

L6R48D Series**48W Desktop Power Supply**

- DOE Level VI Efficiency Rating
- Universal Input: 90 ~ 264Vac, 47/63 Hz
- UL/cUL Safety Approved
- Corded Output Connection
- IEC 60320 C6, C8 or C14 AC input connectors
- Light Weight and Compact



Model No. ¹	Application	Output Connector	Output Voltage	Output Current			Voltage Accuracy	Ripple Noise	Line Reg.	Load Reg.
				Min	Rated	Peak				
L6R48D090500	ITE	Corded Jack	+9.0V	0	5.0	—	±5%	< ± 1%	± 1%	± 5%
L6R48D120400	ITE	Corded Jack	+12.0V	0	4.0	—	±5%	< ± 1%	± 1%	± 5%
L6R48D180267	ITE	Corded Jack	+18.0V	0	2.67	—	±5%	< ± 1%	± 1%	± 5%
L6R48D240200	ITE	Corded Jack	+24.0V	0	2.0	—	±5%	< ± 1%	± 1%	± 5%
L6R48D300160	ITE	Corded Jack	+30.0V	0	1.6	—	±5%	< ± 1%	± 1%	± 5%
L6R48D360133	ITE	Corded Jack	+36.0V	0	1.33	—	±5%	< ± 1%	± 1%	± 5%

C8 is the standard option for input connector. Add suffix "C6" or "C14" for alternate input connector options.

- Output voltages from 5.0Vdc to 36.0Vdc are available in increments of 0.1V. Please contact Tri-Mag, LLC for the part number and specifications for your output voltage requirement and application. Output voltages from 6.0V to 8.9V do not meet Level VI efficiency requirements and are subject to associated importation regulations.
- The output voltage is verified to specs at 60 percent rated load condition.
- The **line regulation** is defined by changing ± 10 percent of input voltage from the nominal line at rated load.
- The **load regulation** is defined by changing ± 40 percent of the measured output load from 60 percent of the rated load.
- The **ripple and noise** is measured by using 20MHz bandwidth limited oscilloscope with each output terminated with a 10 µF electrolytic and a 0.1 µF capacitor at rated load and nominal line.
- The **efficiency** is measured at rated load and nominal line.

L6R48D Series

Innovative, reliable, and inexpensive. This economical DOE Level VI compliant power supply/charger is available in a variety of voltage levels,

5.0Vdc to 48.0Vdc (in increments of 0.1V) to match your needs. Rated up to 48W when powering either stationary or charging portable devices.

Specifications

Input

Input Voltage	• 90 Vac ~ 264 Vac
Input Frequency	• 47 Hz to 63 Hz
No Load Input Power	• < 0.1W
Input Current	• 1.2A Max.
Inrush Current	• 40A Max.
Leakage Current	• 0.25mA Max.
Input Connection	• US (others available)

Output

Output Voltage Range	• 5.0 to 36.0 Vdc
Output Current Range	• L6R48D: 1.3 - 5.0A, 48W Max.
Minimum Load	• No min. load required.
Line Regulation	• $\pm 1\%$ at rated load across input voltage range
Load Regulation	• $\pm 5\%$
Ripple & Noise	• 240mVp-p Max.
Overvoltage Protection	• Auto recovery
Overload Protection	• Auto recovery
Short Circuit Protection	• Auto recovery

General

Insulation Resistance	• 50M Ω Min.
Efficiency	• Level VI compliant
MTBF	• 50,000 hrs to MIL-HDBK-217F at +25°C

Environmental

Operating Temperature	• 0°C to 40°C
Operating Humidity	• 5% - 95% RH, Non-Condensing
Storage Temperature	• -20°C to +80°C

EMC & Safety

Safety Approvals	• UL: UL60950-1
	• cUL: UL60950-1

EMC Approvals	• FCC
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Warranty

Warranty Period	• 1 year
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Dimensions and Notes

Dimensions in mm	
Tolerance	• $\pm 0.2\text{mm}$
Size	• 120.0 x 51.0 x 34.0 mm
	• 4.72 x 2.01 x 1.34 Inches
Weight	• Approx. 280g (9.9oz.)
Connectors	• AC input; IEC 60320 C6, C8 or C14 connector
	• DC output, standard 5.5mm x 2.1mm x 9.5mm corded dc output jack or per customer specification.
Cord length	• 1000 \pm 20mm (39.4 \pm .8")

Mechanical Drawing

