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# **LPT60 Series**

60 Watts

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

# 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

# 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

1518, 1519, 1520

CE: Mark (LVD)



Input range: 85-264VAC 120-300VDC 47-440Hz Frequency:

Inrush current: <18A peak @ 115VAC;

<36A peak @ 230VAC, cold start @ 25°C

Input current: 1.5A max. (RMS) @ 115VAC

Efficiency: 70% typical at full load (60% for LPT61)

EMI: FCC Class B conducted; CISPR 22 Class B conducted

> EN55022 Class B conducted: VDE 0878 PT3 Class B conducted <0.5 mA @ 50/60 Hz, 264 VAC input

Safety ground

leakage current:

Cross regulation:

Output

Maximum Power: 60W for convection (LPT61, 35W);

> 80W with 30CFW forced air (LPT61, 55W)  $\pm 2\%$  on output 1;  $\pm 5\%$  on outputs 2, 3

Adjustment range: -5, +10% minimum

Hold-up time: 20ms @ 40W load, 115 VAC nominal line

Overload protection: Short circuit protection on all outputs. Case overload

protected @ 110% to 145% above peak rating

Overvoltage protection: 5.7 to 6.7 VDC on the main output

LPT41: 3.6 to 4.6VDC

Compensates for 0.5 V lead drop min. Will operate without Remote sense:

remote sense connected. Reverse connection protected.





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# **Environmental Specifications**

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree

from 50° to 70°C, -20°C startup

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,

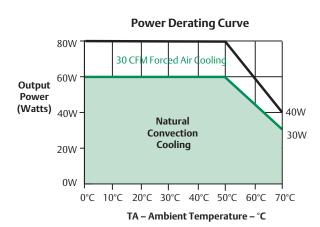
operational

Storage temperature:  $-40^{\circ}$  to 85°C Temperature coefficient:  $\pm .04\%$  per °C

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

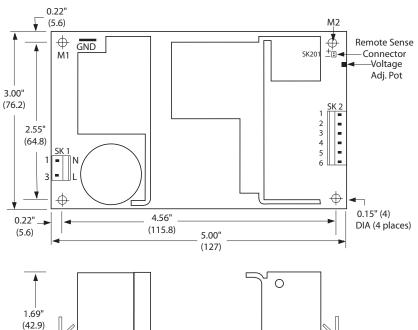
Ordering Information										
Model Number	Output Voltage	Minimum Load	Maximum Load with Convnection cooling	Maximum Load with 30CFM Forced Air	Peak Load¹	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>			
LPT61	+3.3V	0.7A	5A	8.5A	9.5A	±2%	50mV			
	+5V	0A	2.5A	3.0A	3.3A	±2%	50mV			
	+12V	0A	0.5A	1.0A	1A	±5%	120mV			
LPT62	+5V	0.7A	7A	8A	10A	±2%	50mV			
	+12V	0.3A	3A	3.5A	6A	±5%	120mV			
	-12V	0A	0.7A	1A	1.5A	±5%	120mV			
LPT63	+5V	0.7A	7A	8A	10A	±2%	50mV			
	+15V	0.3A	2.8A	3.3A	4A	±5%	150mV			
	-15V	0A	0.7A	1A	1.5A	±5%	150mV			
LPT64	+5V	0.7A	7A	8A	10A	±2%	50mV			
	+12V	0.3A	3A	3.5A	6A	±5%	120mV			
	-5V	0A	0.7A	1A	1.5A	±5%	50mV			
LPT65	+5V	0.7A	7A	8A	10A	±2%	50mV			
	+24V	0.1A	1.5A	2.0A	3A	±7%	240mV			
	+12V	0A	0.7A	1A	1.5A	±5%	120mV			

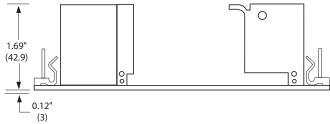
- 1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
- 2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and 10  $\mu F$  in parallel with a 0.1  $\mu F$  capacitor at rated line voltage and load ranges.
- 4. Minimum Loads are required.



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### Mechanical Drawing





Pin Assignments										
Connector	LPT61	LPT62	LPT63	LPT64	LPT65					
SK1-1	Neutral	Neutral	Neutral	Neutral	Neutral					
SK1-3	Line	Line	Line	Line	Line					
SK2-1	5V	+12V	+15V	+12V	+24V					
SK2- 2	3.3V	+5V	+5V	+5V	+5V					
SK2-3	3.3V	+5V	+5V	+5V	+5V					
SK2-4	Common	Common	Common	Common	Common					
SK2-5	Common	Common	Common	Common	Common					
SK2-6	+12V	-12V	-15V	-5V	+12V					
SK201-1	+Sense	+Sense	+Sense	+Sense	+Sense					
SK201-2	-Sense	-Sense	-Sense	-Sense	-Sense					

#### **Mating Connectors**

AC Input:

Molex 09-50-8031 (USA) 09-91-0300 (UK) PINS: 08-58-0111 Molex 09-50-8061 (USA) 09-91-0600 (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

Specifications subject to change without notice. 1.

- 2. All dimensions in inches (mm), tolerance is  $\pm 0.02$ " ( $\pm 0.5$ mm)
- 3. Mounting holes M1 and M2 should be grounded for EMI purposes.
- Mounting hole M1 is safety ground connection.
- Specifications are for convection rating at factory settings at 115 VAC input, 25°C unless otherwise stated.
- 6. Warranty: 2 year

DC Outputs:

7. Weight: 0.75lbs/0.34kg

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