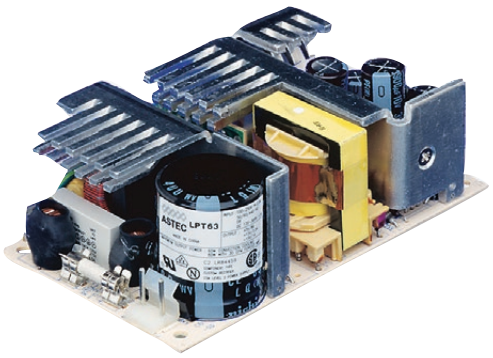
POWER

LPS60 Series

60 Watts

Data Sheet

Total Power: 60 - 80 Watts
Input Voltage: 85 - 264 Vac
120 - 300 Vdc
# 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
- RoHS compliant
- LPX60 enclosure kit available

SAFETY

- UL — UL 60950-1
  CAN/CSA-C22.2 60950-1
  E132002
- NEMKO — EN 60950-1
- CB — IEC 60950-1
- CE — Mark (LVD)

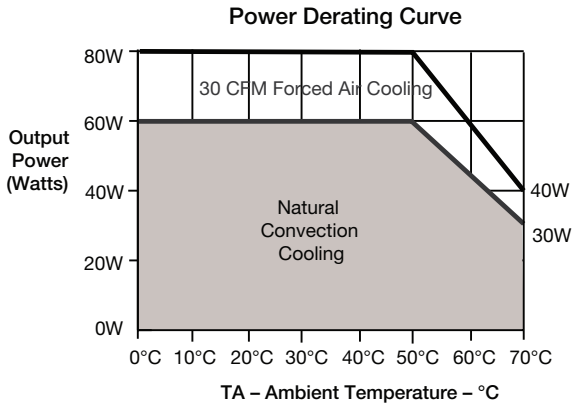
Electrical Specifications

Input	
Input range	85 - 264 Vac (wide range) 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	1.5 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; 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.

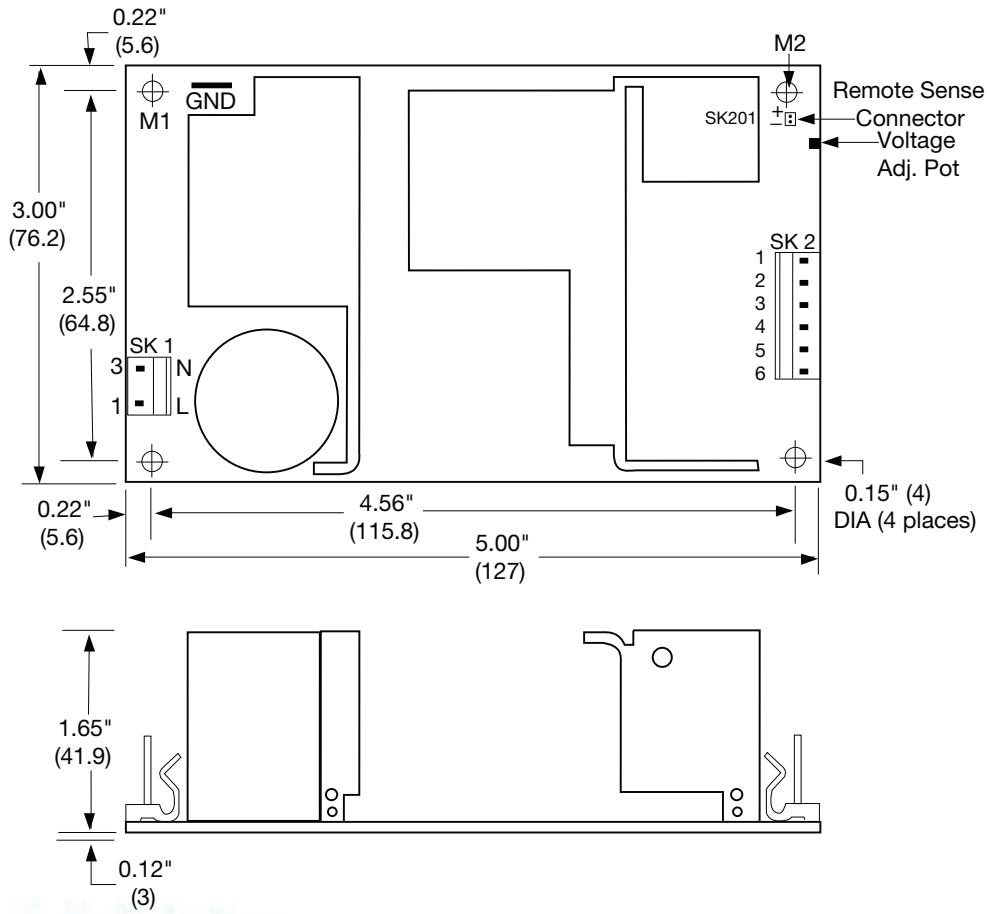
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EMBEDDED TECHNOLOGIES

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 IEC61000-4-2, -4-3, -4-4, -4-5, -4-6, 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 Drawings



Ordering Information

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
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.
4. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.

Pin Assignments

Connector	LPS61	LPS62	LPS63	LPS64	LPS65	LPS68
SK1-1	Line	Line	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
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 09-93-0600 (UK) PINS: 08-52-0113
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 years
7. Weight: 0.75 lbs/0.34 kg

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