# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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# **LPT100-M Series**

130 Watts

Total Power: 80 - 130 Watts

**Data Sheet** 

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	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				

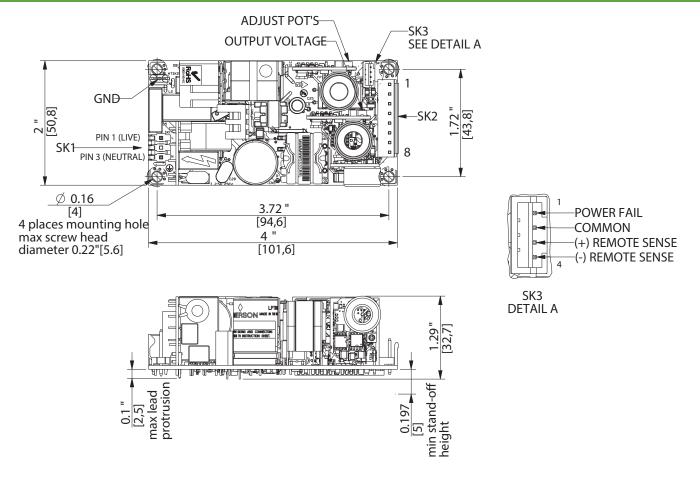
Remote sense Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.





Environmental Specifications				
Operating temperature	0 °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 Convection Cooling	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	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
	+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.

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. 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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