Rev. 05.03.06 LPT50 Series 1 of 3

# LPT50 Series

50 Watts

Total Power: 47 - 55 Watts Input Voltage: 90-264 VAC 127-300 VDC

# of Outputs: Triple



## **Special Features**

- Universal input 2" x 4" footprint
- Overpower and short circuit protection
- 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

# Safety

**UL** UL 60950-1

**CSA** CSA-C22.2 No. 60950-1

**TUV** EN60950-1

**CB** Certificate and report

CE LVD & EMC

CCC

# **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

Efficiency 80% typical at full load

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

Class B conducted

Safety ground 0.5mA @ 50/60 Hz, 264 VAC input

leakage current

Output

Maximum power 55 W for convection (LPT51, 47.4W)
Hold-up time 10/20 ms 115/230 VAC input line
Overpower protection Short circuit protection on all outputs

Case overpower protected @ 110-160% of normal rating

Overvoltage protection 30-50% above nominal output

## **Environmental Specifications**

Operating temperature: 0° to 50°C ambient. Derate each output 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





Rev. 05.03.06 LPT50 Series 2 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) <sup>3</sup>	
LPT51	+3.3V	0.8A	8A	9A	±2%	50 mV	
	+5V	0.1A	3A	4A	±6%	50mV	
	+12V	0A	0.5A	1A	±5%	120mV	
LPT52	+5V	0.5A	8A	9A	±2%	50 mV	
	+12V	0.1A	3A	4A	±5%	120mV	
	-12V	0A	0.5A	1.0A	±5%	120mV	
LPT53	+5V	0.5A	8A	9A	±2%	50 mV	
	+15V	0.1A	2.4A	3.2A	±5%	150mV	
	-15V	0A	0.5A	0.7A	±5%	150mV	
LPT54	+5V	0.5A	8A	9A	±2%	50 mV	
	+24V	0.1A	1.5A	2A	±7%	240mV	
	+12V	0A	0.5A	0.7A	±5%	120mV	

- 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.

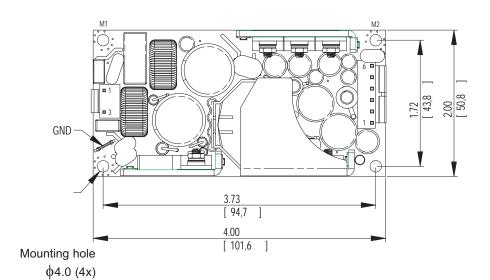
Pin Assignments								
Connector	LPT51	LPT52	LPT53	LPT54				
SK1-1	Line	Line	Line	Line				
SK1-3	Neutral	Neutral	Neutral	Neutral				
SK2-1	+3.3 V	+5 V	+5V	+5V				
SK2-2	+2.3 V	+5 V	+5V	+5V				
SK2-3	Common	Common	Common	Common				
SK2-4	Common	Common	Common	Common				
SK2-5	12V	-12V	-15V	+12V				
SK2-6	5V	+12V	+15V	+24				

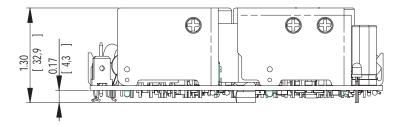
Mating Connectors					
AC Input:	Molex 09-50-8031 (USA)				
·	09-91-0300 (UK)				
	PINS: 08-52-0113				
DC Outputs:	Molex 09-50-8061 (USA)				
	09-91-0600 (UK)				
	PINS: 08-52-0113				
Astec Connector Kit #70-841-006, includes all of the above					

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$ mm)
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
- 6. Warranty: 1 year
- 7. Weight: 0.45lbs/0.20kg

### Rev. 05.03.06 LPT50 Series

#### **Mechanical Drawing**





#### **Astec Power**

5810 Van Allen Way Carlsbad, CA 92008 USA

Telephone: +1 760 930 4600 Facsimile: +1 760 930 0698 Technical Support: +1 888 41 ASTEC

or +1 407 241 2752

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

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

Units 2111-2116, Level 21 Tower 1, Metroplaza 223, Hing Fong Road Kwai Fong, New Territories Hong Kong

Telephone: +852 2437 9662 Facsimile: +852 2402 4426

For global contact, visit:

### www.astecpower.com technicalsupport@astec.com

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

Printed in  ${\sf USA}$ 

#### **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

#### ${\bf Emerson Network Power.\ com}$

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2006 Emerson Electric Co.