

LPT100-M Series

130 Watts





Electrical Specifi	cations			
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; 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.			



EMBEDDED TECHNOLOGIES

Data Sheet

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

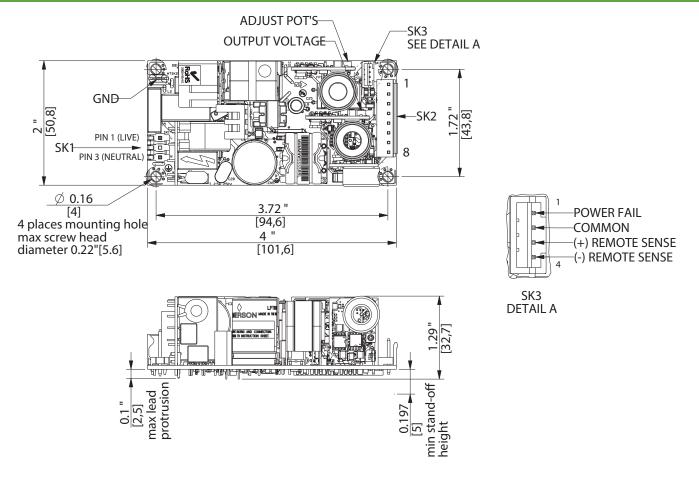
SAFETY

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



Environmental Specifications				
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 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 Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load	Regulation ²	Ripple P/P (PARD) ³
	+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
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	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
LPT104-M	+5 V	0 A	13 A	18 A	20 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	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.

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	

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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. Specifications are for convection rating at factory settings at 115 Vac input 25 $^\circ\mathrm{C}$ unless otherwise stated.
- 6. 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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