MPM-X50 Series

Max 50W AC/DC External Power Supplies - Medical

CoolPower Solutions

FEATURES

- 50W Medical approved adapter
- Over voltage Protection
- Medical standard IEC 60601-1,
- UL 60601-1, EN 60601-1
- Conductive EMI Meets
- CISPR/FCC Class B

1. Description

MPM-X50-xx is single output, 50Watts, universal input switching mode power supply, which is designed to meet UL 60601-1 and IEC 60601-1 medical regulations. It is specially designed for external desktop application.

Model Name	Output Voltage	Mini. Output Current	Rated Output Current	Line Regulation	Load Regulation	Ripple & Noise p-p	Initial Setting Accuracy
MPM-X50-05	**+5V**	0A	7.0A	+/-1%	3%	100mV	2%
MPM-X50-12	**+12V**	0A	4.17A	+/-1%	3%	120mV	2%
MPM-X50-138	**+13.8V**	0A	3.62A	+/-1%	2%	120mV	2%
MPM-X50-15	**+15V**	0A	3.33A	+/-1%	2%	150mV	2%
MPM-X50-19	**+19V**	0A	2.63A	+/-1%	2%	190mV	2%
MPM-X50-24	**+24V**	0A	2.1A	+/-1%	2%	240mV	2%

2. Input Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Input Voltage-AC	Continuous input range.	90	115/230	264	VAC
Input Frequency	AC input.	47		63	Hz
Hold Up Time	Nominal AC Input Voltage (230VAC), rated load.	12			ms
Input Current	Nominal AC Input Voltage (115VAC/230VAC), rated load.			1.5	A
Inrush Current	Nominal AC Input Voltage (115VAC/230VAC), one cycle at 25 C.			60	A
Leakage Current	Nominal AC Input voltage (115VAC/230VAC), rated load. Earth: Enclosure:			0. 5 0.1	mA

3. Output Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Efficiency	Rated load, 115VAC. Varies with distribution of loads among output.		75		%
Minimum load			See Chart of 1.Description		
Ripple & Noise	Rated load, 20MHz bandwidth and the each output is connected With a 10µF Electrolytic Capacitor and a 0.1µF Ceramic Capacitor.		See Chart of 1.Description		

4. Internal Protection

Parameter	Conditions/Description
Short Circuit Protection	Fully protected against output overload and short circuit. Automatic recovery upon of overload condition.
Over Voltage Protection	Fully protected against output voltage higher than .Automatic recovery upon of over voltage condition

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5. Safety Approvals, EMI and EMS Specification

Parameter	Conditions/Description		
Input Voltage-AC	UL (cUL), UL 60601-1, IEC 60601-1	Applying	
Hi-Pot	Input to output	5808	VDC
EMI	EN 60601-1-2: 1993	B	Class
EMS	IEC 61000-4-2: 1991, 8KV air discharge and 6KV contact discharge	3	Level
	IEC 61000-4-3: 1984, 3V/M	2	
	IEC 61000-4-4: 1988, 2KV line & PE	3	
	IEC 61000-4-5, 2KV	3	

6. Environment Specification

Parameter	Conditions/Description	Min.	Nom.	Max.	Units
Operating Temperature		0		40	C
Storage Temperature		-20		+85	C
Relative Humidity	Non-condensing.	10		90	%RH

7. Mechanical Specification

Parameter	Conditions/Description
Dimension	141 x 71 x 35 mm, Tolerance +/- 0.4mm.
Connector	AC input: IEC-320/C14 (3 Pin) DC output plug: 5.5 x 5.1 x 12mm

8. Dimension