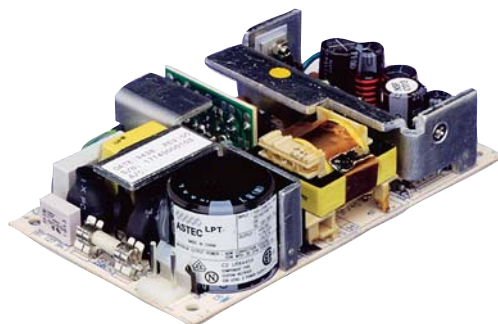


## LPT40 Series

40 Watts

**Total Power:** 40 - 55 Watts  
**Input Voltage:** 85 - 264 VAC  
120 - 300VDC  
**# of Outputs:** Triple



Rev. 04.13.06  
LPT40 Series  
1 of 3

### Special Features

- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense on main output
- Terminal Block option (-T)
- Built-in EMI filter
- Low output ripple
- Adjustable main output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

### Safety

<b>UL</b>	UL1950 E132002
<b>CSA</b>	CSA 22.2-234 Level 3 LR53982C
<b>NEMKO</b>	EN 60950/EMKO-TUE P95100411 (74-sec) 203
<b>CB</b>	Certificate and report 1118, 1122, 1123, 1124
<b>CE</b>	Mark (LVD)

## Electrical Specifications

### Input

Input range	85-264 VAC 120-300 VDC
Frequency	47-440 Hz
Inrush current	<18A peak @ 115VAC; <36A peak @ 230VAC, cold start @ 25°C
Input current	1A max. (RMS) @ 115VAC
Efficiency	70% typical at full load (60% for LPT41)
EMI	FCC Class B conducted; CISPR 22 Class B conducted EN55022 Class B conducted; VDE 0878 PT3 Class B conducted
Safety ground leakage current	<0.5 mA @ 50/60 Hz, 264 VAC input

### Output

Maximum Power	40W for convection (LPT41, 25W); 55W with 30CFW forced air (LPT41, 41W)
Cross regulation	±2% on output 1; ±5% on outputs 2, 3
Adjustment range	-5, +10% minimum
Hold-up time	20ms @ 40W load, 115 VAC nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110% to 145% above peak rating
Overvoltage protection	5.7 to 6.7 VDC on the main output LPT41: 3.6 to 4.6VDC
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.



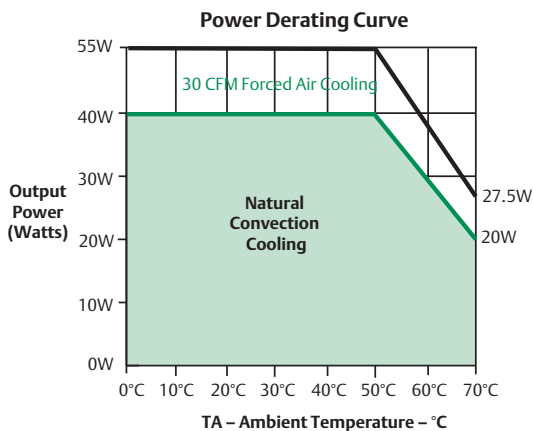
## Environmental Specifications

Operating temperature:	0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C, -20°C start up.
Electromagnetic susceptibility:	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3
Humidity:	Operating; non-condensing 5% to 95%
Vibration:	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75G peak 5 Hz to 500 Hz, operational
Storage temperature:	-40° to 85°C
Temperature coefficient:	±.04% per °C
MTBF demonstrated:	>550,000 hours at full load and 25°C ambient conditions

