Embedded Power for Business-Critical Continuity

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LPS50-M Series 60 Watts

Total Power: Input Voltage: # of Outputs: 55 - 60 Watts 90 - 264 VAC 127 - 300 VDC Single





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 current:	275uA @ 50/60 Hz; 264 VAC input
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.



- UL: UL 60601-1
- CSA: CSA-C22.2 No. 601.1-M90
- VDE: EN60601-1
- CE: LVD & EMC





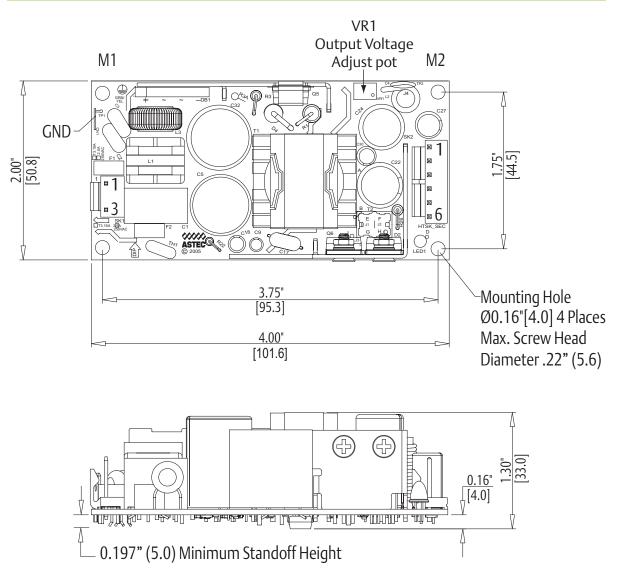
Special Features

- 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 MTBFBuilt in EMI filter
- (CISPR 22 Class B)
- LED power good indicator
- Input power < 74 watts
 Complian with ENC1000 -2.2
- Complies with EN61000-3-2
- UL Class I approved
- LPX50 enclosure kit available
- Dual AC fuses

Environmental Specifications

Operating temperature:	0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C20 °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



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Ordering Information

Ordering informat	lon							
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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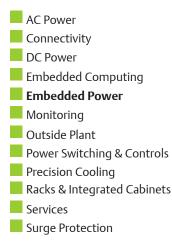
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