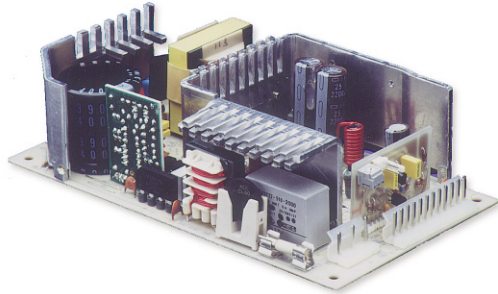


# 110 Watts LPS110 Series

**Total Power:** 80-110 Watts  
**Input Voltage:** 85-264 VAC  
 120-300 VDC  
**# of Outputs:** Single



## Special Features

- Universal input
- High efficiency
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Power fail
- Overvoltage protection
- Overload protection
- Optional L bracket (-B suffix)
- Cover kit available LPX110-C

## 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

## 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	2.5 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
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### Output

Maximum power	80 W for convection; 110 W with 30 CFM forced air
Adjustment range	±5% minimum
Hold-up time	20 ms @80 W load, 115 VAC nominal line
Overload protection	Short circuit protection. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5 V output: 5.7-6.7 VDC. Other outputs 10% to 20% above nominal output. Latching type, recycle AC to reset.

### Logic Control

Power failure	TTL logic signal goes high 50-150 msec after main output. It goes low at least 4 msec before loss of regulation.
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

## Safety

<b>VDE</b>	0805/EN60950 (IEC950)	11774-3336-1245 (LC #84997)
<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	P95100376
<b>CB</b>	Certificate and report	1563, 1564, 1565, 1566, 1567
<b>CE</b>	Mark (LVD)	

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## 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 (PARD) <sup>3</sup>
LPS113	12 V	0 A	6.7 A	9.2 A	10.4 A	±2%	120 mV
LPS114	15 V	0 A	5.3 A	7.3 A	8.3 A	±2%	150 mV
LPS115	24 V	0 A	3.3 A	4.6 A	5.2 A	±2%	240 mV
LPS118	48 V	0 A	1.7 A	2.3 A	2.6 A	±2%	480 mV

- Peak current lasting <30 seconds with a maximum 10% duty cycle.
  - At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
  - Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load.
- Note: -B suffix added to model number indicates L bracket option.

## Pin Assignments

Connector	LPS113	LPS114	LPS115	LPS118
SK1-1	GND	GND	GND	GND
SK1-3	Neutral	Neutral	Neutral	Neutral
SK1-5	Line	Line	Line	Line
SK2-1	+12 V	+15 V	+24 V	+48 V
SK2-2	+12 V	+15 V	+24 V	+48 V
SK2-3	+12 V	+15 V	+24 V	+48 V
SK2-4	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common
SK2-7	Common	Common	Common	Common
SK2-8	+12 V	+15 V	+24 V	+48 V
SK2-9	+12 V	+15 V	+24 V	+48 V
SK201-1	+sense	+sense	+sense	+sense
SK201-2	-sense	-sense	-sense	-sense
SK202-1	Pok	Pok	Pok	Pok
SK202-2	GND	GND	GND	GND

### Mating Connectors

AC Input: Molex 09-50-8051 (USA)  
 09-91-0500 (UK)  
 PINS: 08-58-0111

DC Outputs: Molex 09-50-8091 (USA)  
 09-91-0900 (UK)  
 PINS: 08-58-0111

Remote sense/power fail:  
 Molex 22-01-1022 (USA)  
 22-01-1023 (UK)  
 PINS: 08-50-0114

Astec Connector Kit #70-841-007, includes all of the above

### Notes:

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance is ±.02".
- Specifications are for convection rating at factory settings unless otherwise stated.
- Mounting holes M1 and M2 should be grounded for EMI purposes.
- Mounting hole M1 is safety ground connection.
- L Bracket mounting (6-32) maximum insertion depth is .20" (5).
- Warranty: 1 year
- Weight: 1.25 lb / 0.57 kg

## -B Bracket

