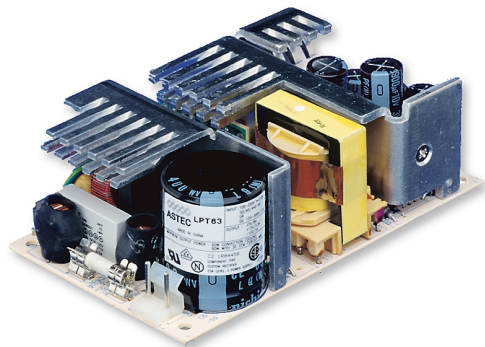


# 60 Watts LPT60 Series

**Total Power:** 60-80 Watts  
**Input Voltage:** 85-264 VAC  
 120-300 VDC  
**# of Outputs:** Triple



## Special Features

- Universal input
- 3" x 5" footprint
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable main output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX60 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  
 0.75G 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	1.5 A max. (RMS) @ 115 VAC
Efficiency	70% typical at full load (60% for LPT61)
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	60 W for convection (LPT61, 35 W); 80 W with 30 CFM forced air (LPT61, 55 W)
Adjustment range	-5, +10% minimum
Cross regulation	±2% on output 1; ±5% on outputs 2,3
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	5.7-6.7 VDC on main output LPT61: 3.6 to 4.6 VDC
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)	11774-3336-1255 (LC #86665)
<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	P95100123
<b>BABT</b>	EN60950/BS7002	PS / 605273
<b>CB</b>	Certificate and report	1518, 1519, 1520
<b>CE</b>	Mark (LVD)	

AMERICAS

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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>
LPT61	+3.3 V	0.7A	5 A	8.5 A	9.5 A	±2%	50mV
	+5 V	0 A	2.5 A	3.0 A	3.3 A	±2%	50mV
	+12 V	0 A	0.5 A	1.0 A	1 A	±5%	120mV
LPT62	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+12 V	0.3 A	3 A	3.5 A	6 A	±5%	120 mV
	-12 V	0 A	0.7 A	1 A	1.5 A	±5%	120 mV
LPT63	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+15 V	0.3 A	2.8 A	3.3 A	4 A	±5%	150 mV
	-15 V	0 A	0.7 A	1 A	1.5 A	±5%	150 mV
LPT64	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+12 V	0.3 A	3 A	3.5 A	6 A	±5%	120 mV
	-5 V	0 A	0.7 A	1 A	1.5 A	±5%	50 mV
LPT65	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+24 V	0.1 A	1.5 A	2.0 A	3 A	±7%	240 mV
	+12 V	0 A	0.7 A	1 A	1.5 A	±5%	120 mV
LPT66	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+24 V	0.1 A	1.5 A	2.0 A	3 A	±7%	240 mV
	-12 V	0 A	0.7 A	1 A	1.5 A	±5%	120 mV
LPT67	+5 V	0.7 A	7 A	8 A	10 A	±2%	50 mV
	+24 V	0.1 A	1.5 A	2.0 A	3 A	± 7%	240 mV
	-5 V	0 A	0.7 A	1 A	1.5 A	± 5%	50 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.
4. Minimum Loads are required.

## Pin Assignments

Connector	LPT61	LPT62	LPT63	LPT64	LPT65	LPT66	LPT67
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
SK1-3	Line	Line	Line	Line	Line	Line	Line
SK2-1	5 V	+12 V	+15 V	+12 V	+24V	+24V	+24V
SK2-2	3.3 V	+5 V	+5 V	+5 V	+5 V	+5 V	+5 V
SK2-3	3.3 V	+5 V	+5 V	+5 V	+5 V	+5 V	+5 V
SK2-4	Common	Common	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common	Common	Common
SK2-6	+12V	-12 V	-15 V	-5 V	+12 V	-12 V	-5 V
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense	+Sense
SK201-2	-Sense	-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: 0.75 lb. / 0.34 kg

