

# **LPT40-M Series**

40 Watts

## **Data Sheet**

Total Power: 40 - 55 Watts Input Voltage: 85 - 264 Vac 120 - 300 Vdc

# of Outputs: Triple

## **SPECIAL FEATURES**

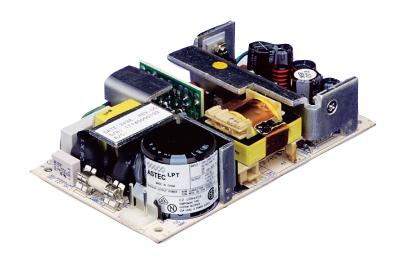
- Universal input
- 3" x 5" footprint
- Less than 1U high
- Remote sense on main output
- Built-in EMI filter
- Low output ripple
- Adjustable 5 V output
- Overvoltage protection
- Overload protection
- 110 KHz switching frequency
- LPX40 enclosure kit available

## **SAFETY**

VDE

	113769
<ul><li>UL</li></ul>	UL2601
	E182560
<ul><li>CSA</li></ul>	CSA 22.2 No.601.1
	LR109492
■ CE	Mark (LVD)

0750/EN60601-1 (IEC601)



Electrical Specifications		
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 A max. (RMS) @ 115 Vac	
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 μA @ 50/60 Hz, 264 Vac input	
Output		
Maximum power	40 W for convection; 55 W with 30CFW forced air	
Cross regulation	±2% on output 1; ±5% on outputs 2, 3	
Adjustment range	-5, +10% minimum	
Hold-up time	20 ms @ 40 W 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 4.6 Vdc	
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.	

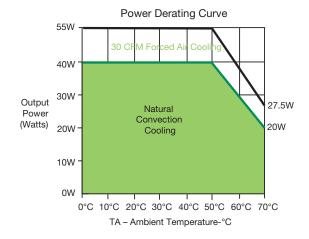


Environmental Specifications		
Operating temperature	0 °C to 50 °C ambient derate each output at 2.5% per degree from 50 °C to 70 °C, -20 °C start up.	
Electromagnetic susceptibility	Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3	
Humidity	Operating; non-condensing 5% to 95%	
Vibration	Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational	
Storage temperature	-40 °C to 85 °C	
Temperature coefficient	±.04% per °C	
MTBF demonstrated	> 550,000 hours at full load and 25 °C ambient conditions	

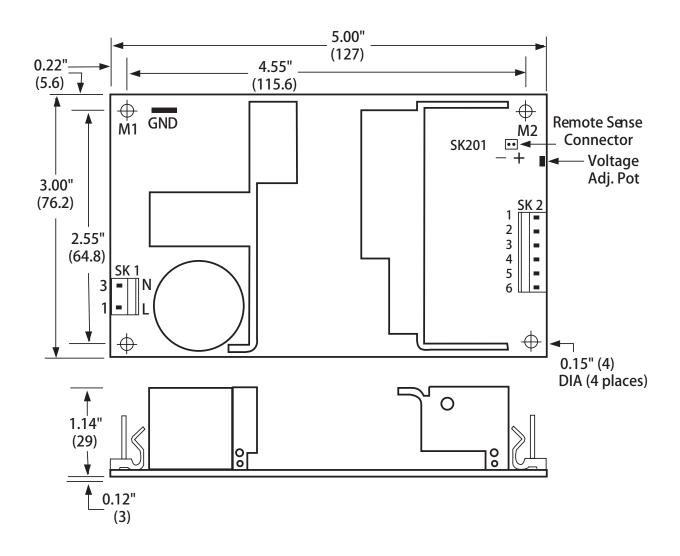
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Ordering Info	ormation						
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
LPT42-M	+12 V	0.2 A	2 A	2.5 A	4 A	±5%	120 mV
	-12 V	0 A	0.5 A	0.7 A	1 A	±5%	120 mV
	+5 V	0.4 A	4 A	5 A	7 A	±2%	50 mV
LPT45-M	+15 V	0.2 A	2 A	2.5 A	3 A	±5%	150 mV
	-15 V	0 A	0.5 A	0.7 A	1 A	±5%	150 mV

- 1. Peak current lasting < 30 seconds with a maximum 10% duty cycle.
- 2. At 25  $^{\circ}\text{C}$  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.



# **Mechanical Drawing**



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Pin Assignments		
Connector	LPT42-M	LPT45-M
SK1-1	Line	Line
SK1-3	Neutral	Neutral
SK2-1	+12 V	+15 V
SK2-2	+5 V	+5 V
SK2-3	+5 V	+5 V
SK2-4	Common	Common
SK2-5	Common	Common
SK2-6	-12 V	-15 V
SK201-1	+Sense	+Sense
SK201-2	-Sense	-Sense

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Mating Connectors	
AC Input	Molex 09-50-8031 (USA) 09-91-0300 (UK) PINS: 08-52-0111
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	s, includes all of the above

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

## **WORLDWIDE OFFICES**

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