

LPT50-M Series

55 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
- Less than 1U high
- 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
- 85 kHz switching frequency
- Dual AC fuses
- UL Class I approved
- LPX50 enclosure kit available

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, 47.4 W)
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 as 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 (PARD) ³
LPT51-M	+3.3 V	0.8 A	8 A	9 A	±2%	50 mV
	+5 V	0.1 A	3 A	4 A	±6%	50 mV
	+12 V	0 A	0.5 A	1 A	±5%	120 mV
LPT52-M	+5 V	0.5 A	8 A	9 A	±2%	50 mV
	+12 V	0.1 A	3 A	4 A	±5%	120 mV
	-12 V	0 A	0.5 A	1 A	±5%	120 mV
LPT53-M	+5 V	0.5 A	8 A	9 A	±2%	50 mV
	+15 V	0.1 A	2.4 A	3.2 A	±5%	150 mV
	-15 V	0 A	0.5 A	0.7 A	±5%	150 mV
LPT54-M	+5 V	0.5 A	8 A	9 A	±2%	50 mV
	+24 V	0.1 A	1.5 A	2 A	±7%	240 mV
	+12 V	0 A	0.5 A	0.7 A	±5%	120 mV

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	+5 V	+5 V
SK2-2	+3.3 V	+5 V	+5 V	+5 V
SK2-3	Common	Common	Common	Common
SK2-4	Common	Common	Common	Common
SK2-5	+12 V	-12 V	-15 V	+12 V
SK2-6	5 V	+12 V	+15 V	+24 V

Mating Connectors

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

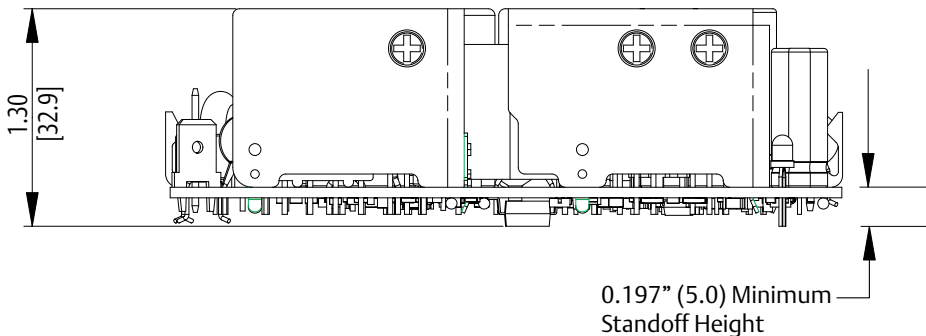
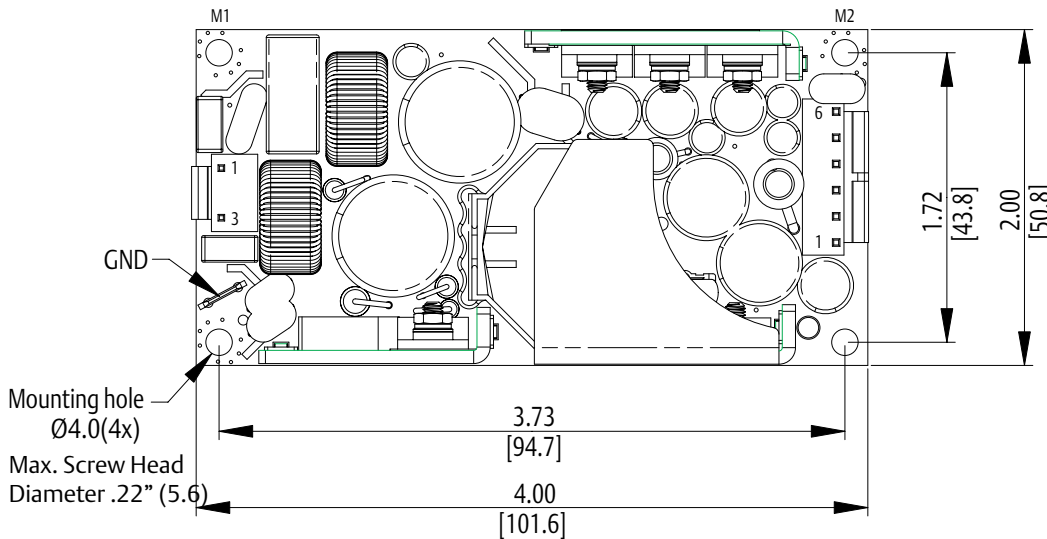
DC Outputs: Molex 09-50-8061 (USA)
09-91-0600 (UK)
PINS: 08-52-0113

Emerson Network Power Connector Kit #70-841-006, includes all of the above

Notes:

- Specifications subject to change without notice.
- All dimensions in inches (mm), tolerance is ±0.02" (±0.5mm)
- 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: 2 year
- Weight: 0.45 lbs/0.20 kg

Mechanical Drawing



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