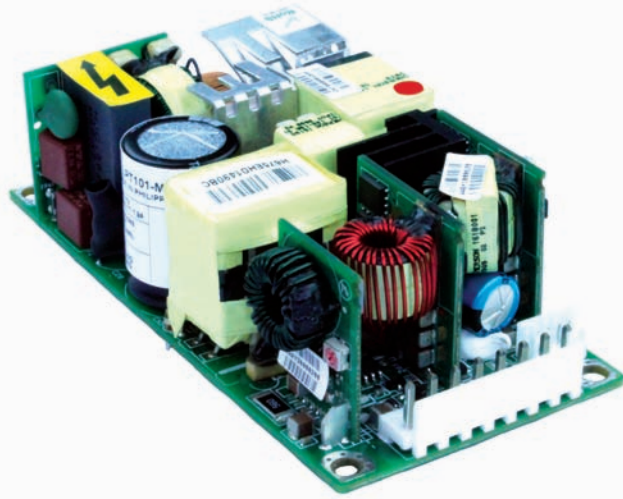


## LPT100-M Series

130 Watts

**Total Power:** 80 - 130 Watts  
**Input Voltage:** 90 - 264 Vac  
**# of Outputs:** Triple



### Special Features

- Medical and ITE safeties
- Active power factor correction
- 2" x 4" footprint
- Less than 1U high
- EN61000-3-2 compliant
- Remote sense
- Power fail
- Adjustable main output
- Built-in Class B EMI filter
- Overvoltage protection
- Overload protection
- Thermal overload protection
- LPX50 enclosure kit available

### Electrical Specifications

| Input                          |  |
|--------------------------------|--|
| Input range:                   | 90 - 264 Vac; 127 - 300 Vdc  |
| Frequency:                     | 47 - 63 Hz   |
| Inrush current:                | 50 A max., cold start @ 25 °C  |
| Efficiency:                    | 82% typical at full load   |
| EMI/RFI:                       | FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted                    |
| Safety ground leakage current: | 275 $\mu$ A @ 50/60 Hz, 264 Vac input  |
| Output                         |  |
| Maximum power:                 | 80 W for convection;<br>130 W with 200 LFM forced air  |
| Adjustment range:              | All outputs adjustable - 40%, +10%, except for +24V output on LPT104-xxx which will be -10%, +20%.                           |
| Hold-up time:                  | 10 ms @ 130 W load, 120 Vac input  |
| Overload protection:           | Short circuit protection on all outputs. Case overload protected @ 110 - 160% above rating for V1 & V2, 110-190% for V3      |
| Overvoltage protection:        | 15 - 35% above nominal output  |
| Logical Control                |  |
| Power failure:                 | Active LowTTL logic signal goes high 100 - 500 msec after main output; it goes low at least 6 msec before loss of regulation |
| Remote sense:                  | Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.              |

### Safety

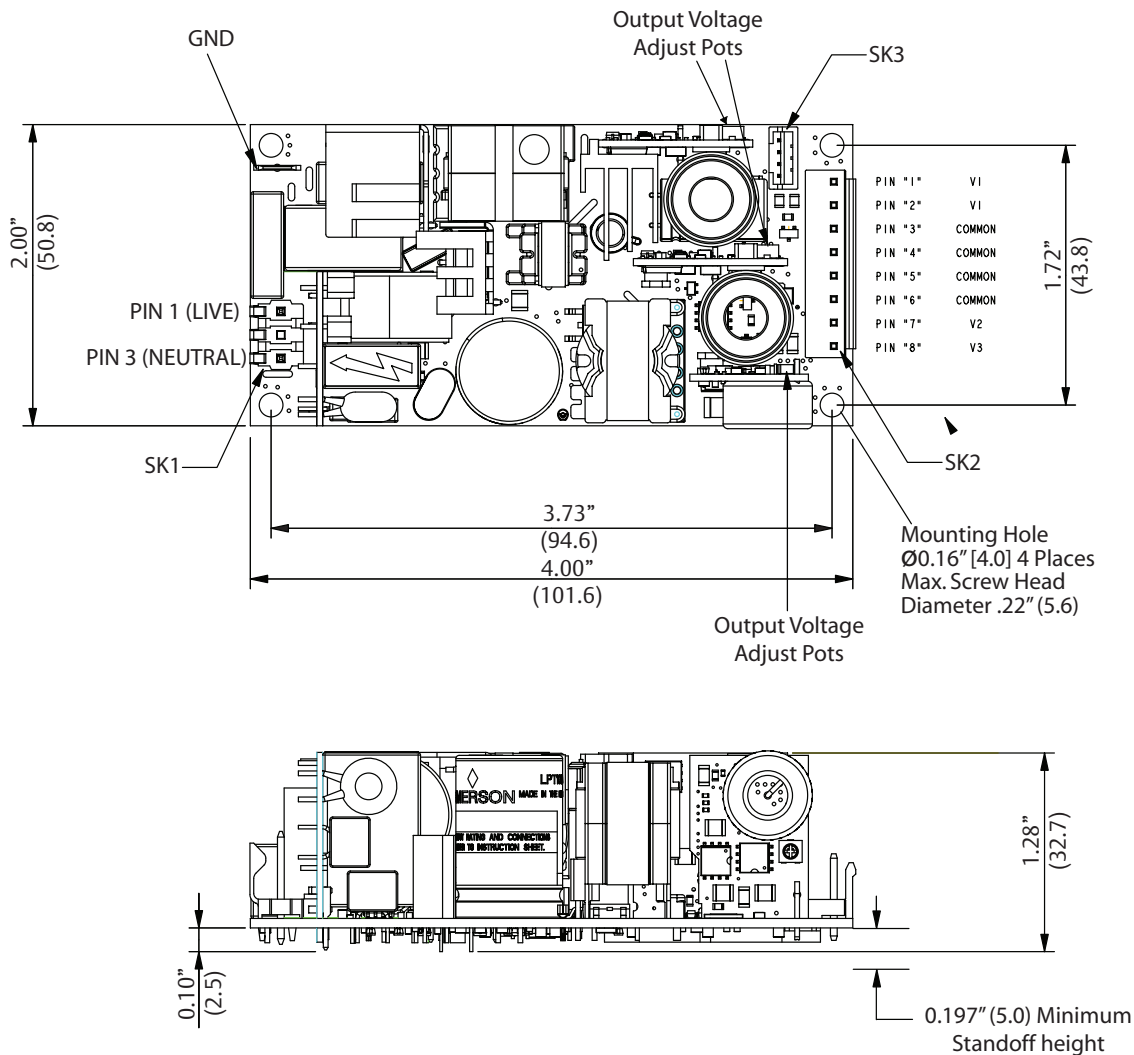
- TUV 60950, 60601-1
- UL 60950, 60601-1
- CSA 60950, 60601-1
- NEMKO 60950, 60601-1
- AUSTEL 60950, 60601-1
- CB Certificate & report
- CE Mark (LVD)

