# **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	Ripple	Line	Load
				Min	Rated	Peak	Accuracy	Noise	Reg.	Reg.
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. An IEC 60320 C8 conneactor is the standard AC input configuration. For alternate input connector options, add "C6", "C14" or "C18" to designate the desired input 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.

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**GREEN POWER** 



# **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	<ul> <li>1.2A @ 120Vac / 0.5A @ 230Vac</li> </ul>
Inrush Current	• 60A Max. / 230Vac
Leakage Current	• < 100µA
Input Connection	<ul> <li>IEC 60320 C6 / C14 or C8 / C18, dependent upon output voltage and resulting input current</li> </ul>

#### Output

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	<ul> <li>No min. load required.</li> </ul>
Line Regulation	<ul> <li>± 1% at rated load across input voltage range</li> </ul>
Load Regulation	• ± 5% (typical)
Ripple & Noise	<ul> <li>2% Vp-p Max. @ full load</li> </ul>
Hold-up Time	10mS @ Full Load
Overvoltage Protection	Auto recovery
<b>Overload Protection</b>	Auto recovery
Short Circuit Protection	Auto recovery
General	

#### General

**Dielectric Withstand** 4,000Vac Primary to Secondary ٠ Efficiency DoE Level VI, ErP Stage 2 compliant MTBF 300,000 hrs. @ 25°C per Telcordia SR-332

#### Environmental

0°C to 40°C
20 to 80% RH, Non-Condensing
-20°C to +80°C
10 to 90%, Non-Condensing

### Mechanical Drawing



Safety Approvals	<ul> <li>ANSI/AAMI ES60601-1:2012,</li> </ul>	edition 3.1			
	IEC/EN ES60601-1:2012, edit	ion 3.1			
EMC Approvals	<ul> <li>Radiated &amp; Conducted Emissions: EN55011 CISPR 11, Class B</li> </ul>				
	Harmonic Current: EN61000-	3-2, 3			
	EMC: IEC60601-1-2:2014, ed	ition 4.0			
Harmonic Currents	• EN 61000-3-2 Class A				
EMI	• EN 55022/CISPR 22 Class B; EN 61	000-3-3			
ESD Immunity	• EN 61000-4-2, ±15kV/Air	Criterion A			
	± 8kV/Contact	Criterion A			
Radiated Immunity	<ul> <li>EN 61000-4-3, 10V/m with 80% AM @ 1kH</li> </ul>	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 <sub>rms,</sub> 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

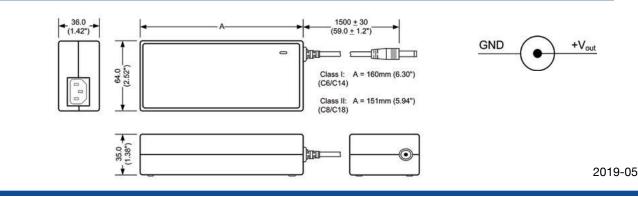
#### **Dimensions and Notes**

Dimensions in mm Tolerance	• ± 0.2mm
Size	<ul> <li>L 151 x W 64 x H 35 mm L 5.94" x W 2.52" x H 1.3</li> </ul>
Weight	<ul> <li>Approx. 450g [1.0 lb.] (ref</li> </ul>
Connectors	<ul> <li>AC Input: IEC 60320 C8 is Add "C6", "C14" or "C18"</li> </ul>

- ref.)
- 8 is standard. 18" for optional input connections. DC output: Standard 2.5mm x 5.5mm x 9.5mm corded dc output connector or per customer specification.

.38"

1500 ±50 mm [59.1 ±2.0"]



Output Cord length