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LPS50 Series

60 Watts

of Outputs:

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

Single





Special Features

- Universal input
- 2" x 4" footprint
- Less than 1U high
- Remote sense
- Overload and short circuit protection
- Adjustable Output Voltage
- High efficiencyHigh 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
- LPS52(-I) and LPS53 (-I) extended temperature option: -40 °C to +80 °C
- LPX50 enclosure kit available

Safety

- UL UL 60950-1
- CSA CSA-C22.2 No. 60950-1
- TUV EN60950-1
- **CB** Certificate and report
- **CE** LVD & EMC

Electrical Specifications

Input

Input range: 90 - 264 VAC (wide range)

127 - 300 VDC

Frequency: 47-440 Hz

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

Input power: < 74 Watts

Efficiency: 80% - 85% typical at full load

EMI/RFI: FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B

conducted; VDE0878PT3 Class B conducted.

Safety ground leakage < 0.5mA @ 50/60 Hz; 264 VAC input for class I; < 0.25mA @ 50/60Hz;

current: 264 VAC input for class II

Output

Maximum power: 60 W 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: Compensates 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

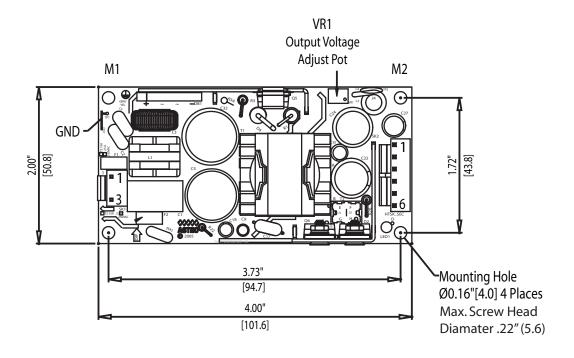
Electromagnetic susceptibility: Designed to meet EN61000-4;

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

- 1. Peak current lasting < 15 seconds with a maximum 10% duty cycle.
- $2. At 25 \, ^{\circ}C$ 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.
- 4. LPS52(-I) is an extended temperature range model operating from -40 $^{\circ}$ C to +80 $^{\circ}$ C

Pin Assignments											
Connector	LPS52	LPS53	LPS54	LPS55	LPS58						
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 " (± 0.5 mm)
- 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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