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LPS50 Series 60 Watts

Total Power: Input Voltage: # of Outputs: 55 - 60 Watts 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 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
- 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 current:	< 0.5mA @ 50/60 Hz; 264 VAC input for class I; < 0.25mA @ 50/60Hz; 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.



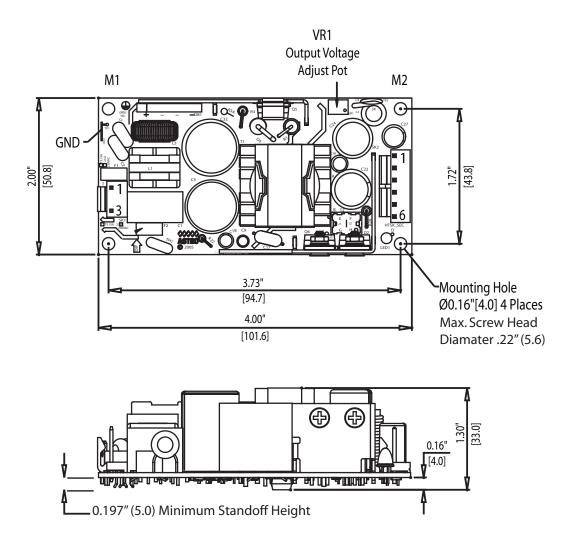


Environmental Specifications

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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



Ordering Information

Ordering information						
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 °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 (tantalum capacitor) in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
- 4. LPS52(-I) is an extended temperature range model operating from -40 °C to +80 °C

Pin Assignments					
Connector	LPS52	LPS53	LPS54	LPS55	LPS58
SK1-1	Line	Line	Line	Line	Line
SK1-3	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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