



Medical PSU FSP100-1K40M1

DESCRIPTION

This series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 100 watts of continuous output power at convection cooling. They are suited for medical, information technology and industrial applications, but not for life-supporting medical equipment. Approval to both EN60601-1 and EN60950-1 safety standards improves design-in time and reduces end equipment compliance costs.

FEATURES

- Medical and ITE approvals
- Compact size 2" x 4" x 1.26"
- High power density 10 W/cubic inch
- 100 W output with convection cooling up to +50°C
- Low earth leakage current
- EN55011 /55022 class B emissions
- RoHS compliant

WATTAGE

Wattage: 100W

DIMENSION

Dimension: 101.6mm(L) x 50.8mm(W) x 32.0mm(H)

INPUT SPECIFICATION

Input Range: 90-264 Vdc
Input Frequency: 47-63 Hz
Input Current: 1.9A(rms) for 100-120VAC,
1.1A(rms) for 200-240VAC
Leakage Current: 150 µA max. @ 264 VAC, 63 Hz

SAFETY STANDARD APPROVAL



OUTPUT SPECIFICATION

Ripple & Noise:

Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 µs after a 25% step load change
All outputs protected to short circuit conditions.

Over Current Protection:

GENERAL SPECIFICATION

Efficiency: 88~90% @ 230 VAC full load
Inrush Current: 40A @ 115 VAC or 80A @ 230 VAC, at 25°C cold start

ENVIRONMENTAL SPECIFICATION

TEMP.Range: Operating Temperature: -10°C to +70°C
Storage Temperature: -40°C to +85°C
270,000 hours at full load at 25°C ambient temperature calculated per MIL-HDBK-217F

MTBF:

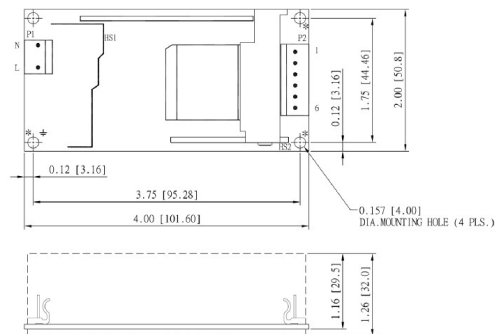
*Output Voltage and Current Rating

	+24V
Ripple-Noise(R-P) mV	240mV
Regulation Load %	±2%
Output Max.(A)	4.2A
Output Min.(A)	0A

NOTES

1. Safety approvals are for PCB form only. To order models with metallic L-bracket or box, change suffix "A" to "B" for L-bracket form, to "C" for enclosed form (see Outline Drawing of Cased Internal Switchers), e.g. PM100-14C.
2. Ripple and noise is maximum peak to peak voltage value measured at output within 20 MHz bandwidth, at rated line voltage and output load ranges, and with a 10 µF tantalum capacitor in parallel with a 0.1 µF ceramic capacitor across the output.

MECHANICAL SPECIFICATION



This content is subject to change, please refer to specification for more detail.
FSP reserve the right to change the content without prior notice