LPT60 Series 60 Watts

Total Power: Input Voltage: # of Outputs:

60 - 80 Watts 85 - 264 VAC 120 - 300VDC Triple





Electrical Specifications

| Input | |
|-----------------------------------|---|
| Input range: - | 85-264VAC 120-300VDC |
| Frequency: | 47-440Hz |
| 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 |
| Safety ground leakage current: | <0.5 mA @ 50/60 Hz, 264 VAC input |
| Output | |
| Maximum Power: | 60W for convection (LPT61, 35W); 80W with 30CFW forced air (LPT61, 55W) |
| Cross regulation: | $\pm 2\%$ 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 |

Remote sense:

Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.





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) |

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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° to 85°C |
| Temperature coefficient: | ±.04% per °C |
| MTBF demonstrated: | >550,000 hours at full load and 25°C ambient conditions |

Ordering Information

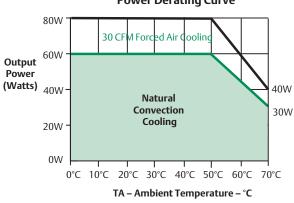
| 5 | | | | | | | |
|-----------------|-------------------|-----------------|---|--|------------------------|--------------------------------|--------------------------------|
| Model Number | Output Voltage | Minimum Load | Maximum Load with Convnection cooling | Maximum Load with 30CFM Forced Air | Peak Load ¹ | Regulation ² | Ripple P/P (PARD) ³ |
| 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 μF in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.

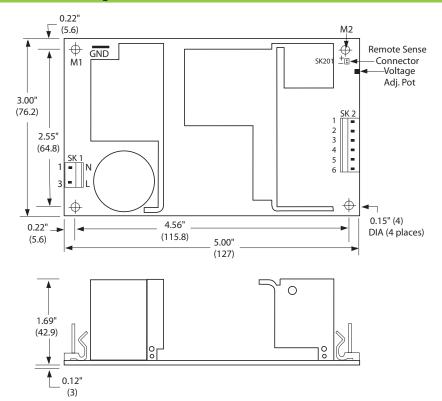
4. Minimum Loads are required.



Power Derating Curve

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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 | | | |
| DC Outputs: | 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 | | | | |
| | ons subject to change without notice. ons 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, $25^\circ\!C$ unless otherwise stated.
- 6. Warranty: 2 year
- 7. Weight: 0.75lbs/0.34kg

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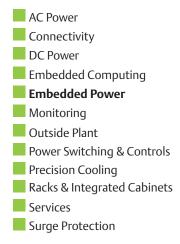
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