

CAR90UUSB

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
- All output voltages and currents can be configured via the multiple connector system (MCS)
- 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 cont.
Initial set tolerance	±3% max.
Load regulation	-80.00mV max. / A
Line regulation	±1% max.
Ripple & Noise	< 200.00mV _{pk-pk}
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		
	Operation:	Storage:
Ambient Temperature	-20°C to 40°C	-40°C to 85°C
Pressure & Altitude	1200hPa to 795hPa max. 2000m 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	
Input connector	Cigarette lighter adapter (CLP)
Output connector (output 1)	Customer-specific with multiple connector system
Output connector (output 2)	USB receptacle, Type A
Efficiency	Typical 96% at 100% load
MTBF	> 20000h @ 25°C ambient temperature and G _B per MIL HDBK217F
Green procurement	RoHS 2011/65/EU + 2015/863/EU REACH 1907/2006, WEEE 2012/19/EU
Indicator green LED	On: Power on Flashing: Failure Off: Power off
Ingress protection rating	IEC60529, IP40
Cooling	Convection cooled

Safety & EMC		
Regulatory approvals	Europe United Kingdom International USA/Canada Australia	CE UKCA 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, 3V/m, AM 80%/1kHz IEC61000-4-4,+/-1kV, 5/50ns ISO7637-2, pulses 1, 2a, 2b, 3a, 3b, 4

- other approvals on request

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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