

## 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		
	Operation:	Storage:
Ambient Temperature	-20°C to 40°C 40°C to 50°C, derating 35%	-40°C to 75°C
Pressure & Altitude	1200hPa to 570hPA max. 4600m above sea level	1200hPa to 115hPa max. 15000m above sea level
Humidity (non-condensing)	5% to 95% r.H.	5% to 95% r.H.
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	
Cooling	Convection cooled	
Safety & EMC		
Regulatory approvals	Europe United Kingdom International USA/Canada Australia & New Zealand	CE UKCA 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  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 ISO7637-2, pulse 1 till 5, immunity test level III IEC60601-1-2

**- other approvals on request**

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

## Germany/Headquarters

RRC power solutions GmbH  
Technologiepark 1  
66424 Homburg / Saar

Tel.: +49 6841 98090  
Fax: +49 6841 9809280  
Email: [sales@rrc-ps.de](mailto:sales@rrc-ps.de)  
Web: [www.rrc-ps.com](http://www.rrc-ps.com)

## USA

RRC power solutions Inc.  
18340 Yorba Linda Blvd.,  
# 107-437  
Yorba Linda, CA 92886

Tel.: +1 714 777 3604  
Fax: +1 714 777 3658  
Email: [usa@rrc-ps.com](mailto:usa@rrc-ps.com)  
Web: [www.rrc-ps.com](http://www.rrc-ps.com)

## Hong Kong

RRC power solutions Ltd.  
S-V,6/F, Valiant Industrial  
Centre 2-12 Au Pui Wan Street  
Fo Tan, N.T., Hong Kong

Tel.: +852 2376 0106  
Fax: +852 2375 0107  
Email: [hkrcc@rrc-ps.cn](mailto:hkrcc@rrc-ps.cn)  
Web: [www.rrc-ps.cn](http://www.rrc-ps.cn)




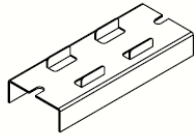
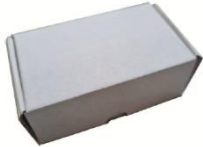
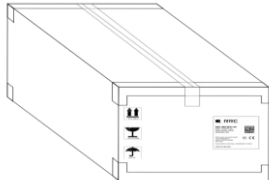
## China

RRC power solutions Ltd.  
Room 1306, C Building,  
Tianan International building,  
Renmin South Road, Luohu  
District, Shenzhen 518021

Tel.: +86 755 8374 1908  
Fax: +86 755 8374 1861  
Email: [hkrcc@rrc-ps.cn](mailto:hkrcc@rrc-ps.cn)  
Web: [www.rrc-ps.cn](http://www.rrc-ps.cn)

## RECYCLING INFORMATION

### RRC Standard Car Adapter & Custom Car-Adapter Variants

Products	
RRC-SMB-CAR	CAR90A
CAR12A	CAR90U
CAR15A	CAR100M
CAR15B	CAR120A
CAR4A	CAR150U
CAR70M	
Material	Packaging component
LDPE 4 	PE-Bag 
PAP 20 	Paper Sheet 
	Single Box 
	Outer Box 

Pictures only for reference