

MSM07 Series

Medical Switch Mode Power Supply

HE Elpac Power Systems

TECHNICAL SUPPORT

WORLDWIDE 1-888-357-2280 saleselpac@iccus.com www.iccus.com

EUROPE +44.1383.432920 saleseurope@iccus.com



5-YEAR LIMITED WARRANTY*

- Wide Range AC Input
- Fully Regulated DC Output
- Lifetime Expectation >5 years
- Hold-up Time >22ms at full load
- Output Floating
- Safety Approval EN60601-1 Class II

Input	
Input Voltage	85 – 264VAC 100 – 240VAC Nominal
Input Frequency	50 – 60Hz
Input Current	<0.3A rms
Inrush Current	<37A @ 230 VAC Cold Start
Zero Load Power Consumption	<0.7W
Fauth Leakage Current	<32μA @ 132VAC @ 60Hz
Earth Leakage Current	<55μA @ 264VAC @ 60Hz

Output	
Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<750 ms
Hold-Up Time	>22ms
Ripple & Noise	<1% pk-pk **
Over Voltage Protection	110 – 135%
Over Current Protection	200 – 350%
Short Circuit Protection	Shutdown, auto-restart (hiccup mode)

^{*}visit www.iccus.com for complete details **Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.







MSM07 Series

Medical Switch Mode Power Supply

-	٥	N	,
		Λ	И

Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MSM0705	5.1V	1.4A	2.0A	±5%	74%
MSM0712	12.0V	0.6A	0.83A	±5%	74%
MSM0715	15.0V	0.5A	0.66A	±5%	76%
MSM0724	24.0V	0.3A	0.42A	±5%	75%
MSM0728	28.0V	0.3A	0.36A	±5%	75%

Notes

- 1) Maximum peak load (10W) lasting 500ms with a maximum 10% duty cycle.
- 2) Includes initial setting, line regulation, load regulation, and thermal drift.
- 3) Typical at 115VAC and full load.

General	
Efficiency	Avg Efficiency 74.8% @ 115VAC; 75.9% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	2.00" (50.80mm) x 2.28" (57.91mm) x 0.71" (18.11mm)
Weight	0.10 lbs (0.05 kg)
Power Density	2.2 W/in ³

Environmental		
Operating Temperature	0 – 50°C (Full load to 50°C, derate linearly to 50% load at 70°C)	
Storage Temperature	-40°C to +85°	
Relative Humidity	5-95%, non-condensing	
Cooling	Natural Convection	
Vibration	All units production tested to 19.6m/s ²	

EMC & Safety	
Emissions	FCC Part 15, Class B, CISPR11 EN61000-3-2, -3
Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11
	сЯUus
Certified by UL	UL 60601-1
following:	CAN/CSA-22.2 No.601.1-M90
c FU °us	CB per IEC60601-1
	CE marked to LVD

Input Configuration		
Connector	Molex p/n 22-43-8030	
Mating Connector	Molex p/n 50-37-5033 or Equivalent	
Mating Connector Contacts	Molex p/n 08-70-1040 or Equivalent	

Output Configuration		
Connector	Molex p/n 22-43-8020	
Mating Connector	Molex p/n 50-37-5023 or Equivalent	
Mating Connector Contacts	Molex p/n 08-70-1040 or Equivalent	

Output Pin Assignments (P2)		
Pin 1	+V1	
Pin 2	Com	

Input Pin Assignments (P1)		
Pin 1	AC Neutral	
Pin 2	<not assembled=""></not>	
Pin 3	AC Line	



