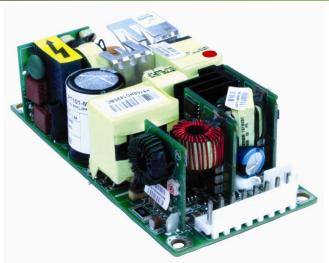
# **LPT100-M Series** 130 Watts

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



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### **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 μA @ 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: -20%, +10%, except for +24V output on LPT104-M which will be -10%, +20% and 3.3 V output on the LPT101-M +10%, -15% |
| 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, 150 - 250% 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)

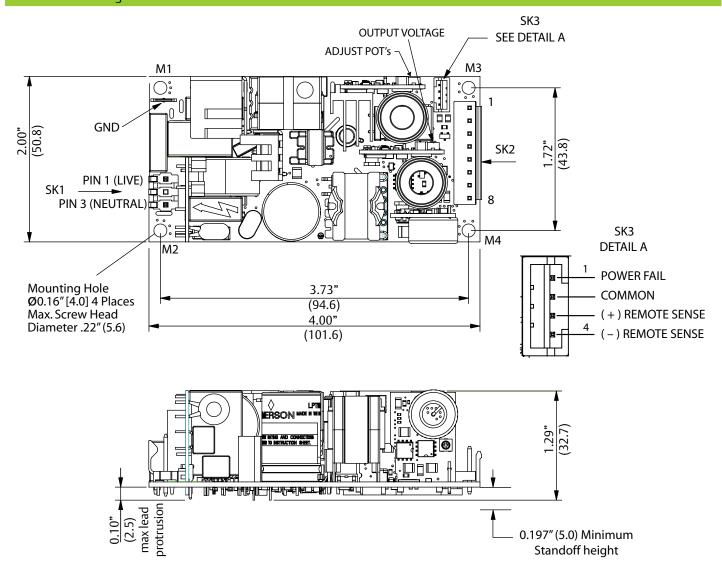


# **Environmental Specifications**

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| Operating temperature: | 0° to 50 °C ambient derate each output as 2.5% per degree from 50° to 70 °C20 °C start up |
|------------------------|---|
| Storage temperature:   | -40 °C to +85 °C  |
| Electromagnetic        | designed to meet EN61000-4;   |
| susceptibility:        | -2, -3, -4, -5, -6, -8, -11 Level 3   |
| Humidity:              | Operating; non-condensing 10% to 90% RH, non-operating, non-condensing 10% - 95%          |
| Vibration:             | IEC68-2-6 to the levels of IEC721-3-2   |
| MTBF calculated:       | 583,000 hours at full load and 25 °C ambient conditions. 230 Vac input, Bellcore          |

#### **Mechanical Drawing**



| Ordering Inf    | formatio          | า               |  |  |              |                         |                                      |
|-----------------|-------------------|-----------------|--|--|--------------|-------------------------|--------------------------------------|
| Model<br>Number | Output<br>Voltage | Minimum<br>Load | Maximum Load<br>with Convection<br>Cooling | Maximum Load<br>with 30CFM<br>Forced Air | Peak<br>Load | Regulation <sup>2</sup> | Ripple<br>P/P<br>(PARD) <sup>3</sup> |
|                 | +3.3 V            | 0 A             | 13 A                                       | 18 A                                     | 20 A         | ±2%                     | 50 mV                                |
| LPT101-M        | +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                               |
|                 | +5 V              | 0 A             | 13 A                                       | 18 A                                     | 20 A         | ±2%                     | 50 mV                                |
| LPT102-M        | +12 V             | 0 A             | 5 A  | 9 A                                      | 10 A         | ±5%                     | 120 mV                               |
|                 | -12 V             | 0 A             | 1 A  | 2 A                                      | 2 A          | ±5%                     | 120 mV                               |
|                 | +5 V              | 0 A             | 13 A                                       | 18 A                                     | 20 A         | ±2%                     | 50 mV                                |
| LPT103-M        | +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                               |
|                 | +5 V              | 0 A             | 13 A                                       | 18 A                                     | 20 A         | ±2%                     | 50 mV                                |
| LPT104-M        | +24 V             | 0 A             | 1.5 A                                      | 3 A                                      | 3.5 A        | ±7%                     | 240 mV                               |
|                 | +12 V             | 0 A             | 1 A  | 2.3 A                                    | 2.3 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  $\mu F$  (tantalum capacitor) in parallel with a 0.1  $\mu F$  capacitor at rated line voltage and load ranges.

| Pin Assig | nments |                |
|-----------|--------|----------------|
| Connector |        | LPT100-M       |
| SK1       | PIN 1  | Live           |
|           | PIN 3  | Neutral        |
| 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 |

| AC Input (SK1): Molex 09-50-3031 PINS: 08-52-0072 AC Ground: Molex 01-90020001 DC Output (SK2): JST VHR-8N PINS: SVH-21T-P1.1 Remote Sense (SK3): JST PHR-4 PINS: SPH-002T-PO.5S |
|--|
| DC Output (SK2): JST VHR-8N PINS: SVH-21T-P1.1 Remote Sense (SK3): JST PHR-4   |
| PINS: SVH-21T-P1.1 Remote Sense (SK3): JST PHR-4   |
|  |
| OR<br>LANDWIN 2001S0400<br>PINS: 2005T   |

#### Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is ±.02".
- 3. All mounting holes should be grounded for EMI purpose
- 4. Mounting M1 is safety ground connection
- 5. Specifications are for convection rating at factory settings at 115 Vac input 25 °C unless otherwise stated.
- This power supply requires mounting on metal standoffs 0.20" (5 m) in height.
- 7. For DC input an external DC safety rated fuse must be used.
- 8. Warranty: 2 year
- 9. Weight: 0.44 lb. / 0.20 kg

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