Distributed by:

JAMECO

ELECTRONICS

## www.Jameco.com + 1-800-831-4242

The content and copyrights of the attached material are the property of its owner.

Jameco Part Number 1773531

Rev. 03.26.07 LPS50 Series 1 of 3

# **LPS50 Series**

60 Watts

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

# of Outputs: 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
- UL Class II available, consult factory
- LPS52(-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 - 300VDC

Frequency 47-440 Hz

Inrush current <60A peak @ 230VAC, 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.

current <0.5mA @ 50/60 Hz; 264VAC input for class I; <0.25mA @
50/60Hz; 264VAC input for class II</pre>

Output

Safety ground leakage

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

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 protect-

ed @ 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

 $remote\ sense\ connected.\ Reverse\ connection\ protected.$ 





### Rev. 03.16.07 LPS50 Series 2 of 3

# **Environmental Specifications**

Operating tempera- 0° to 50°C ambient derate each output as 2.5% per degree

ture: from 50° to 70°C. -20°C start up

Storage temperature: -40°C to +85°C

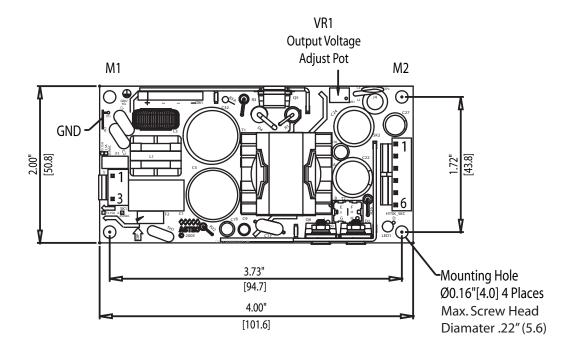
Electromagnetic designed to meet EN61000-4; susceptibility: -2, -3, -4, -5, -6, -8, -11 Level 3

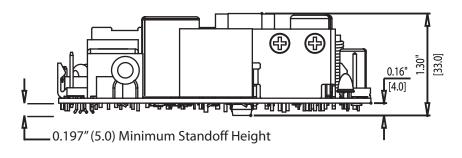
Humidity: Operating; non-condensing 10% to 95% RH

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**





Rev. 03.16.07 LPS50 Series 3 of 3

Ordering Information										
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD)³				
LPS52(-I)	5V	0A	11A	12A	±2%	50mV				
LPS53	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								

- 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  $\mu F$  (tantalum capacitor) in parallel with a 0.1  $\mu F$  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 Assianme	

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	+15V	+24V	+48
SK2-2	+5 V	+12 V	+15V	+24V	+48
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

Astec 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  $\pm .02$ " ( $\pm 0.5$ mm)
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
- 6. Warrantv: 2 year
- 7. Weight: .41lbs/.18kg

Astec

5810 Van Allen Way Carlsbad, CA 92008 USA

Telephone: +1 760 930 4600 Facsimile: +1 760 930 0698

## Europe (UK)

Waterfront Business Park Merry Hill, Dudley West Midlands, DY5 1LX United Kingdom

Telephone: +44 (0) 1384 842 211 Facsimile: +44 (0) 1384 843 355

### Asia (HK)

13-15, Shing Wan Road Tai Wai, Shatin, N. T.

Hong Kong

Telephone: +852 2699 2868 Facsimile: +852 2699 1770

For global contact, visit:

www.astecpower.com www.artesyn.com technicalsupport@astec.com technicalsupport@artesyn.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Printed in U.S.A.

### **Emerson Network Power.**

The global leader in enabling business-critical continuity.

AC Power

Connectivity

DC Power

Embedded Power

Inbound Power

Integrated Cabinet Solutions

Outside Plant

Precision Cooling

Site Monitoring and Services

EmersonNetworkPower.com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2007 Emerson Electric Co.