

## CAR100M

Car Adapter DC/DC



### Features:

- Wide input voltage range
- Max. output power 110.00W
- Galvanic isolation for maximum patient safety
- Car/Truck input connector
- Wall-mount kit optional

### Applications:

Suitable for use with all mobile medical devices (e.g. respirator, defibrillator, suction pump etc.)

## Specification

Input		
Voltage range	10.00 – 32.00VDC	
Stand-by current	Typical 45.00mA @ 10.00V input Typical 35.00mA @ 32.00V input	
Input fuse	13.00A	
Protection	Reverse polarity Over voltage protection (Transient suppression circuit)	
Output		
Voltage range	16.00 – 24.00V nominal	
Power	100.00W cont.	
Initial set tolerance	±3% max.	
Load regulation	-4% max.	
Line regulation	±1% max.	
Ripple & Noise	< 120.00mV <sub>pk-pk</sub>	
Current limit	Constant current	
Protection	Short circuit, over temperature protection, over voltage protection	
Environmental		
Cooling	Convection cooled	
Temperature	Operating: -20°C to 40°C 40°C to 50°C, derating 35%	Non-operating: -40°C to 75°C
Pressure & Altitude	Operating: 1200hPa to 570hPa max. 4600m above sea level	Non-operating: 1200hPa to 115hPa max. 15000m above sea level
Humidity	5% to 95% r.H., non-condensing	
General		
Galvanic isolation	Isolation voltage 2.00kV	
Input connector	Cigarette lighter adapter	
Output connector	Customer-specific	
Efficiency	Typical 88% at 100% load	
MTBF	> 100000h @ 25°C ambient temperature and G <sub>B</sub> per MIL HDBK217F	
Green procurement	WEEE RoHS	
Indicator	Single green LED	
Ingress protection rating	IEC60529, IP42	
Safety & EMC		
Regulatory approvals	Europe International USA/Canada Australia & New Zealand	CE CB Report IEC 60601-1 3 <sup>rd</sup> edition UL60601-1 RCM
Electromagnetic Emissions	Europe USA Medical electrical equipment Airborne equipment	EN 55011/55022 class B FCC15 class B IEC60601-1-2 RTCA/DO-160F, Section 21
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity  Electrical fast transient/burst immunity test Surge immunity test  Conducted Immunity  Airborne equipment  ISO-Impulses  Medical electrical equipment	IEC61000-4-2, 8kV contact/ 15kV air IEC61000-4-3, 80-2700MHz, 30V/m, modulation 80%/200Hz IEC61000-4-4,+/-2kV, 5/50ns  IEC61000-4-5,+/-0,5kVsym, 1.2/50(8/20)µs IEC61000-4-6, 0.15-80MHz, 10V, 80%, 1KHz, AM, with CDN RTCA/DO-160F Sections 16.6-17-18-19.3.1-20-25 ISO7637-2, pulse 1 till 5, immunity test level III IEC60601-1-2

**- other approvals on request**

CAR100M

Mechanical Details	
Housing dimensions (LxWxH)	165.00 x 64.00 x 38.00mm, without cables and connectors
Input cable length	240cm ±5%
Output cable length	100cm ±5%
Weight	Approx. 420g, without cables, connectors and wall-mount kit

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