LPS40-M Series

40 Watts Medical

Total Power: 40-55 Watts **Input Voltage:** 85-264 VAC 120-300 VDC

of Outputs: Single



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Electrical Specifications

Input

Input range: 85 - 264 VAC; 120 - 300 VDC

Frequency: 47 - 440 Hz

Inrush current: < 18A peak @ 115 VAC; <36A peak @ 230 VAC, cold start @ 25 °C

Input current: 1A max. (RMS) @ 115 VAC Efficiency: 70% typical at full load

EMI filter: FCC Class B conducted; CISPR 22 Class A conducted;

EN55022 Class A conducted; VDE 0878 PT3 Class A conducted

Safety ground $<75\mu A @ 50/60 Hz$, 264 VAC input

leakage current:

Output

Maximum power: 40 W for convection; 55 W with 30CFM forced air

Adjustment range: -5, +10% minimum

Hold-up time: 20ms @ 40 W load, 115 VAC nominal line Overload protection: Short circuit protection on all outputs

verload protection: Short circuit protection on all outputs Case overload protected @ 110 - 145% above peak rating

Overvoltage protection: 5V output; 5.7 to 6.7 VDC. Other outputs 10% to 25% above nominal

output

Remote sense: Compensates for 0.5 V lead drop minimum.

Will operate without remote sense connected.

Reverse connection protected.

Special Features

- Medical safety approvals
- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense on main output
- Low output ripple
- Adjustable 5V output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

Safety

• **VDE** 0750/EN60601-1

CSA 22.2 No.601.1 LR109492

• CE Mark (LVD)





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Environmental Specifications

Operating temperature: 0° to 50 °C ambient. Derate each output 2.5% per degree from 50° to 70 °C, -20 °C startup

Storage temperature: -40 °C to +85 °C Temperature coefficient: ± 0.4% per °C

Electromagnetic Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3

susceptibility:

Humidity: Operating; non-condensing 5% to 95% RH

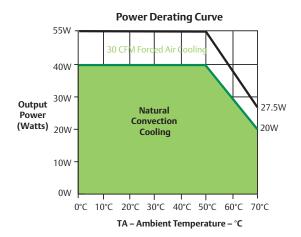
Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75G

peak 5 Hz to 500 Hz, operational

MTBF demonstrated: > 550,000 hours at full load and 25 °C ambient conditions

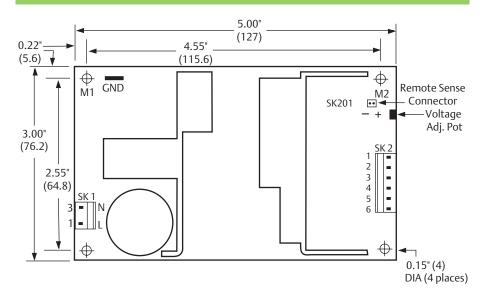
Ordering Informati	ring Information						
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection cooling	Maximum Load with 30CFM Forced Air	Peak Load¹	Regulation ²	Ripple P/P (PARD)³
LPS42-M	5 V	0 A	8 A	11 A	12 A	± 2%	50mV
LPS43-M	12 V	0 A	3.3 A	4.5 A	5 A	± 2%	120 mV
LPS44-M	15 V	0 A	2.6 A	3.6 A	4 A	± 2%	150 mV
LPS45-M	24 V	0 A	1.6 A	2.3 A	2.5 A	± 2%	240 mV

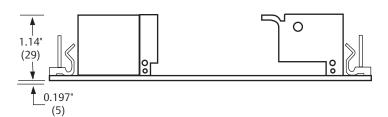
- 1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.
- 2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and 10 μF in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.



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Mechanical Drawing





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Pin	Assi	anme	nts

	Connector	LPS42-IVI	LPS43-IVI	LPS44-IVI	LPS45-IVI
	SK1-1	Neutral	Neutral	Neutral	Neutral
	SK1-3	Line	Line	Line	Line
	SK2-1	+5V	+12V	+15V	+24V
	SK2- 2	+5V	+12V	+15V	+24V
	SK2- 3	+5V	+12V	+15V	+24V
	SK2-4	Common	Common	Common	Common
	SK2-5	Common	Common	Common	Common
	SK2-6	Common	Common	Common	Common
ı	SK201-1	+Sense	+Sense	+Sense	+Sense
	SK201-2	-Sense	-Sense	-Sense	-Sense

Mating Connectors

	Mating Connectors			
	AC Input:	Molex 09-50-8031 (USA) 09-91-0300 (UK) PINS: 08-52-0113		
	DC Outputs:	Molex 09-50-8061 (USA) 09-91-0600 (UK) PINS: 08-52-0113		
	Remote Sense:	Molex 22-01-2025 PINS: 08-52-0123		
	Emerson Networ	rk Power Connector Kit #70-841-006, includes all o		

the above

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is ± 0.02" (± 0.5mm)
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25 °C unless otherwise stated.
- 6. Warranty: 2 year
- 7. Weight: 0.5lbs/0.23kg

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