

TECHNICAL DATASHEET
Medical / Industrial AC-DC Power Supply
MPE1000 Series



Highlights and Features

- 1000W Max. Output Power for Universal AC Input
- Compact 4" x 7" x 1.59" Low Profile
- Medical and ITE Approvals
- Class B Conducted and Radiated EMI
- Type BF Medical Equipment, 2 x MOPP
- Current Share and +15%/-10% Voltage Trimming
- Bootloader
- High Efficiency Up to 95%
- Up to 70 °C Ambient Operation
- PMBus Ver1.3 Support
- Intelligent Fan Speed Control

Safety Certifications

- IEC/EN/ES60601-1 UL Certifications and CB Report
- IEC/EN/UL62368-1 CB Report
- CE Mark (LVD, EMC and RoHS Directive)
- Complies with IEC60601-1-2 4th Ed
- EN 55011/EN 55032, Class B

General Description

The MPE1000 is ideal for applications where high efficiency, high reliability, low cost and low profile are needed, such as IVD equipment, aesthetic device, dialysis machine, etc. Packed in the industry standard 4" x 7" footprint, the MPE1000 can deliver up to 1000W continuous power for a wide range of AC input without power derating to 50 °C ambient temperature. With IEC60601-1 & IEC62368-1 certifications, the unit can be used in both Medical and ITE applications. A 5V/2A standby, current share, voltage trimming, intelligent fan speed control, boot loader, remote on/off, remote sense and power good signal are included as part of the standard product.

Model List

Model	Input Voltage (Vac)	Nominal Output Voltage (V)	Voltage Trimming Range(V)	Max. Current (A)	Max. Power (W)
MPE1000A12T	90 - 264	12	10.8 ~ 13.8	83.3	1000
MPE1000A24T	90 - 264	24	21.6 ~ 27.6	41.6	1000
MPE1000A36T	90 - 264	36	32.4 ~ 41.4	27.7	1000
MPE1000A48T	90 - 264	48	43.2 ~ 55.2	20.8	1000

Model Name

MPE	1000	A	24	T		AAA
MP: Medical Power Supply	Max. Wattage in Product Series	Family Code	Output Voltage	Inlet Type	Blank	Revision Control Code
E: Enclosed	1000:1000W	A	24: 24V	T: US Terminal		AAA: Standard

Environment

Surrounding Air Temperature	Operating	Absolute maximum/minimum rating -20°C to +70°C. Derating from 100% load at 50°C to 50% load at 70°C.
Storage		-40°C to +85°C
Operating Humidity		5-95 % RH (Non-condensing)
Operating Altitude		Up to 5,000 meters
Shock Test (Non-Operating)		50G, 11ms, 3 shocks for each direction
Vibration (Non-Operating)		5- 500 Hz, 2Grms, 15 minutes for each three axes
Cooling		Convection cooling or forced air

All parameters are specified at 25°C ambient unless otherwise noted. Mar.2025, Rev.02