

## CAR90AUSB

Car Adapter DC/DC



### Features:

- Wide input voltage range
- Available USB charging port
- 90.00W continuous output power (85.00W main-output + 5.00W USB-output)
- Ultra compact and lightweight car adapter
- Worldwide approvals
- High safety standards (e.g. protection against short circuit, over current, over voltage, over temperature)
- For use in cars and trucks

### Applications:

- Suitable for portable mobile devices
- Simultaneous power for a mobile computing and works with e.g. a laptop and USB compatible device

## Specification

Input		
Voltage range	11.00 – 32.00VDC	
Switch off voltage	10.00VDC	
Stand-by current	Typical 40.00mA @ 11.00V input Typical 80.00mA @ 32.00V input	
Input fuse	12.00A (in CLP)	
Protection	Reverse polarity (input fuse CLP) Under voltage protection Over temperature protection (latch-off reset)	
Output 1 (main)		
Voltage range	10.00 – 24.00VDC nominal	
Power	85.00W max.	
Initial set tolerance	±3% max.	
Load regulation	-80.00mV max. / A	
Line regulation	±1% max.	
Ripple & Noise	< 200.00mV <sub>pk-pk</sub>	
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)	Customer-specific	
Output connector (output 2)	USB receptacle, Type A	
Efficiency	Typical 96% at 100% load	
MTBF	> 20000h @ 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	CE CB Report IEC60950-1 cULus UL60950-1 RCM
Electromagnetic Emissions	Europe USA	EN55022 class B, EN55024 FCC15 class B
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity  Electrical fast transient/burst immunity test ISO-Impulses	IEC61000-4-2, 4kV contact/ 8kV air IEC61000-4-3, 80-2700MHz, 3 V/m, AM 80%/1kHz IEC61000-4-4, +/-1kV, 5/50ns  ISO7637-2, pulses 1, 2a, 2b, 3a, 3b, 4

**- other approvals on request**

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Mechanical Details	
Housing dimensions (LxWxH)	115.00 x 53.70 x 21.50mm, without cables and connectors
Input cable length	100cm ±5%
Output cable length	100cm ±5%
Weight	250g, without cables and connectors

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