

## LPS60 Series

60 Watts

**Total Power:** 60 - 80 Watts  
**Input Voltage:** 85 - 264 Vac  
120 - 300Vdc  
**# of Outputs:** Single



### Special Features

- Universal input
- 3" x 5" footprint
- Remote sense
- Built in EMI filter
- Low output ripple
- Adjustable output voltage
- Overload protection
- 110 KHz switching frequency
- LPX60 enclosure kit available

### Safety

**VDE** 0805/EN60950 (IEC950)  
11774-3336-1255  
(LC #86665)  
**UL** UL1950  
E132002  
**CSA** CSA 22.2-234 Level 3  
LR53982C  
**NEMKO** EN 60950/EMKO-TUE  
P95100123  
(74-sec) 203  
**CB** Certificate and report  
1521, 1522, 1523, 1524  
**CE** Mark (LVD)

## Electrical Specifications

### Input

Input range:	85 - 264 Vac (wide range) 120 - 300 Vdc
Frequency:	47-440 Hz
Inrush current:	<18A peak @ 115 Vac, <36 A peak @230 Vac, cold start @ 25 °C
Input current:	1.5 A max. (RMS) @ 115 Vac
Efficiency:	70% typical at full load
EMI filter:	FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted
Safety ground leakage current:	<0.5 mA @ 50/60 Hz; 264 Vac input

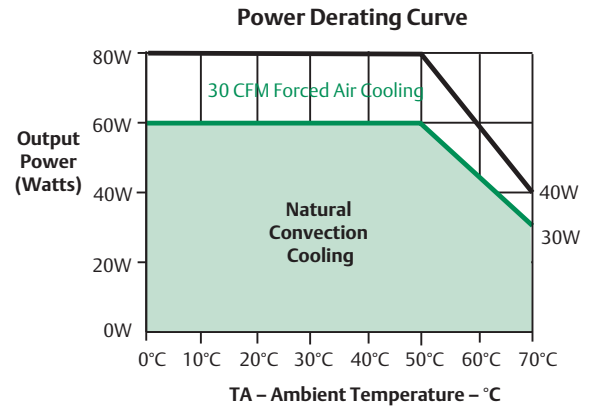
### Output

Maximum power:	60 W for convection; 80 W with 30 CFM forced air
Adjustment range	-5, +10% minimum
Hold-up time	20 ms @ 60 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 - 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.

