

L6R90D Series

90W Desktop Power Supply

- DOE Level VI Efficiency Rating
- Universal Input: 90 ~ 264Vac, 47/63 Hz
- UL/cUL/IEC 62368-1 Approved
- Corded Output Connection
- IEC 60320 C6 and C14 AC input connectors
- Light Weight and Compact



Model No. ¹	Application	Output Connector	Output Voltage	Output Current (A)			Voltage Accuracy	Ripple Noise	Line Reg.	Load Reg.
				Min	Rated	Peak				
L6R90D-120	ITE	2.5mm I.D. x 5.5mm O.D. x 9.5mm Barrel	+12.0V	0	7.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-150	ITE		+15.0V	0	6.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-160	ITE		+16.0V	0	5.63	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-180	ITE		+18.0V	0	5.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-190	ITE		+19.0V	0	4.74	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-200	ITE		+20.0V	0	4.50	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-240	ITE		+24.0V	0	3.75	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-300	ITE		+30.0V	0	3.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-480	ITE		+48.0V	0	1.88	—	±5%	< ± 2%	± 1%	± 5%
L6R90D-560	ITE		+56.0V	0	1.60	—	±5%	< ± 2%	± 1%	± 5%

1. Add "C6" or "C14" for the required AC input connector configuration.

- 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.

L6R90D Series

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

12.0 to 56.0Vdc (per the model number table) to match your needs. Rated up to 90W 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	• < 0.21W
Input Current	• 1.2A Max.
Inrush Current	• 60A Max. / 230Vac
Leakage Current	• 3.5mA Max.
Input Connection	• IEC 60320 C6 or C14

Output

Output Voltage Range	• 12.0 to 56.0Vdc
Output Current Range	• 1.6 to 7.0A
Minimum Load	• No min. load required.
Line Regulation	• $\pm 1\%$ at rated load across input voltage range
Load Regulation	• $\pm 5\%$ (typical)
Ripple & Noise	• 2% Vp-p Max. @ full load
Overvoltage Protection	• Auto recovery
Overload Protection	• Auto recovery
Short Circuit Protection	• Auto recovery

General

Dielectric Withstand	• 3,000Vac Primary to Secondary
Efficiency	• Level VI, ErP Stage 2, CoC Tier 2 compliant
MTBF	• 300,000 hrs. @ 25°C per Telcordia SR-332

Environmental

Operating Temperature	• 0°C to 40°C
Operating Humidity	• 20 to 80% RH, Non-Condensing
Storage Temperature	• -20°C to +80°C
Storage Humidity	• 10 to 90%, Non-Condensing

EMC & Safety

Safety Approvals	• UL/cUL: UL/cUL 62368-1, 60950-1
	• CE: IEC 62368-1, 60950-1
EMC Approvals	• FCC

Warranty

Warranty Period	• 1 year
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Dimensions and Notes

Dimensions in mm	
Tolerance	• $\pm 0.2\text{mm}$
Size	• C6: L 139 x W 61 x H 36 (mm) L 5.5" x W 2.4" x H 1.4"
	• C14: L 151 x W 64 x H 36 (mm) L 5.9" x W 2.5" x H 1.4"
Weight	• Approx. 460g (1.0 lb.)
Connectors	• AC input; IEC 60320 C6 or C14 connector
	• DC output; Standard 2.5mm x 5.5mm x 9.5mm barrel connector or per customer specification.
Output Cord length	• 1500 \pm 30 mm (59 \pm 1.2")

Mechanical Drawing

