

## RRC-SMB-CAR

Car Adapter DC/DC

P/N: 110041-01



### Features:

- 90 Watt continuous output power (85W main-output + 5W USB-output)
- Ultra compact and lightweight car adapter
- Wide input voltage range
- USB charging port
- Worldwide approvals
- High safety standards (e. g. protection against short circuit, over current, over voltage, over temperature)
- For use in cars and trucks
- To power RRC-SMB-UBC, RRC-SMB-MBC, RRC-SMB-FPC and RRC-SMB-DBC charger

### Applications:

- Suitable for portable or mobile devices as well
- Simultaneous power for a battery charger and USB compatible device

## Specification

Input	
Voltage range	11.00 – 32.00VDC
Switch off voltage	10.00VDC
Stand-by current	Typically 40.00mA @ 11.00V input Typically 80.00mA @ 32.00V input
Input fuse	12.00A (in CLP)
Protection	Reverse polarity (input fuse in CLP), under voltage protection, over temperature protection (latch-off reset)

Output 1 (main)	
Voltage range	24.00VDC nominal
Power	85.00W max.
Initial set tolerance	±3% max.
Load regulation	-80.00mV max. / A
Line regulation	±1% max.
Ripple & noise	< 200.00V
Current limit	Constant current, 6.00A max.
Protection	Short circuit, over current protection (current limitation), over voltage protection (latch-off reset), over temperature protection (latch-off reset)

Output 2 (USB)	
Voltage	5.00VDC nominal
Current / Power	1.00A max. / 5.00W max.
Total tolerance	±5% max.
Protection	Short circuit, over current protection

Environmental		
Cooling	Convection cooled	
Temperature	Operating: -20°C to 40°C	Non-operating: -40°C to 85°C
Pressure & Altitude	Operating: 1200hPa to 795hPa max. 2000m above sea level	Non-operating: 1200hPa to 115hPa max. 15000m above sea level
Humidity	5% to 95% r.H., non-condensing	

General	
Input connector	Cigarette lighter adapter (CLP)
Output connector (output 1)	DC-Plug OD 5.5mm ID 2.1mm
Output connector (output 2)	USB receptade, Type A
Efficiency	Typical 96% at 100% load
MTBF	>20000hPa @ 25°C ambient temperature and G <sub>B</sub> per MIL HDBK217F
Green procurement	WEEE RoHS
Indicator green LED	On: power on; Flashing: Failure; Off: Power off
Ingress protection rating	IEC60529, IP40

Safety & EMC		
Regulatory approvals	Europe International USA & Canada Australia & New Zealand	CE CB Report IEC60950-1 cULus UL60950-1 RCM
Electromagnetic Emissions	Europe USA	EN55032 class B, EN55024 FCC15 class B
Electromagnetic Immunity	ESD immunity  Electromagnetic field immunity  EFT / Burst immunity test ISO-Impulses	IEC61000-4-2, 4kV contact / 8kV air IEC61000-4-3, 80-2700MHz, 3V/m, AM 80%/1kHz IEC61000-4-4, +/-1kV, 5/50ns ISO7637-2, pulses 1, 2a, 2b, 3a, 3b, 4

RRC-SMB-Car

Mechanical Details	
Housing dimensions (LxWxH)	115 x 53.7 x 21.5mm, without cables and connectors
Input cable length	100cm ±5%
Output cable length	100cm ±5%
Weight	250g, with cables and connectors

## Germany/Headquarters

RRC power solutions GmbH  
Technologiepark 1  
66424 Homburg / Saar

Tel.: +49 6841 98090  
Fax: +49 6841 9809280  
Email: sales@rrc-ps.de  
Web: www.rrc-ps.de

## USA

RRC power solutions Inc.  
18340 Yorba Linda Blvd.,  
# 107-437 Yorba Linda,  
CA 92886-4104

Tel.: +1 714 777 3604  
Fax: +1 714 777 3658  
Email: usa@rrc-ps.com  
Web: 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: hkrrc@rrc-ps.cn  
Web: www.rrc-ps.com

## 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: hkrrc@rrc-ps.cn  
Web: www.rrc-ps.com