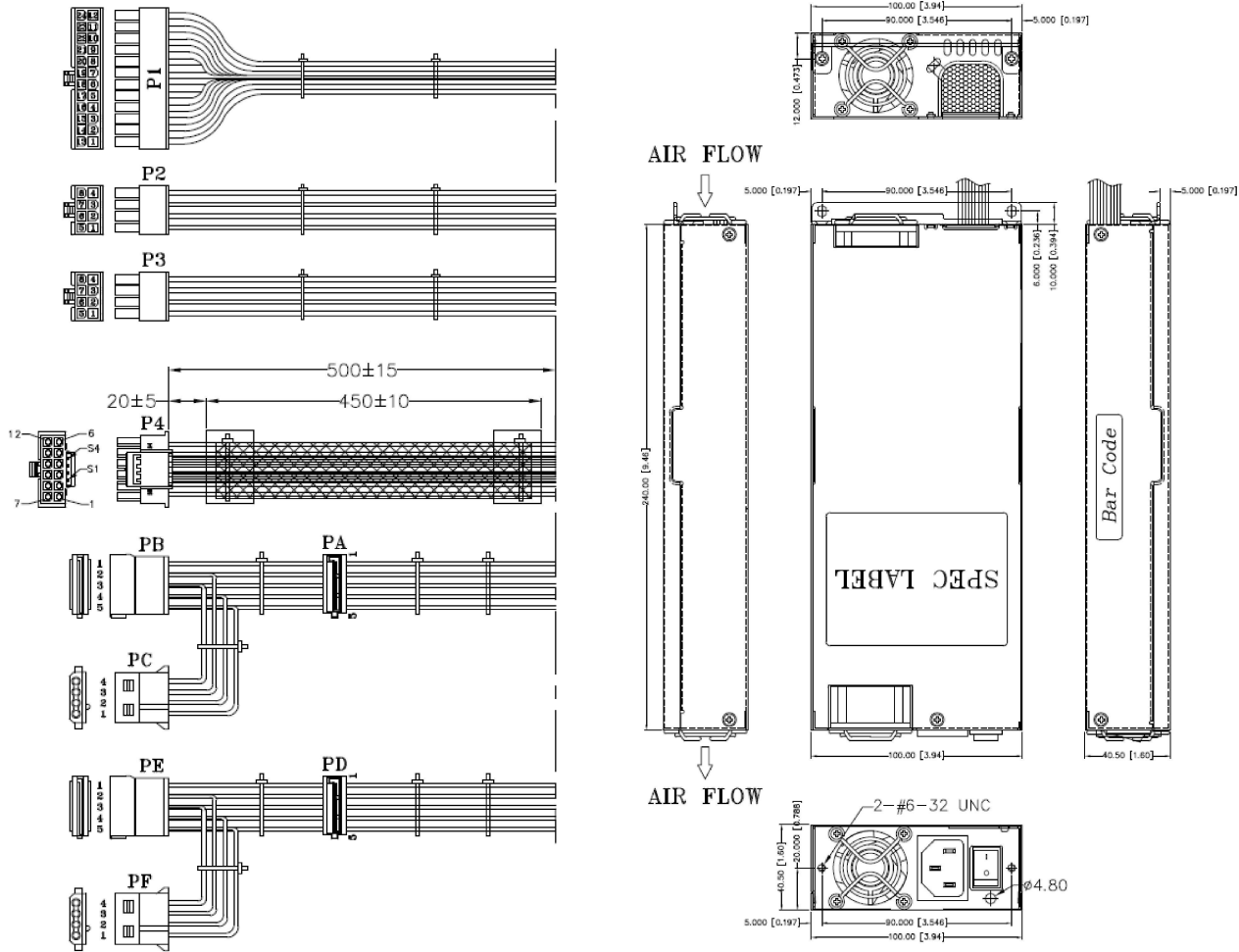
Tumbler Technologies + TRUMPower

3350 Scott Blvd., Building 13 • Santa Clara, California 95054, USA • 408-988-6616 • sales@trumpower.com • www.TRUMPower.com

TMPC-900-1U

900W 1U Medical/ITE Grade ATX PC Power Supply

MECHANICAL SPECIFICATIONS



Notes:

- 1) Units: mm
- 2) Weight: 1.6 kgs (3.53 lbs.) approx.
- 3) The above cable set is for reference only. Customized cable sets are available upon request.