

LPT100-M Series

130 Watts

Data Sheet

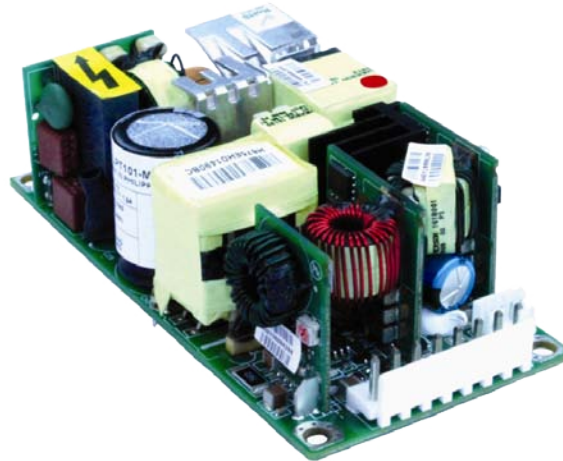
Total Power: 80 - 130 Watts
Input Voltage: 90 - 264 Vac
of Outputs: Triple

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
- 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:	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

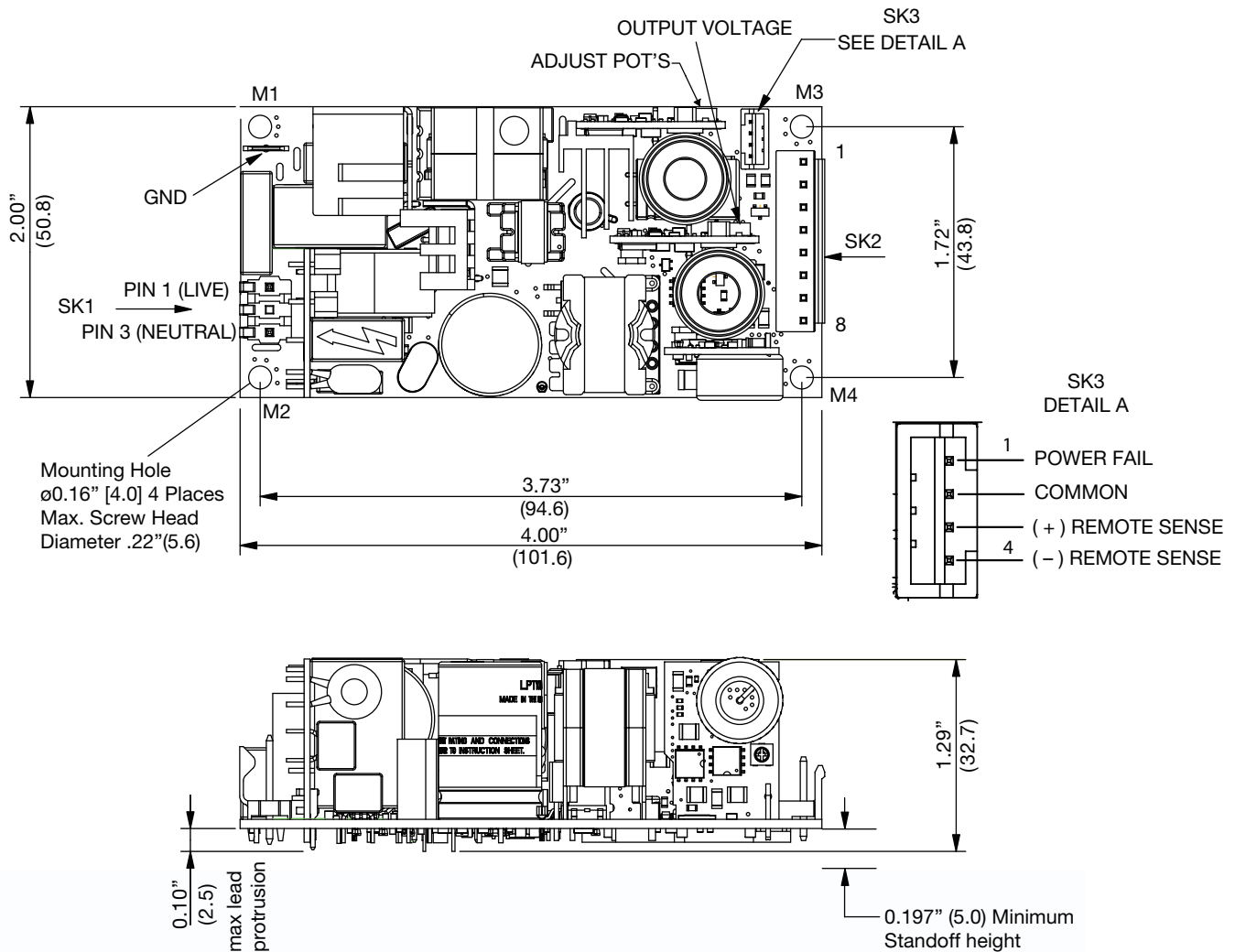
Logical Control

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.

Environmental Specifications

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 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
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	2 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	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
	PIN 5	Ground
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
	PIN 9	GND
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 ±.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.
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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For more information: www.artesyn.com/power
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