

# **LPT100-M Series**

130 Watts

**Data Sheet** 

Total Power: 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
- LPX100 enclosure kit available
- RoHS compliant

#### 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)



# Electrical Specifications

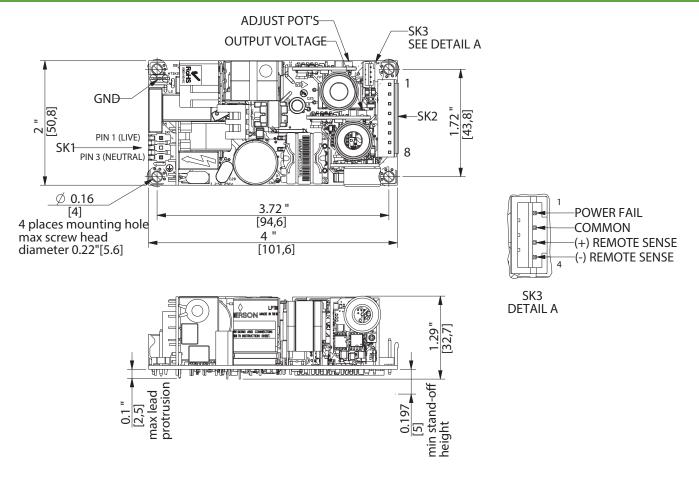
Input			
Input range	90 - 264 Vac; 127 - 300 Vdc		
Frequency	47 - 63 Hz		
Inrush current	50 A max., cold start @ 25 °C		
Efficiency	82% typical at full load		
EMI/RFI	FCC Class B conducted; CISPR22 Class B conducted; EN55022 Class B conducted; VDE0878PT3 Class B conducted		
Safety ground leakage current	275 μA @ 50/60 Hz, 264 Vac input		
Output			
Maximum power	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.		





Environmental Specifications				
Operating temperature	0 °C to 50 °C ambient derate each output as 2.5% per degree from 50 °C to 70 °C20 °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 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 Information						
Model Number	Output Voltage	Minimum Load	Maximum Load with 30CFM Forced Air	Peak Load	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>
LPT101-M	+3.3 V	0 A	18 A	20 A	±2%	50 mV
	+5 V	0 A	9 A	10 A	±5%	50 mV
	+12 V	0 A	2.3 A	2.3 A	±5%	120 mV
LPT102-M	+5 V	0 A	18 A	20 A	±2%	50 mV
	+12 V	0 A	9 A	10 A	±5%	120 mV
	-12 V	0 A	2 A	2 A	±5%	120 mV
LPT103-M	+5 V	0 A	18 A	20 A	±2%	50 mV
	+15 V	0 A	7.2 A	8 A	±5%	150 mV
	-15 V	0 A	1.5 A	2 A	±5%	150 mV
LPT104-M	+5 V	0 A	18 A	20 A	±2%	50 mV
	+24 V	0 A	3 A	3.5 A	±7%	240 mV
	+12 V	0 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 µF (tantalum capacitor) in parallel with a 0.1 µF capacitor at rated line voltage and load ranges.

4. This product is a Component Power Supply and is only for inclusion by professional installers within other equipment and must not be operated as a standalone product. EMC compliance to appropriate standards must be verified at the system level. This product is for sale to OEMs and System Integrators, including through Distribution Channels. It is not intended for sale to End Users.





Pin Assignments				
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		

Mating Connectors			
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 OR LANDWIN 2001S0400; PINS: 2005T		
Artesyn Embedded Technologies 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  $\pm .02$ ".
- 3. All mounting holes should be grounded for EMI purpose
- 4. Mounting M1 is safety ground connection
- 5. This power supply requires mounting on metal standoffs 0.20" (5 m) in height.
- 6. For DC input an external DC safety rated fuse must be used.
- 7. Warranty: 2 year
- 8. Weight: 0.44 lb. / 0.20 kg

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LPT100-M DS 16Jul2018

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Authorized Distributor

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