



L6R12M / ICM12M Series

12W Medical Power Supply / Adapter

- 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 Connector or USB Output Connection
- Single (L6R12M) or Interchangeable International (ICM12M) AC Plug Adapters
- Light Weight and Compact
- 2-Year Warranty



ICM12M

L6R12M

Model No.	Application	Output Connector	Output Voltage	Output Current (A)			Voltage Accuracy	Ripple Noise	Line Reg.	Load Reg.
				Min	Rated	Peak				
L6R/ICM12M-033	Medical	2.1mm I.D. x 5.5mm O.D. x 9.5mm Barrel	+3.3V	0	2.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-050	Medical		+5.0V	0	2.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-051	Medical		+5.0V	0	3.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-050U	Medical	USB Connector	+5.0V	0	2.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-059	Medical	2.1mm I.D. x 5.5mm O.D. x 9.5mm Barrel	+5.9V	0	2.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-062	Medical		+6.2V	0	2.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-090	Medical		+9.0V	0	1.20	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-120	Medical		+12.0V	0	1.00	—	±5%	< ± 2%	± 1%	± 5%
L6R/ICM12M-150	Medical		+15.0	0	0.80	—	+5%	<+2%	+1%	+5%
L6R/ICM12M-180	Medical		+18.0	0	0.67	—	+5%	<+2%	+1%	+5%
L6R/ICM12M-240	Medical		+24.0	0	0.50	—	+5%	<+2%	+1%	+5%

- 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.

L6R12M / ICM12M Series

Innovative, inexpensive and medical reliability. This economical DOE Level VI compliant medical power supply/charger is available in a variety of voltage levels, 5.0 to 24.0Vdc (per the model number table)

to match your needs. Rated up to 12W 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	• 0.32A - 0.19A
Inrush Current	• 40A Max. / 230Vac
Leakage Current	• < 100µA
Input Connection	• L6R12M-xxx: U.S. AC Connector ICM12M-xxx: Interchangeable International AC Connectors

Output

Output Voltage Range	• 5.0 to 24.0Vdc
Output Current Range	• 2.00 to 0.50A
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
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
EMI	• EN 55022/CISPR 22 Class B; EN 61000-3-3
ESD Immunity	• EN 61000-4-2, $\pm 15\text{kV}/\text{Air}$ Criterion A $\pm 8\text{kV}/\text{Contact}$ Criterion A
Radiated Immunity	• EN 61000-4-3, 10V/m with 80% AM @ 1kHz Criterion A
EFT Burst	• EN 61000-4-4, $\pm 2\text{kV}$ Criterion A
Surge	• EN 61000-4-5, $\pm 1\text{kV}/\text{L-L}$, $\pm 2\text{kV}/\text{L-G}$ 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
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Dimensions and Notes

Dimensions in mm	
Tolerance	• $\pm 0.2\text{mm}$
Size	• L 80.2 x W 46 x H 57.5 mm L 3.16" x W 1.81" x H 2.26"
Weight	• Approx. 140g [0.31 lb.] (ref.)
Connectors	• AC Input: L6R12M-xxx: U.S. AC Connector ICM12M-xxx: Interchangeable International AC Connectors DC output: L6R/ICM12M-xxxU: USB Connector All other models: standard 2.1mm I.D. x 5.5mm O.D. x 9.5mm barrel connector or per customer specification.
Output Cord length	• 1500 ± 50 mm [59.1 ± 2.0 "]

Mechanical Drawing

