

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.



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SAFETY STANDARD APPAOVA

FEATURES

- Medical and ITE approvals Compact size 2" x4" x1.18 0
- Single, dual and triple outputs
- Wide-range input 90-264 VAC
- Low earth leakage current
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Level B emissions RoF	IS 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

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OUTPUT SPECIFIC	ATION	
Ripple & Noise: Over Current Protection:	Maximum excursion of 4% or better on all models, recovering to 1% of final value within 500 us after a 25% step load change All outputs protected to short circuit conditions.	
Protection.	circuit conditions.	
GENERAL SPECIFI	CATION	
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° C	
MTBF:	400,000 hours at full load at 25"C ambient, calculated per MIL-HDBK-	

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*Output Voltage and Current Rating

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

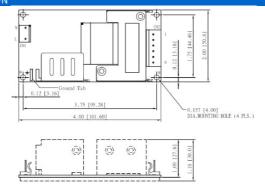
NOTES

Safety approvals are for PCB form only. To order unit with cover fitted, change suffix "A" to "C".
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 μ F tantalum capacitor in parallel with a 0.1 μ F 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