



L6R90DM Series

90W Medical Power Supply

- DOE Level VI Efficiency Rating
- Universal Input: 90 ~ 264Vac, 47/63 Hz
- ANSI/AAMI/IEC/EN ES60601-1:2012 Approved
- Means of Protection: 2xMOPP
- Corded Output Connection
- IEC 60320 C6 / C14, C8 / C18 AC input connectors
- Light Weight and Compact
- 2-Year Warranty



Model No. ¹	Application	Output Connector	Output Voltage	Output Current (A)			Voltage Accuracy	Ripple Noise	Line Reg.	Load Reg.
				Min	Rated	Peak				
L6R90DM-120	Medical	2.5mm I.D. x 5.5mm O.D. x 9.5mm Barrel Connector	+12.0V	0	7.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90DM-150	Medical		+15.0V	0	6.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90DM-180	Medical		+18.0V	0	5.00	—	±5%	< ± 2%	± 1%	± 5%
L6R90DM-190	Medical		+19.0V	0	4.74	—	±5%	< ± 2%	± 1%	± 5%
L6R90DM-240	Medical		+24.0V	0	3.75	—	±5%	< ± 2%	± 1%	± 5%
L6R90DM-480	Medical		+48.0V	0	1.88	—	±5%	< ± 2%	± 1%	± 5%

1. Add "C6", C8, "C14" or ""C18" 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.

L6R90DM Series

Innovative, inexpensive and medical reliability. This economical DOE Level VI compliant medical power supply/charger is available in a variety of voltage levels, 12.0 to 48.0Vdc (per the model number table)

to match your needs. Rated up to 90W when powering either stationary or charging portable devices for home healthcare and medical office/hospital applications.

Specifications

Input

Input Voltage	• 90 Vac ~ 264 Vac, 100~240Vac Nominal
Input Frequency	• 47 Hz to 63 Hz
No Load Input Power	• < 0.15W
Input Current	• 1.2A @ 120Vac / 0.5A @ 230Vac
Inrush Current	• 60A Max. / 230Vac
Leakage Current	• < 100µA
Input Connection	• IEC 60320 C6 / C14 or C8 / C18, dependent upon output voltage and resulting input current

Output

Output Voltages	• 12.0, 15.0, 18.0, 19.0, 24.0 and 48.0Vdc
Output Current Range	• 7.00 to 1.88A
Minimum Load	• No min. load required.
Line Regulation	• ± 1% at rated load across input voltage range
Load Regulation	• ± 5% (typical)
Ripple & Noise	• 2% Vp-p Max. @ full load
Hold-up Time	• 10mS @ Full Load
Overvoltage Protection	• Auto recovery
Overload Protection	• Auto recovery
Short Circuit Protection	• Auto recovery

General

Dielectric Withstand	• 4,000Vac Primary to Secondary
Efficiency	• DoE Level VI, ErP Stage 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	• ANSI/AAMI ES60601-1:2012, edition 3.1 IEC/EN ES60601-1:2012, edition 3.1
EMC Approvals	• Radiated & Conducted Emissions: EN55011 CISPR 11, Class B Harmonic Current: EN61000-3-2, 3 EMC: IEC60601-1-2:2014, edition 4.0
Harmonic Currents	• EN 61000-3-2 Class A
EMI	• EN 55022/CISPR 22 Class B; EN 61000-3-3
ESD Immunity	• EN 61000-4-2, ±15kV/Air Criterion A ± 8kV/Contact Criterion A
Radiated Immunity	• EN 61000-4-3, 10V/m with 80% AM @ 1kHz Criterion A
EFT Burst	• EN 61000-4-4, ±2kV Criterion A
Surge	• EN 61000-4-5, ±1kV/L-L, ±2kV/L-G Criterion A
Conducted Immunity	• EN 61000-4-6, 3V _{rms} , 80% AM, 1kHz Criterion A
Magnetic Fields	• EN 61000-4-8, 30A/m Criterion A
Dips & Interruptions	• EN 61000-4-11, 100% dips 10ms Criterion A 100% dips 20ms Criterion A 30% dips 500ms Criterion B

Warranty

Warranty Period	• 2 years
-----------------	-----------

Dimensions and Notes

Dimensions in mm	
Tolerance	• ± 0.2mm
Size	• L 151 x W 64 x H 35 mm L 5.94" x W 2.52" x H 1.38"
Weight	• Approx. 450g [1.0 lb.] (ref.)
Connectors	• AC input: IEC 60320 C6 / C14 or C8 / C18 connector DC output: Standard 2.5mm x 5.5mm x 9.5mm corded dc output connector or per customer specification.
Output Cord length	• 1500 ±50 mm [59.1 ±2.0"]

Mechanical Drawing

