

LPT40-M Series

40 Watts

Total Power: 40 - 55 Watts
Input Voltage: 85 - 264 VAC
120 - 300VDC
of Outputs: Triple



Special Features

- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable 5V output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

Safety

VDE 0750/EN60601-1 (IEC601)
113769
UL UL2601 E182560
CSA CSA 22.2 No.601.1
LR109492
CE Mark (LVD)

Electrical Specifications

Input

| | |
|-------------------------------|---|
| Input range | 85-264 VAC 120-300 VDC |
| Frequency | 47-440 Hz |
| Inrush current | <18A peak @ 115VAC; <36A peak @ 230VAC, cold start @ 25°C |
| Input current | 1A max. (RMS) @ 115VAC |
| Efficiency | 70% typical at full load (60% for LPT41) |
| EMI | FCC Class A conducted; CISPR 22 Class A conducted EN55022 Class A conducted; VDE 0878 PT3 Class A conducted |
| Safety ground leakage current | <75 μ A @ 50/60 Hz, 264 VAC input |

Output

| | |
|------------------------|---|
| Maximum Power | 40W for convection; 55W with 30CFW forced air |
| 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. |



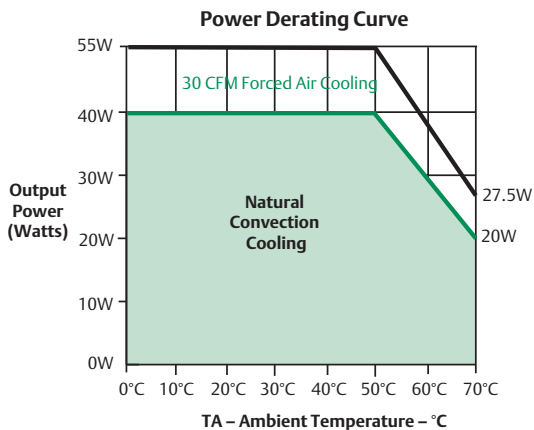
Environmental Specifications

| | |
|---------------------------------|---|
| Operating temperature: | 0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C, -20°C start up. |
| 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 |

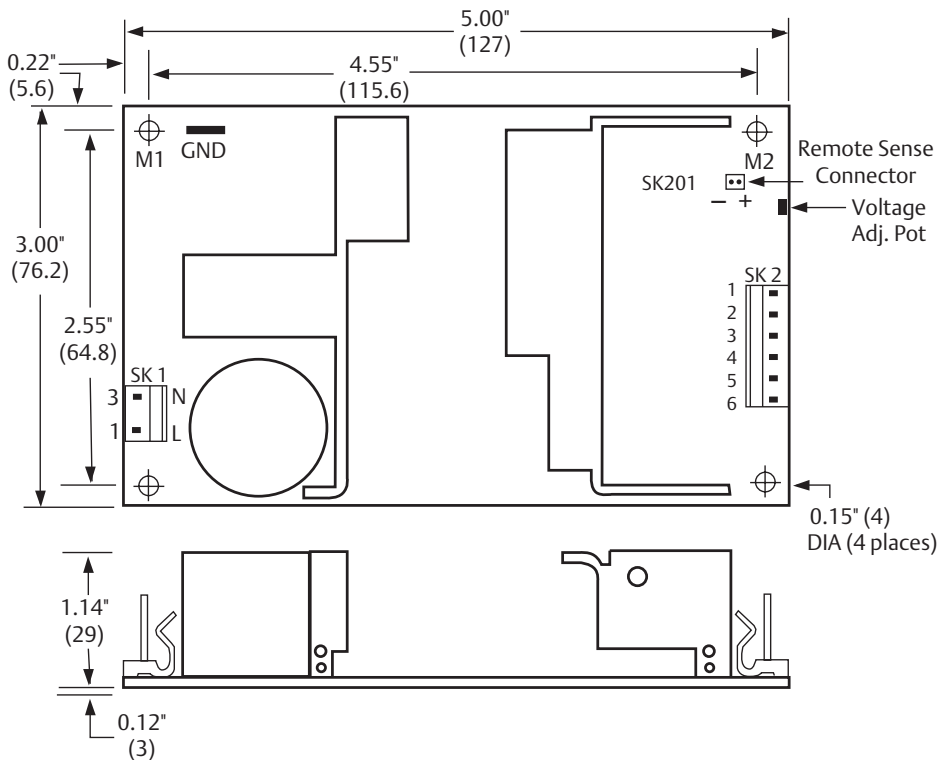
Ordering Information

| 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 (PAR) ³ |
|--------------|----------------|--------------|--------------------------------------|------------------------------------|------------------------|-------------------------|-------------------------------|
| LPT42-M | +5V | 0.4A | 4A | 5A | 7A | ±2% | 50mV |
| | +12V | 0.2A | 2A | 2.5A | 4A | ±5% | 120mV |
| | -12V | 0A | 0.5A | 0.7A | 1A | ±5% | 120mV |
| LPT45-M | +5V | 0.4A | 4A | 5A | 7A | ±2% | 50mV |
| | +15V | 0.2A | 2A | 2.5A | 3A | ±5% | 150mV |
| | -15V | 0A | 0.5A | 0.7A | 1A | ±5% | 150mV |

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.



Mechanical Drawing



Pin Assignments

| Connector | LPT42-M | LPT45-M |
|-----------|---------|---------|
| SK1-1 | Line | Line |
| SK1-3 | Neutral | Neutral |
| SK2-1 | +12V | +15V |
| SK2-2 | +5V | +5V |
| SK2-3 | +5V | +5V |
| SK2-4 | Common | Common |
| SK2-5 | Common | Common |
| SK2-6 | -12V | -15V |
| SK201-1 | +Sense | +Sense |
| SK201-2 | -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: 08-52-0114

Astec Connector Kit #70-841-006, includes all of the above

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance is ± 0.02 " (± 0.5 mm)
- 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.
- Warranty: 1 year
- Weight: 0.5lbs/0.23kg

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