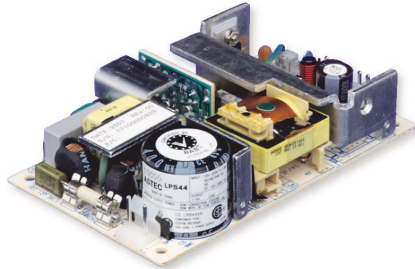


# 40 Watts LPS40 Series

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



## Electrical Specs

### Input

Input range	85-264 VAC 120-300 VDC
Frequency	47-440 Hz
Inrush current	<18 A peak @ 115 VAC; <36 A peak @ 230 VAC, cold start @ 25°C
Input current	1 A max. (RMS) @ 115 VAC
Efficiency	70% typical at full load
EMI filter	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	40 W for convection; 55 W with 30 CFM forced air
Adjustment range	-5, +10% minimum
Hold-up time	20 ms @40 W load, 115 VAC nominal line
Overload protection	Short circuit protection on all outputs. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5 V output: 5.7 to 6.7 VDC. Other outputs 10% to 25% above nominal output
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

## Special Features

- Universal input
- 3" x 5" footprint
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

## Environmental

Operating temperature: 0° to 50°C ambient  
 derate each output at 2.5% per degree from 50° to 70°C

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 0.75 G 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

## Safety

<b>VDE</b>	0805/EN60950 (IEC950)	11774-3336-1241 (LC# 84936)
<b>UL</b>	UL1950	E132002
<b>CSA</b>	CSA 22.2-234 Level 3	LR53982C
<b>NEMKO</b>	EN 60950/EMKO-TUE (74-sec) 203	P94100375
<b>BABT</b>	EN60950/BS7002	PS/604781
<b>CB</b>	Certificate and report	1119,1125,1126,1127
<b>CE</b>	Mark (LVD)	

AMERICAS

5810 Van Allen Way  
Carlsbad, CA 92008  
Telephone: 760-930-4600  
Facsimile: 760-930-0698

EUROPE

Astec House, Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX, UK  
Telephone: 44 (1384) 842-211  
Facsimile: 44(1384) 843-355

ASIA

Units 2111-2116, Level 21  
Tower 1, Metroplaza  
223, Hing Fong Road  
Fwai Fong, New Territories  
Hong Kong  
Telephone: 852-2437-9662  
Facsimile: 852-2402-4426



## Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PAR) <sup>3</sup>
LPS41	3.3 V	0 A	8 A	11 A	12 A	±2%	33 mV
LPS42	5 V	0 A	8 A	11 A	12 A	±2%	50 mV
LPS43	12 V	0 A	3.3 A	4.5 A	5 A	±2%	120 mV
LPS44	15 V	0 A	2.6 A	3.6 A	4 A	±2%	150 mV
LPS45	24 V	0 A	1.6 A	2.3 A	2.5 A	±2%	240 mV
LPS48	48 V	0 A	0.9 A	1.2 A	1.3 A	±2%	480 mV

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.

## Pin Assignments

Connector	LPS41	LPS42	LPS43	LPS44	LPS45	LPS48
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Natural
SK1-3	Line	Line	Line	Line	Line	Line
SK2-1	+3.3 V	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-2	+3.3 V	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-3	+3.3 V	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-4	Common	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common	Common	Common
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense	-Sense

### Mating Connectors

AC Input: Molex 09-50-8031 (USA)  
09-91-0300 (UK)  
PINS: 08-58-0111

DC Outputs: Molex 09-50-8061 (USA)  
09-91-0600 (UK)  
PINS: 08-58-0111

Remote Sense: Molex 22-01-2025  
PINS: 08-50-0114

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 ±.02".
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: 0.5 lb. / 0.23 kg

Power Derating Curve

