

LPT50-M Series

50 Watts

Total Power: 47 - 55 Watts
Input Voltage: 90-264 VAC
127-300 VDC
of Outputs: Triple



Special Features

- Medical Safety Approvals
- Universal input
- 2" x 4" footprint
- Overpower and short circuit protection
- High efficiency
- High MTBF
- Built in EMI filter (CISPR 22 Class B)
- LED power good indicator
- Input power <74 watts
- Complies with EN61000-3-2
- UL Class I approved

Safety

UL UL 60601-1
CSA CSA-C22.2 No. 601.1-M90
VDE EN60601-1
CE LVD

Electrical Specifications

Input

Input range	90-264 VAC (wide range) 127-300 VDC
Frequency	47-440 Hz
Inrush current	<60 A peak @ 230 VAC, cold start @ 25°C
Efficiency	80% typical at full load
EMI RFI	FCC Class B conducted; CISPR 22 Class B conducted: EN55022 Class B conducted, EN60601-1-2
Safety ground leakage current	275uA @ 50/60 Hz, 264 VAC input

Output

Maximum power	55 W for convection (LPT51, 47.4W)
Hold-up time	10/20 ms 115/230 VAC input line
Overpower protection	Short circuit protection on all outputs Case overpower protected @ 110-160% of normal rating
Overvoltage protection	30-50% above nominal output

Environmental Specifications

Operating temperature:	0° to 50°C ambient. Derate each output 2.5% per degree from 50° to 70°C. -20°C start up
Storage temperature:	-40°C to +85°C
Electromagnetic susceptibility:	Designed to meet EN61000-4; -2, -3, -4, -5, -6, -8, -11 Level 3
Humidity:	Operating; non-condensing 10% to 95% RH
Vibration:	IEC68-2-6 to the levels of IEC721-3-2
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	Peak Load 1	Regulation 2	Ripple P/P (PAR)3
LPT51-M	+3.3V	0.8A	8A	9A	±2%	50 mV
	+5V	0.1A	3A	4A	±6%	50mV
	+12V	0A	0.5A	1A	±5%	120mV
LPT52-M	+5V	0.5A	8A	9A	±2%	50 mV
	+12V	0.1A	3A	4A	±5%	120mV
	-12V	0A	0.5A	1.0A	±5%	120mV
LPT53-M	+5V	0.5A	8A	9A	±2%	50 mV
	+15V	0.1A	2.4A	3.2A	±5%	150mV
	-15V	0A	0.5A	0.7A	±5%	150mV
LPT54-M	+5V	0.5A	8A	9A	±2%	50 mV
	+24V	0.1A	1.5A	2A	±7%	240mV
	+12V	0A	0.5A	0.7A	±5%	120mV

1. Peak current lasting <15 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 (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

Pin Assignments

Connector	LPT51-M	LPT52-M	LPT53-M	LPT54-M
SK1-1	Line	Line	Line	Line
SK1-3	Neutral	Neutral	Neutral	Neutral
SK2-1	+3.3 V	+5 V	+5V	+5V
SK2- 2	+2.3 V	+5 V	+5V	+5V
SK2- 3	Common	Common	Common	Common
SK2-4	Common	Common	Common	Common
SK2-5	12V	-12V	-15V	+12V
SK2-6	5V	+12V	+15V	+24

Mating Connectors

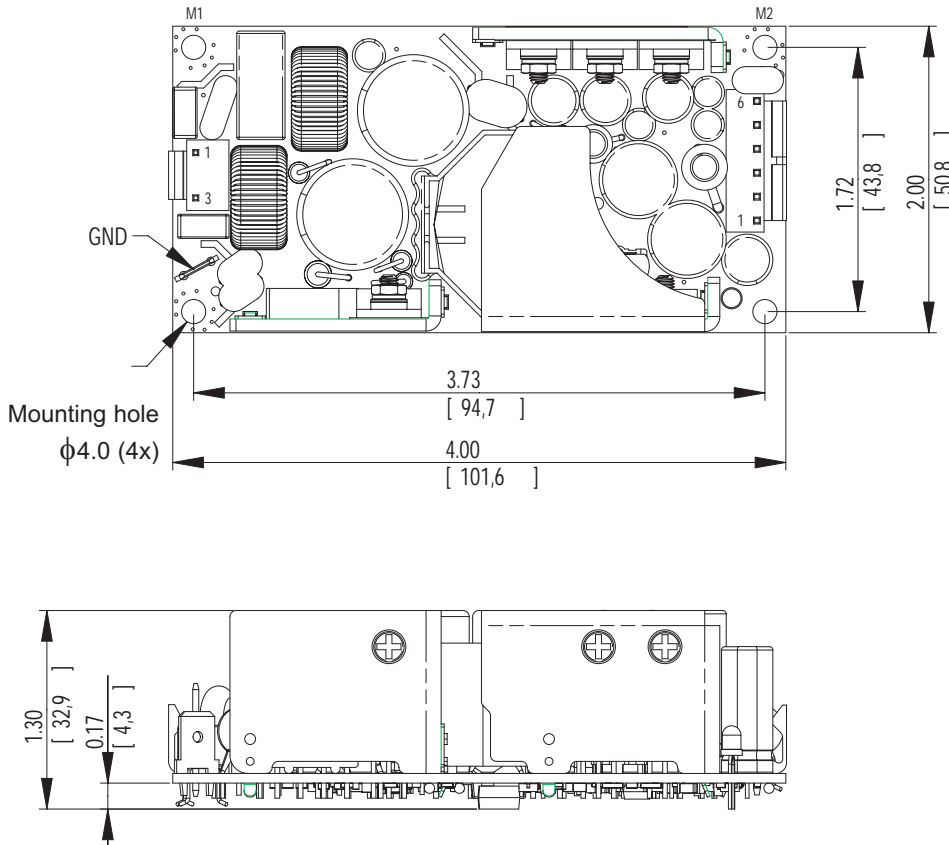
AC Input: Molex 09-50-8031 (USA)
09-91-0300 (UK)
PINS: 08-52-0113

DC Outputs: Molex 09-50-8061 (USA)
09-91-0600 (UK)
PINS: 08-52-0113

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

1. Specifications subject to change without notice.
2. All dimensions 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°C unless otherwise stated.
6. Warranty: 1 year
7. Weight: 0.45lbs/0.20kg

Mechanical Drawing



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