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LPS50-M Series 60 Watts

Total Power: 55 - 60 Watts **Input Voltage:** 90 - 264 VAC 127 - 300 VDC

of Outputs: Single





Special Features

- Medical Safety Approvals
- Universal input
- Less than 1U high
- 2" x 4" footprint
- Remote sense
- Overload and short circuit
- protection
- Adjustable output voltage
- High efficiency
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- LED power good indicator
- Input power < 74 watts
- Complies with EN61000-3-2
- UL Class I approved
- LPX50 enclosure kit available
- Dual AC fuses

Safety

• **UL:** UL 60601-1

• CSA: CSA-C22.2 No. 601.1-M90

VDE: EN60601-1 CE: LVD & EMC

Electrical Specifications

Input

Input range: 90 - 264 VAC (wide range) 127-300 Vdc

Frequency: 47-440 Hz

Inrush current: <60 A peak @ 230 VAC, cold start @ 25°C

Input power: < 74 Watts

Efficiency: 80% - 85% typical at full load

EMI/RFI: FCC Class B conducted; CISPR 22 Class B conducted; EN55022 Class B

conducted, VDE0878PT3 Class B conducted

Safety ground leakage 275uA @ 50/60 Hz; 264 VAC input

current:

Output

Maximum power: 60W for convection (LPS52, 55 W)

Adjustment range: ±20% minimum

Hold-up time: 10/20 ms 115/230 VAC input line

Overload protection: Short circuit protection on all outputs. Case overload protected @

110-160% of normal rating

Overvoltage protection: 30-50% above nominal output

Remote sense: Compensatesd for 0.5 V lead drop max. Will operate without remote sense

connected. Reverse connection protected.





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Environmental Specifications

Operating temperature: 0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C.

-20 °C start up

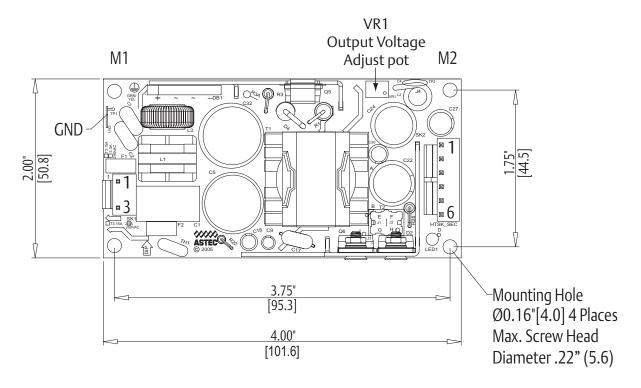
Storage temperature: -40 °C to +85 °C

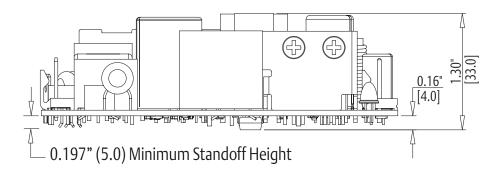
Electromagnetic susceptibility: Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3

Humidity: Operating; non-condensing 10% to 95% RH Vibration: IEC68-2-6 to the levels of IEC721-3-2

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

Mechanical Drawing





	Ordering Informati	ering Information										
	Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Peak Load¹	Regulation ²	Ripple P/P (PARD) ³					
	LPS52-M	5 V	0 A	11 A	12 A	±2%	50 mV					
	LPS53-M	12 V	0 A	5 A	5.4 A	±2%	120 mV					
	LPS54-M	15 V	0 A	4 A	4.4 A	±2%	150 mV					
	LPS55-M	24 V	0 A	2.5 A	2.75 A	±2%	240 mV					
	LPS58-M	48 V	0 A	1.25 A	1.35 A	±2%	480 mV					

- 1. Peak current lasting < 15 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 μ F (tantalum capacitor) in parallel with a 0.1 μ F capacitor at rated line voltage and load ranges.

Pin Assignments											
Connector	LPS52-M	LPS53-M	LPS54-M	LPS55-M	LPS58-M						
SK1-1	Line	Line	Line	Line	Line						
SK1-3	Neutral	Neutral	Neutral	Neutral	Neutral						
SK2-1	+5 V	+12 V	+15 V	+24 V	+48 V						
SK2-2	+5 V	+12 V	+15 V	+24 V	+48 V						
SK2-3	Common	Common	Common	Common	Common						
SK2-4	Common	Common	Common	Common	Common						
SK2-5	-Sense	-Sense	-Sense	-Sense	-Sense						
SK2-6	+Sense	+Sense	+Sense	+Sense	+Sense						

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

Emerson Network Power Connector Kit #70-841-006, includes all of the above

Notes:

- 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: 0.41lbs/0.18kg

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