

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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# **LPT80 Series**

80 Watts

**Total Power:** 55 - 85 Watts **Input Voltage:** 85 - 264 Vac 120 - 370 Vdc

# of Outputs: Triple



Rev. 6.25.12\_161 LPT80 Series 1 of 3



# **Special Features**

- Power Factor Correction
- EN61000-3-2 compliant
- Universal input
- 3" x 5" footprint
- Remote sense on outputs 1 (& 2 for LPT81)
- Power fail and remote inhibit
- Wide range adjustable on outputs 1 (& 2 for LPT81)
- Built-in Class B EMI filter
- Overvoltage protection
- · Overload protection

# Safety

VDE 60950
 UL 60950
 CSA 60950
 NEMKO 60950
 AUSTEL 60950

• **CB** Certificate & report

• **CE** Mark LVD

# **Electrical Specifications**

Input

Input range: 85 - 264 Vac; 120 - 300 Vdc

Frequency: 47 - 440 Hz

< 18 A peak @ 115 Vac;

Inrush current: < 36 A peak @ 230 Vac,

cold start @ 25 °C

Input current: 1.5 A max. (RMS) @ 115 Vac

Efficiency: 75% typical at full load EMI filter: FCC Class B conducted

CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted

Safety ground < 1 mA @ 50/60 Hz, 264 Vac input

leakage current:

Output

Maximum power: 60 W for convection (LPT81, 55 W);

85 W with 30 CFM forced air

Adjustment range: 3.3 V - 5.5 V on outputs one

(and two 1.8 V - 3.5 V for LPT81)

Hold-up time: 20 ms @ 85 W load, 115 Vac nominal line Overload protection: Short circuit protection on all outputs.

Case overload protected @ 145% above peak rating

Overvoltage protection: Tracks outputs 1( & 2 for LPT81): 20% to 35% above output setting





Rev. 6.25.12\_161 LPT80 Series 2 of 3

Logic Control

Power failure:

TTL logic signal goes high 100 - 500 msec after V1 output; It goes low at least 4 msec before

loss of regulation

Remote inhibit: Requires contact closure to inhibit outputs

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 at 2.5% per degree from 50° to 70 °C

Temperature coefficient:  $\pm 0.4\%$  per °C Storage temperature:  $-40^{\circ}$  to 85 °C

Electromagnetic

Designed to meet IEC EN61000-4, -2, -3, -4, -5, -6, -8, -11 Level 3

susceptibility:

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G

peak 5 Hz to 500 Hz, operational

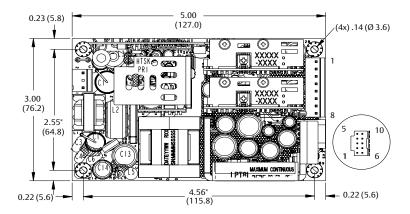
MTBF demonstrated: > 550,000 hours at full load and 25 °C ambient conditions

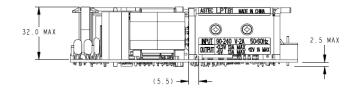
Ordering Information									
Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30CFM Forced Air	Peak Load <sup>1</sup>	Regulation <sup>2</sup>	Ripple P/P (PARD) <sup>3</sup>		
LPT81	+3.3 V (1.8 - 3.5 V)	0.7 A	8.0 A	13 A	15 A	±2%	50 mV		
	+5 V (3.3 - 5.5 V)	0.3 A	4.0 A	13 A	15 A	±2%	50 mV		
	+12 V	0	0.7 A	1.0 A	1.5 A	±5%	120 mV		
LPT82	+5 V (3.3 - 5.5 V)	0.7 A	8.0 A	13 A	15 A	±2%	50 mV		
	+12 V	0.3 A	3.0 A	4.0 A	4.6 A	±5%	120 mV		
	-12 V	0	0.7 A	1.0 A	1.5 A	±5%	120 mV		
LPT83	+5 V (3.3 - 5.5 V)	0.7 A	8.0 A	13 A	15 A	±2%	50 mV		
	+15 V	0.3 A	2.4 A	3.2 A	3.7 A	±5%	150 mV		
	-15 V	0	0.7 A	0.7 A	1 A	±5%	150 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  $\mu$ F in parallel with a 0.1  $\mu$ F capacitor at rated line voltage and load ranges.
- 4. Minimum loads are required
- 5. Total current of all outputs can not exceed 21 A.

Rev. 6.25.12\_161 LPT80 Series 3 of 3

## **Mechanical Drawing**





Pin Assignments							
Connector		LPT81	LPT82/83				
SK1	Pin1	Neutral	Neutral				
	Pin3	Line	Line				
SK2	Pin1	V1 (3.3V)	V1 (5 V)				
	Pin2	V1 (3.3V)	V1 (5 V)				
	Pin3	Common	Common				
	Pin4	Common	Common				
	Pin5	Common	Common				
	Pin6	V2 (5V)	V2 (12/15V)				
	Pin7	V2 (5V)	V2 (12/15V)				
	Pin8	V3 (12V)	V3 (-12V/15)				
SK3	Pin1	+V1 Remote sense	+V1 Remote sense				
	Pin2	-V1 Remote sense	-V1 Remote sense				
	Pin3	+Remote inhibit	+Remote inhibit				
	Pin4	-Remote inhibit	-Remote inhibit				
	Pin5	+Power fail	+Power fail				
	Pin6	Common	Common				
	Pin7	No connection	No connection				
	Pin8	+V2 sense	No connection				
	Pin9	-V2 sense	No connection				
	Pin10	No connection	No connection				

## **Mating Connectors**

AC Input (SK1): Molex 09-50-8031 (USA)

Molex 09-91-0300 (UK) PINS: 08-58-0111

DC Outputs (SK2): Molex 09-50-8081 (USA) 09-91-0800 (UK)

PINS: 08-58-0111

Control Signals Molex 90142-0010 (USA) (SK3): PINS: 90119-2110 or

Amp: 87977-3 PINS: 87309-8

Emerson Network Power Connector Kit #70-841-018

includes all the above.

#### Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is  $\pm$  .02".
- 3. Mounting holes M1, M2 and M3 should be grounded for EMI purposes.
- 4. Mounting hole M1 is safety ground connection.
- 5. Specifications are for convection rating at factory settings at 115 VAC input, 25 °C unless otherwise stated.
- 6. Warranty: 2 year
- 7. Weight: 0.8 lb. / 0.36 kg

#### **Americas**

5810 Van Allen Way Carlsbad, CA 92008 USA

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

## 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.PowerConversion.com 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 and the Emerson Network Power logo are trademarks of Emerson Electric Co. ©2012 Emerson Electric Co. All rights reserved.