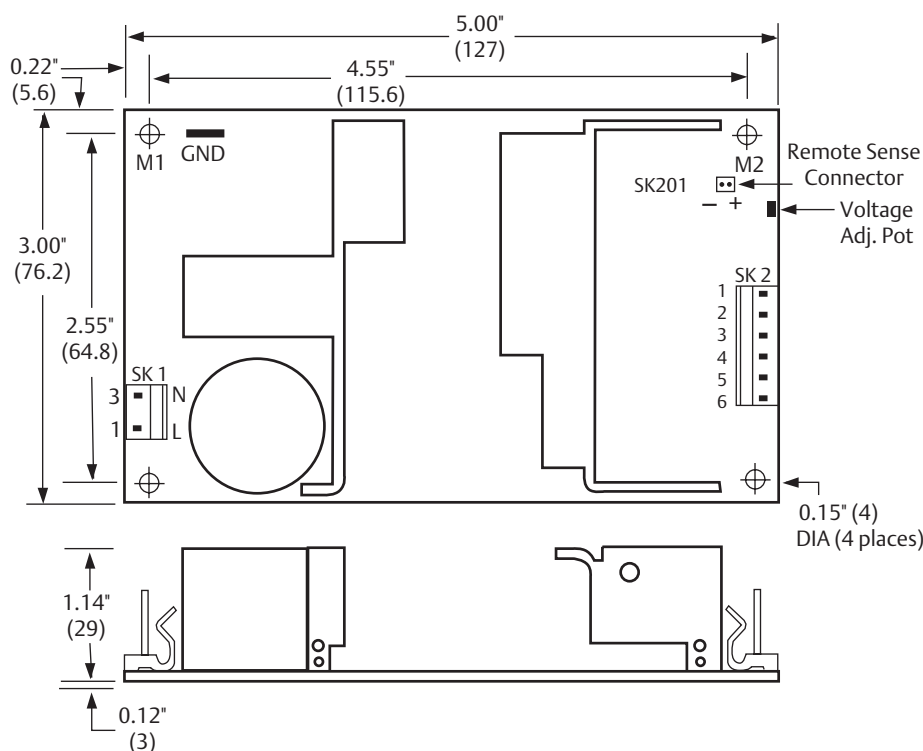
## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPT41(-T)	+3.3V	0.5A	4A	7A	7A	±2%	50mV
	+5V	0A	1.5A	2.0A	2.5A	±2%	50mV
	+12V	0A	0.5A	0.7A	0.7A	±5%	120mV
LPT42(-T)	+5V	0.4A	4A	5A	7A	±2%	50mV
	+12V	0.2A	2A	2.5A	4A	±5%	120mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV
LPT43(-T)	+5V	0.5A	6A	8A	9A	±2%	50mV
	+12V	0A	0.5A	0.7A	1A	±5%	120mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV
LPT44(-T)	+5V	0.4A	4A	5A	7A	±2%	50mV
	+12V	0.2A	2A	2.5A	4A	±5%	120mV
	-5V	0A	0.5A	0.7A	1A	±5%	50mV
LPT45(-T)	+5V	0.4A	4A	5A	7A	±2%	50mV
	+15V	0.2A	2A	2.5A	3A	±5%	150mV
	-15V	0A	0.5A	0.7A	1A	±5%	150mV
LPT46(-T)	+5V	0.4A	4A	5A	6A	±2%	50mV
	+24V	0.1A	1.0A	1.5A	2A	±7%	240mV
	+12V	0A	0.5A	0.7A	1A	±5%	120mV
LPT47(-T)	+5V	0.4A	4A	5A	6A	±2%	50mV
	+24V	0.2A	1.0A	1.5A	2A	±7%	240mV
	-12V	0A	0.5A	0.7A	1A	±5%	120mV

1. Peak current lasting <30 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 in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.
4. Minimum Loads are required.
5. (-T) indicates Terminal Block option for input and output (instead of Molex type)



## Mechanical Drawing



## Pin Assignments

Connector	LPT41	LPT42	LPT43	LPT44	LPT45	LPT46	LPT47
SK1-1	Line	Line	Line	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
SK2-1	5V	+12V	+12V	+12V	+15V	+24V	+24V
SK2-2	3.3V	+5V	+5V	+5V	+5V	+5V	+5V
SK2-3	3.3V	+5V	+5V	+5V	+5V	+5V	+5V
SK2-4	Common	Common	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common	Common	Common
SK2-6	12V	-12V	-12V	-5V	-15V	+12V	-12V
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense

## Mating Connectors

**AC Input:** Molex 09-50-8031 (USA) **Not required for (-T) option**  
09-91-0300 (UK)  
PINS: 08-52-0113

**DC Outputs:** Molex 09-50-8061 (USA) **Not required for (-T) option**  
09-91-0600 (UK)  
PINS: 08-52-0113

**Remote Sense:** Molex 22-01-2025  
PINS: 08-52-0123

Astec Connector Kit #70-841-006, includes all of the above

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$ mm)
- Mounting holes M1 and M2 should be grounded for EMI purposes.
- Mounting hole M1 is safety ground connection.
- Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
- Warranty: 1 year
- Weight: 0.5lbs/0.23kg

## 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](http://www.astecpower.com)**  
**[technicalsupport@astec.com](mailto: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 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

**EmersonNetworkPower.com**

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