



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](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

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

# POWER

## LCB50

### Data Sheet

**Total Power:** 50 W  
**# of Outputs:** Single  
**Outputs:** 3.3 - 48 V

#### SPECIAL FEATURES

- No-load power consumption 0.5 W
- Low cost
- 3.9" x 3.2" x 1.4"
- 10% output voltage adjust
- -25 °C to 70 °C with derating
- High efficiency: 90% @ 230 Vac
- Power ON with LED indicator
- Withstand 5G vibration test
- Two year warranty

#### COMPLIANCE

- EMI Class B
- EN61000 EN61204-3

#### SAFETY

- UL, cUL 60950-1
- TUV 60950-1
- CE



#### Electrical Specifications

##### Input

Input range	88 - 264 Vac 125 - 373 Vdc
Frequency	47 - 63 Hz, Nominal 50/60
Inrush current	40 A, cold start at 25 °C, 230 Vac
Harmonics	EN61000-3-2: 2000 Class A, EN61000-3-3: 1995+A1:2001
Input current	01.3 A / 115 Vac
Hold up time	>32 ms / 230 Vac >10 ms / 115 Vac at full load
Efficiency	90% typical at full Load / 230 Vac nominal
Leakage current	< 2 mA at 264 Vac
Isolation	Isolation: PRI-Chassis 1500 Vac PRI-SEC 3000 Vac SEC-Chassis 500 Vac

## Electrical Specifications

### Output

Output rating	See ordering information	90 - 264 Vac
Output tolerance	± 1% to 3%	90 - 264 Vac
Total regulation range	± 0.5% to 2%	Combined line/load/transient when measured at output terminal
Rated load	33 - 52.8 W	Derate linear to 50% from 50 °C to 70 °C
Output noise (PARD)	100 - 200 mV p-p	Main output Measured with a 0.1 µF Ceramic and 10 µF Tantalum Capacitor on any output, 20 MHz
Output voltage overshoot		No overshoot/undershoot outside the regulation band during on or off cycle
Short circuit protection	Protected, no damage to occur	Bounce mode
Output isolation		Standard per safety requirements
Overload protection (OCP)	>110% rated output power	Main output
Overvoltage protection (OVP)	115% to 150%	Main output
Output voltage adjust	± 10%	Main output

## Environmental Specifications

Operating temperature	-25 °C to +70 °C, linear derating to 50% from 50 °C to 70 °C
Storage temperature	-40 °C to +85 °C
Humidity	20 to 90%, non-condensing
Vibration	10 - 500 Hz, 5G 10 min/1 cycle, period for 60 min each along X, Y, Z axes

## Ordering Information

Model Number	Output Voltage	Output Current	Vo Adjust	Output Power	Efficiency
LCB50D	3.3 V	10 A	± 10%	33 W	78%
LCB50E	5 V	10 A	± 10%	50 W	83%
LCB50L	12 V	4.2 A	± 10%	50.4 W	88%
LCB50N	15 V	3.4 A	± 10%	51 W	89%
LCB50Q	24 V	2.2 A	± 10%	52.8 W	90%
LCB50W	48 V	1.1 A	± 10%	52.8 W	90%

## Miscellaneous Specifications

### BURN-IN

100% Burn-in at 45 °C, at full load. Duration of burn-in determined by Quality Assurance Procedures.