## Environmental Specifications

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|                                 |  |
|---------------------------------|--|
| 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                                    |

## Mechanical Drawing



## Ordering Information

| Model Number | Output Voltage | Minimum Load | Maximum Load with Convection Cooling | Maximum Load with 30CFM Forced Air | Peak Load | Regulation <sup>2</sup> | Ripple P/P (PAR) <sup>3</sup> |
|--------------|----------------|--------------|--------------------------------------|------------------------------------|-----------|-------------------------|-------------------------------|
| LPT101-M     | +3.3 V         | 0 A          | 13 A                                 | 18 A                               | 20 A      | ±2%                     | 50 mV                         |
|              | +5 V           | 0 A          | 5 A                                  | 9 A                                | 10 A      | ±5%                     | 50 mV                         |
|              | +12 V          | 0 A          | 1 A                                  | 2.3 A                              | 2.3 A     | ±5%                     | 120 mV                        |
| LPT102-M     | +5 V           | 0 A          | 13 A                                 | 18 A                               | 20 A      | ±2%                     | 50 mV                         |
|              | +12 V          | 0 A          | 5 A                                  | 9 A                                | 10 A      | ±5%                     | 120 mV                        |
|              | -12 V          | 0 A          | 1 A                                  | 1.5 A                              | 2 A       | ±5%                     | 120 mV                        |
| LPT103-M     | +5 V           | 0 A          | 13 A                                 | 18 A                               | 20 A      | ±2%                     | 50 mV                         |
|              | +15 V          | 0 A          | 4 A                                  | 7.2 A                              | 8 A       | ±5%                     | 150 mV                        |
|              | -15 V          | 0 A          | 1 A                                  | 1.5 A                              | 2 A       | ±5%                     | 150 mV                        |
| LPT104-M     | +5 V           | 0 A          | 13 A                                 | 18 A                               | 2 A       | ±2%                     | 50 mV                         |
|              | +24 V          | 0 A          | 1.5 A                                | 3 A                                | 3.5 A     | ±7%                     | 240 mV                        |
|              | +12 V          | 0 A          | 1 A                                  | 1.5 A                              | 2 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 | LPT100-M |                |
|-----------|----------|----------------|
| SK1       | PIN 1    | Neutral        |
|           | PIN 3    | Line           |
|           | PIN 4    | GND            |
| SK2       | PIN 1    | V1out          |
|           | PIN 2    | V1out          |
|           | PIN 3    | GND            |
|           | PIN 4    | GND            |
|           | PIN 5    | GND            |
|           | PIN 6    | GND            |
|           | PIN 7    | V2out          |
|           | PIN 8    | V3out          |
| SK3       | PIN 1    | Power Fail     |
|           | PIN 2    | GND            |
|           | PIN 3    | + Remote Sense |
|           | PIN 4    | - Remote Sense |

## Mating Connectors

|  |  |
|--|--|
| AC Input (SK1):  | Molex P/N 09-50-8031<br>PINS: 08-52-0113 |
| AC Ground:   | Molex P/N 01-9002001                     |
| DC Output (SK2):   | JST P/N VHR-8N<br>PINS: SVH-21T-P1.1     |
| Remote Sense (SK3):  | Molex P/N 87639-0400<br>PINS: 50212-8100 |
| Emerson Network Power Connector Kit #70-841-026, includes all of the above |  |

## Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. mounting holes MH1, MH2, MH3 should be grounded for EMI purpose
4. Mounting MH1 is safety ground connection
5. Specifications are for convection rating at factory settings at 115 Vac input 25 °C unless otherwise stated.
6. This power supply requires mounting on metal standoffs 0.20" (5 m) in height.
7. Warranty: 2 year
8. Weight: 0.44 lb. / 0.20 kg

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