Medical PSU
FSP042-1K20M1

DESCRIPTION

This series of compact, open PCB constructed, AC-DC switching power supplies are capable of delivering 30-48 watts of continuous output power at convection cooling. They operate at 90-264 VAC input voltage ithout the need of voltage ion, and are suited for medical, information technology and industrial applications. 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" x4" x1.18"
- Single, dual and triple outputs
- Wide-range input 90-264 VAC
- Low earth leakage current
- Level B emissions RoHS compliant

WATTAGE

Wattage:	42W

DIMENSION

Dimension:	101.6mm(L) x 50.8mm(W) x 30.0mm(H)

INPUT SPECIFICATION

Input Range:	90-264 Vdc
Input Frequency:	47-63 Hz
Input Current:	0.9A(rms) for100VAC, 0.5A(rms) for 240VAC
Leakage Current:	150 μA max. @ 264 VAC,63 Hz

SAFETY STANDARD APPAOVAL

OUTPUT SPECIFICATION

Ripple & Noise:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change
Over Current Protection:	All outputs protected to short circuit conditions.

GENERAL SPECIFICATION

Efficiency:	80~88% typical except PM42-31-3A and PM42-31-5A at 75% typical
Inrush Current:	25A @ 115 VAC, or 50A @ 230 VAC, at 25"C cold start

ENVIRONMENTAL SPECIFICATION

TEMP.Range:	Operating Temperature:-10°C to +70°C Storage Temperature: -40°C to + 85℃
MTBF:	400,000 hours at full load at 25"C ambient, calculated per MIL-HDBK-217F

*Output Voltage and Current Rating

	+12V1
Ripple-Noise(R-P) mV	120mV
Regulation Load %	±2%
Output Max.(A)	3.5A
Output Min.(A)	0A

NOTES

1. Safety approvals are for PCB form only. To order unit with cover fitted, change suffix "A" to "C".
2. The output voltages of a multiple output model may go outside of the stated tolerance when an output load current is out of stated limits. All models may be operated at no-load without damage.
3. 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