

EN: This Datasheet is presented by the manufacturer.

Please visit our website for pricing and availability at www.hestore.hu.

LPS100-M Series 150 Watts

Total Power: 80 - 150 Watts **Input Voltage:** 90 - 264 Vac **# of Outputs:** Single



Rev. 03.30.10_29 LPS100-M Series 1 of 3



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
- Isolated12 V Fan output
- LPX50 Enclosure kit available

Electrical Specifications

| Input | | | | | |
|---|---|--|--|--|--|
| Input range: | 90 - 264 Vac; 120 - 300 Vdc | | | | |
| Frequency: | 47-63 Hz | | | | |
| Inrush current: | 50 A max., cold start @ 25 °C | | | | |
| Efficiency: | 88% 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: | 100 W for convection (80 W for LPS102-M); 150 W with 30 CFM forced air (120 W for LPS102-M) | | | | |
| Adjustment range: | ± 10% minimum on the main outputs | | | | |
| Fan output: | 12 V @ 1 A isolated, ± 10% | | | | |
| Hold-up time: | 10 ms @ 150 W load, 120 Vac input | | | | |
| Overload protection: | Short circuit protection on all outputs. Case overload protected @ 110-160% above rating | | | | |
| Overvoltage protection: | on: 15-35% above nominal output | | | | |
| Logical Control | | | | | |
| Power failure: | Open collector 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 seconnected. Reverse connection protected. | | | | | |

Safety

TUV 60950, 60601-1
UL 60950, 60601-1
cULus 60950, 60601-1
CB Certificate & report
CE Mark (LVD)
CQC Mark

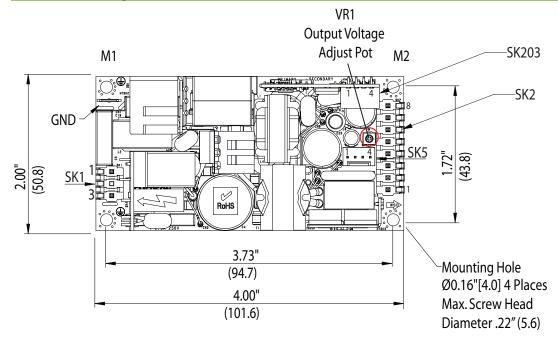


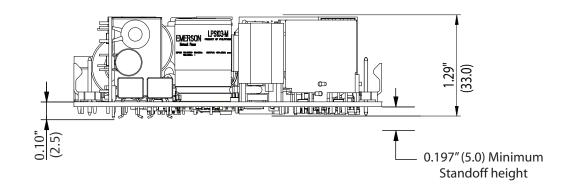
Rev. 03.30.10_29 LPS100-M Series

Environmental Specifications

| Operating temperature: | 0° to 50° C ambient derate each output as 2.5% per degree from 50° to 70° C20 $^\circ$ 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 calculated: | 534,000 hours at full load and 25 °C ambient conditions, 230 V input, Bellcore |

Mechanical Drawing





| Ordering Infor | mation | | | | | | |
|-----------------|-------------------|-----------------|--|--|-----------|-------------------------|-----------------------|
| Model Number | Output Voltage | Minimum Load | Maximum Load with Convection Cooling | Maximum Load with 30CFM Forced Air | Peak Load | Regulation ² | Ripple P/P (PARD)³ |
| LPS102-M | 5 V | 0 A | 16 A | 24 A | 30 A | ± 2% | 50 mV |
| LPS103-M | 12 V | 0 A | 8.3 A | 12.5 A | 14 A | ± 2% | 120 mV |
| LPS104-M | 15 V | 0 A | 6.7 A | 10 A | 11 A | ± 2% | 150 mV |
| LPS105-M | 24 V | 0 A | 4.2 A | 6.3 A | 7 A | ± 2% | 240 mV |
| LPS108-M | 48 V | 0 A | 2.1 A | 3.1 A | 3.5 A | ± 2% | 480 mV |

- 1. Peak current lasting < 30 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 Ass | ignmen | ts | | |
|--------------------|--------|-----------------------|--|--|
| Connector LPS100-M | | | | |
| SK1 | Pin 1 | Neutral | | |
| | Pin 3 | Line | | |
| SK2 | Pin 1 | Common | | |
| | Pin 2 | Common | | |
| | Pin 3 | Common | | |
| | Pin 4 | Common | | |
| | Pin 5 | +Vout | | |
| | Pin 6 | +Vout | | |
| | Pin 7 | +Vout | | |
| | Pin 8 | +Vout | | |
| SK203 | Pin 1 | Common | | |
| | Pin 2 | Power Fail | | |
| | Pin 3 | - Remote Sense | | |
| | Pin 4 | + Remote Sense | | |
| SK5 | Pin 1 | +12 V Fan | | |
| | Pin 2 | +12 V Fan | | |
| | Pin 3 | Fan Return (Isolated) | | |
| | Pin 4 | Fan Return (Isolated) | | |

| Mating Con | nectors |
|-----------------------|--|
| AC Input (SK1): | Molex P/N: 09-50-3031, Pins: 08-52-0072 or |
| | Landwin P/N: 3060S0302, Pins: 3360T011P |
| AC Ground | Molex: 01-90020001 |
| DC Output (SK2): | Molex P/N: 09-50-3081, Pins: 08-52-0072 or |
| | Landwin P/N: 3060S0802, Pins: 3360T011P |
| Remote Sense (SK203): | Molex P/N: 35155-0400, Pins: 08-70-0057 or |
| | Landwin P/N: 2640S04A0, Pins: 2543T011P |
| Fan: (SK5): | Molex P/N: 22-01-1042, Pins: 08-70-0049 or |
| | Landwin: P/N: 2510S04A0, Pins: 2543T011P |
| Emerson Networ above | k Power Connector Kit #70-841-025, includes all of the |

Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is $\pm .02$ ".
- 3. mounting holes MH1, MH2 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.
- 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

Americas

5810 Van Allen Way Carlsbad, CA 92008

USA

Telephone: +1 760 930 4600 Facsimile: +1 760 930 0698

Rev. 03.30.10 29

LPS100-M Series

Europe (UK)

Waterfront Business Park Merry Hill, Dudley West Midlands, DY5 1LX United Kingdom

Telephone: +44 (0) 1384 842 211 Facsimile: +44 (0) 1384 843 355

Asia (HK)

14/F, Lu Plaza 2 Wing Yip Street Kwun Tong, Kowloon

Hong Kong

Telephone: +852 2176 3333 Facsimile: +852 2176 3888

For global contact, visit:

www.Emerson.com/EmbeddedPower techsupport.embeddedpower @emerson.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Emerson Network Power.

The global leader in enabling business-critical continuity.

AC Power

Connectivity

DC Power

Embedded Computing

Embedded Power

Monitoring

Outside Plant

Power Switching & Controls

Precision Cooling

Racks & Integrated Cabinets

Services

Surge Protection

EmersonNetworkPower.com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2010 Emerson Electric Co.