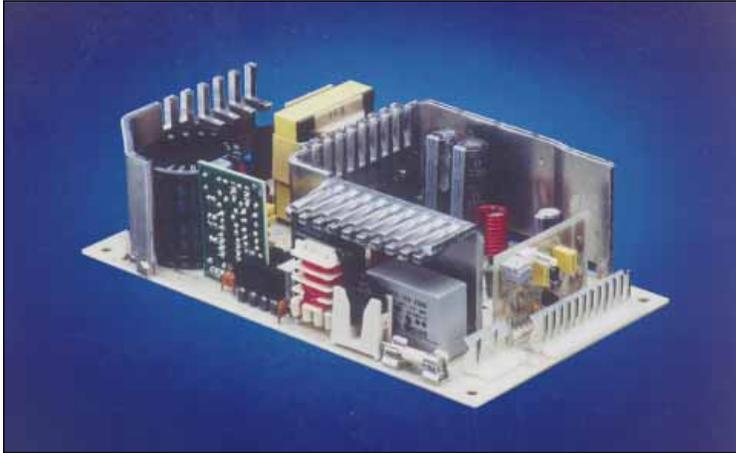


LPS 110



LPS Series 110 Watts • Single Output

The LPS Series of power supplies is an AC/DC universal input, single output design offering the latest in high technology performance. This rugged PCB design measures only 4" x 7" and features Class B EMI, high efficiency, and very high reliability. The LPS Series is ideal for telecommunications and computer peripheral applications, test and industrial equipment, medical instrumentation, and business machines.

SPECIAL FEATURES

- Universal input
- High efficiency
- Remote sense
- Built-in EMI filter
- Low output ripple
- All outputs fully regulated
- Adjustable output
- Overvoltage protection
- Overload protection
- Optional L bracket (-B suffix)
- Cover 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, 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 peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: $\pm .04\%$ per degree C

MTBF demonstrated: > 550,000 hours at full load and 25°C ambient conditions

ELECTRICAL SPECIFICATIONS

Input

Input range 85 VAC to 264 VAC; 120 to 370 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 Meets FCC Class B, CISPR 22 Class B (includes EN55022 class B conducted and VDE 0878 PT3 class B conducted)

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

Output

Maximum power . . . 80 W for convection; 110 W with 30 CFM forced air
Adjustment range . . $\pm 5\%$ minimum
Hold-up time 20 ms at 110 watt load and 115 VAC nominal line
Overload protection Short circuit protection. Case overload protected @ 110% to 145% above peak rating
Overvoltage protection 5V output: 6.0 to 6.7 VDC. Other outputs 10% to 25% above nominal output

SAFETY

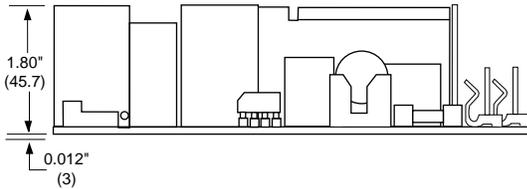
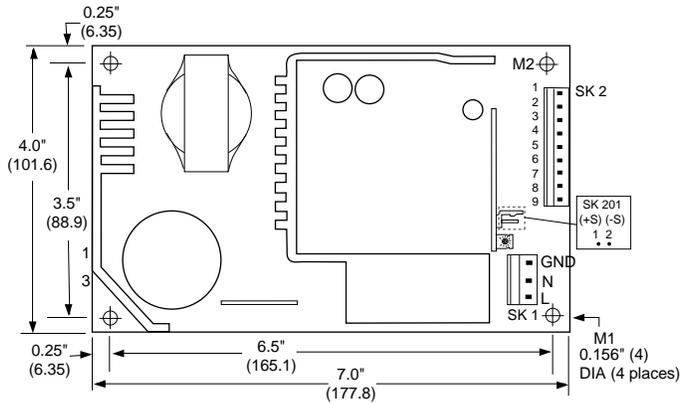
VDE	0805/EN60950 (IEC950)	11774-3336-1245 (LC #84997)
UL	UL1950	E132002
CSA	CSA 22.2-234 Level 3	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P95100376
BABT	EN60950/BS7002	
CB	Certificate and report	
CE	Mark	

ORDERING INFORMATION

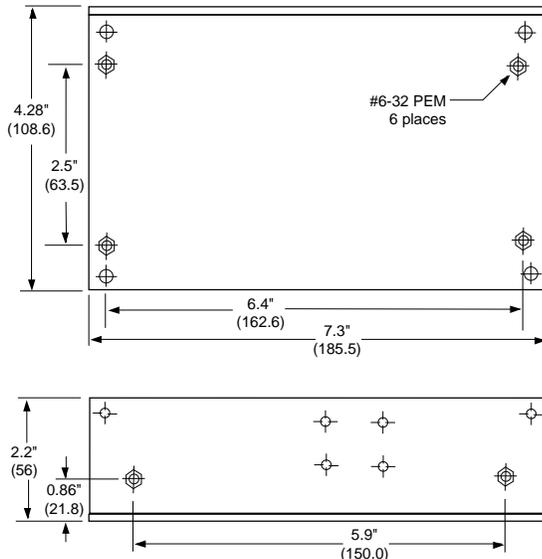
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load ¹	Regulation ²	Ripple P/P (PARD) ³
LPS112	5 V	0 A	16 A	22 A	25 A	± 2%	50 mV
LPS113	12 V	0 A	6.7 A	9.2 A	10.4 A	± 2%	120 mV
LPS114	15 V	0 A	5.3 A	7.3 A	8.3 A	± 2%	150 mV
LPS115	24 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

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.
- Note: -B suffix added to model number indicates L bracket option.

DRAWINGS



(-B) BRACKET



PIN ASSIGNMENTS

Connector	LPS112	LPS113	LPS114	LPS115	LPS118
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral
SK1-2	Line	Line	Line	Line	Line
SK1-3	GND	GND	GND	GND	GND
SK2-1	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-2	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-3	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-4	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common	Common
SK2-7	Common	Common	Common	Common	Common
SK2-8	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-9	+5 V	+12 V	+15 V	+24 V	+48 V
SK201-1	+sense	+sense	+sense	+sense	+sense
SK201-2	-sense	-sense	-sense	-sense	-sense

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: Molex 22-01-1022 (USA)
22-01-1023 (UK)

NOTES

1. Specifications subject to change without notice.
2. All dimensions are in inches and (mm).
3. Specifications are for convection rating unless otherwise stated.
3. Mounting holes M1 and M2 should be grounded for EMI purposes.
4. Mounting hole M1 is safety ground connection.
5. Warranty: 1 year
6. Weight: 1.25 lb / 0.57 kg