




GPFM600 Medical 600 Watt Global Performance Switchers



FEATURES:

- Small package (12.00" x 5.50" x 3.09")
- Power factor corrected to EN61000-3-2 Class A
- Full load rating to 60°C
- 85 to 264 Vac Input
- Medically Approved to UL2601-1, IEC601-1, CSA C22.2 No. 601.1.2
- 2 year warranty
-  marked to LVD

SPECIFICATIONS:

Ac Input

85-264 Vac, 47-63 Hz single phase.

Output Power

Continuous output power, 600 watts.

Hold-upTime

20 ms minimum from loss of ac input until output reaches 3% below nominal.

Line and Load Regulation

±1% over the entire input voltage and frequency range, and over the entire output current range.

Minimum Load

No minimum load required.

Overload Protection

Current limit 105% minimum, 125% maximum of the specified full load current.

Output Noise

50 mV pk-pk maximum.

Transient Response

Maximum of 5% change in V_{out} for a load change of 1.25 A. Recovers to ±1% within 500µ sec.

Overvoltage Protection

Built in on all models. OVP crowbar reduces output voltage below nominal rating in less than 50 ms. Output voltage decay is dependent upon loading.

DC Power Good

Optocoupler isolated output indicates that the DC output is equal to or greater than 21.6 (-0 + 0.25) volts. This signal shall be driven when in the active 'DC Good' state.

Efficiency

Minimum of 75% under full load and input of 120 Vac 60 Hz.

Inrush Current

Limit inrush current to 125% of maximum operating current. Turn on time of the power supply not to exceed 3 seconds over the full input voltage and frequency range.

EMI/EMC Compliance

All models include built-in EMI filtering to meet emissions requirements:

EMI SPECIFICATIONS	COMPLIANCE LEVEL
Conducted Emissions	EN55011 Class B; FCC Class B
Static Discharge	EN61000-4-2, 6 kV contact, 8 kV air
RF Field Susceptibility	EN61000-4-3, 3 V/meter
Fast Transients/Bursts	EN61000-4-4, 2 kV, 5 kHz
Surge Susceptibility	EN61000-4-5, 1 kV diff., 2 kV com.

Vibration and Shock

All models are to meet MIL-STD 810E, method 514.4 Category.

Environmental

Designed for 0 to 60°C operation at full rated output power; derate output current and total output power by 2.5% per °C above 50°C.

Medical Leakage Current

150 µA under normal conditions. Maximum under single fault conditions, 250 µA. Patient sink leakage with 120 Vac, 60 Hz applied to any output with respect to the chassis will be less than 500 µA.

Medical Safety Agency

Approved to UL2601-1, EN60601-1-2, CSA C22.2 No. 601.1.2.



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Commercial Model	Output	Output Maximum(A)	OVP Setpoint	Total Regulation	Noise P-P
GPFM600-24	24 Vac	25 A	25.8 ± 0.6 V	1%	100 mV

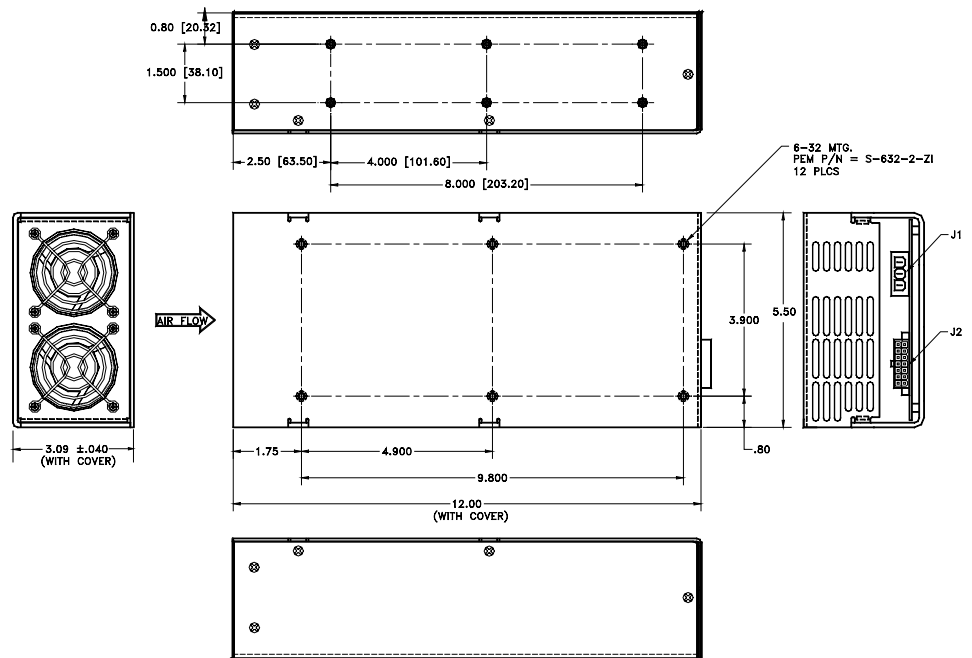
GPFM600 MECHANICAL SPECIFICATIONS

INPUT: J1
MOLEX P/N 43160-31-3

PIN 1: AC LINE
PIN 2: AC NEUTRAL
PIN 3: EARTH GROUND

OUTPUT: J2
MOLEX P.N. 39-29-1147
14 PIN RIGHT ANGLE HEADER

PIN 1: +24 V
PIN 2: +24 V
PIN 3: +24 V RETURN
PIN 4: +24 V RETURN
PIN 5: N/A
PIN 6: AC GOOD
PIN 7: AC GOOD RETURN
PIN 8: +24 V
PIN 9: +24 V
PIN 10: +24 V RETURN
PIN 11: +24 V RETURN
PIN 12: N/A
PIN 13: DC GOOD
PIN 14: DC GOOD RETURN



Environmental Specification	Operating	Non-operating
Temperature (A)	0 to 60°C	-18 to +60°C
Humidity (A)	0 to 97% RH	0 to 97% RH
Shock (B)	20 g _{pk}	40 g _{pk}
Altitude	-500 to 10,000 ft	-500 to 40,000 ft
Vibration (C)	1.5 g _{rms} , 0.003 g ² /Hz	5 g _{rms} , 0.026 g ² /Hz

Dimensions: Inches
Millimeters

- Units should be allowed to warm up/operate under non-condensing conditions before application of power. Cooling provided by internal fan—heatsink temperatures should not exceed 90°C for extended periods in the installation.
- Random vibration—10 to 2000Hz, 6dB/octave roll-off from 350 to 2000Hz, 3 orthogonal axes. Tested for 10 min./axis operating and 1 hr./axis non-operating.
- Shock testing—half-sinusoidal, 10 ± 3 ms duration, ± direction, 3 orthogonal axes, total 6 shocks.