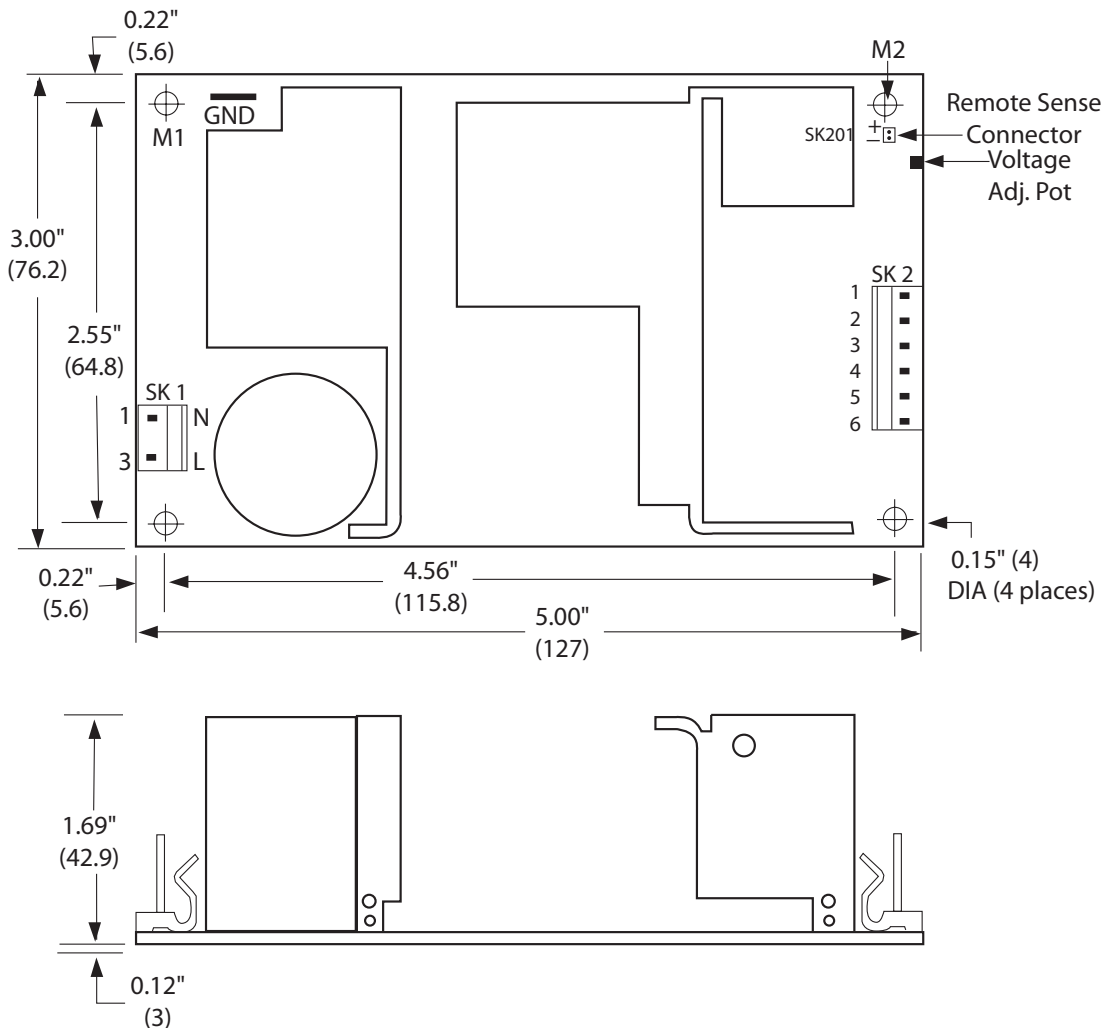


## Environmental Specifications

Operating temperature:	0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C, -20 °C startup
Storage temperature:	-40°C to +85 °C
Electromagnetic susceptibility:	designed to meet IEC801, -2, -3, -4, -5, -6, Level 3
Humidity:	Operating; non-condensing 5% to 95% RH
Vibration:	Three orthogonal axes, sweep at 1 cot/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational
Temperature coefficient	±0.04% per °C
MTBF demonstrated	>550,000 hours at full load and 25 °C ambient conditions



## Mechanical Drawing



## 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 (PAR) <sup>3</sup>
LPS61	3.3 V	2 A	12 A	16 A	18 A	±2%	33 mV
LPS62	5 V	0 A	12 A	16 A	18 A	±2%	50 mV
LPS63	12 V	0 A	5 A	6.7 A	7.5 A	±2%	120 mV
LPS64	15 V	0 A	4 A	5.3 A	6 A	±2%	150 mV
LPS65	24 V	0 A	2.5 A	3.3 A	3.8 A	±2%	240 mV
LPS68	48 V	0 A	1.3 A	1.7 A	1.9 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 (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

## Pin Assignments

Connector	LPS61	LPS62	LPS63	LPS64	LPS65	LPS68
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
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) **Not required for (-T) option**  
09-91-0300 (UK)  
PINS: 08-58-0111

**DC Outputs:** Molex 09-50-8061 (USA) **Not required for (-T) option**  
09-91-0600 (UK)  
PINS: 08-58-0113

**Remote Sense:** Molex 22-01-2025  
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 ±0.02" (±0.5mm)
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: 2 year
7. Weight: 0.75lbs/0.34kg

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