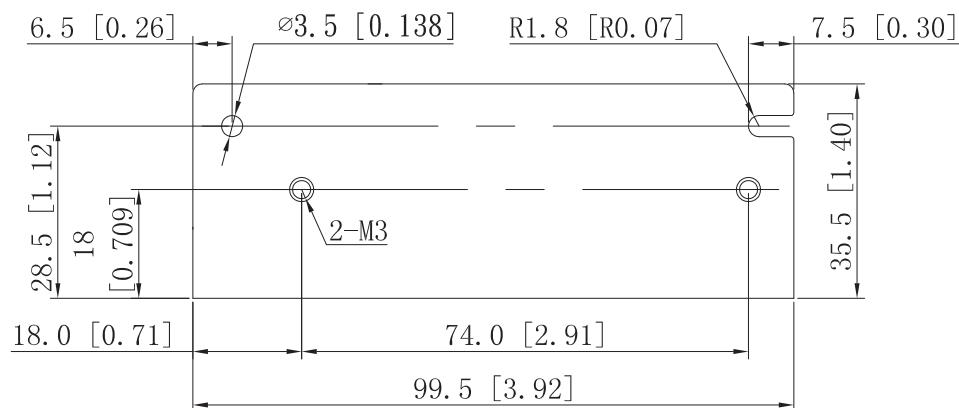
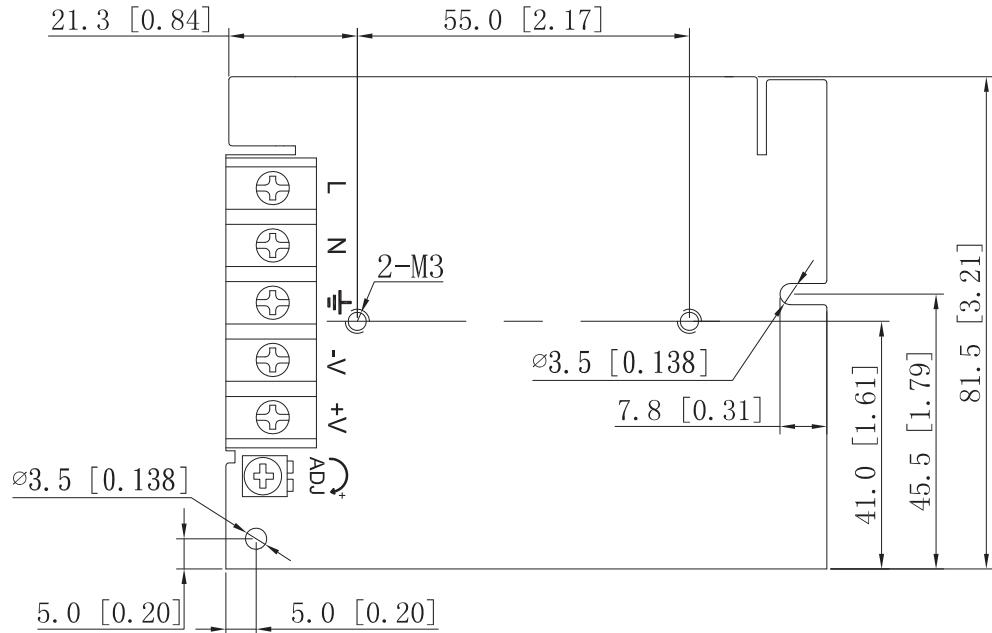
### MTBF

The power supply has a minimum MTBF of 420K hours according to MIL-HDBK-217F.

### WARRANTY

Artesyn Embedded Technologies shall warrant the power supply to be free of defects in materials and workmanship for a minimum period of two years from the date of shipment, when operated within specifications. The warranty shall be fully transferable to the end owner of the equipment powered by the supply.

## Mechanical Drawings



## WORLDWIDE OFFICES

**Americas**

2900 S.Diablo Way  
Tempe, AZ 85282  
USA  
+1 888 412 7832

**Europe (UK)**

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
+44 (0) 1384 842 211

**Asia (HK)**

14/F, Lu Plaza  
2 Wing Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
+852 2176 3333

**ARTESYN**  
EMBEDDED TECHNOLOGIES™

[www.artesyn.com](http://www.artesyn.com)

While every precaution has been taken to ensure accuracy and completeness in this literature, Artesyn Embedded Technologies assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Artesyn Embedded Technologies, Artesyn and the Artesyn Embedded Technologies logo are trademarks and service marks of Artesyn Embedded Technologies, Inc. All other names and logos referred to are trade names, trademarks, or registered trademarks of their respective owners. © 2015 Artesyn Embedded Technologies, Inc.

For more information: [www.artesyn.com/power](http://www.artesyn.com/power)  
For support: [productsupport.ep@artesyn.com](mailto:productsupport.ep@artesyn.com)