Technical Data Sheet

CAR12A Car/Truck Power Adapter

12 Watt automobile power adapter

Features:

- Wide input voltage range
- Max. output power 12 Watt
- Car/Truck input connector

Applications

- Suitable for use with PDA´s, GSM & GPRS navigation systems, handheld devices (e.g. payment terminals) etc.

Specification

Input	
Voltage range	9 - 32VDC
Standby current	Typical 21mA @ 9V input Typical 11mA @ 32V input
Input fuse	3.15A
Protection	Reverse polarity (input fuse)

Output	
Voltage range	3 – 8V
Power	12W cont.
Initial set tolerance	±3% max.
Load regulation(1)	-4% max.
Line regulation	±1% max.
Ripple & Noise(2)	< 120mV$_{pk-pk}$
Current Limit	Constant Current
Protection	Short circuit Over temperature protection

Environmental	
Cooling	Convection cooled
Temperature	Operating: -20°C to 40°C Non-operating -40°C to 85°C
Pressure & altitude	Operating: 1200hPa to 570hPa, max. 4600m above sea level Non-operating: 1200Pa to 115hPa, max. 15000m above sea level
Humidity	5 to 95% r.H., non-condensing

General	
Input connector	Cigarette lighter adapter
Output connector	Customer-specific
Efficiency(3)	typical 80% at 100% load
MTBF	>20000h @ 25°C ambient temperature and G_B per MIL-HDBK217F
Green procurement	WEEE RoHS
Indicator	Single green LED
Ingress protection rating	IEC60529, IP40

Safety & EMC		
Regulatory approvals	Europe USA/Canada Australia	CE UL60950 / CSA C22.2 No. 60950 RCM
Electromagnetic emissions	Europe International	EN55022 class B CISPR 22, level B
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity Electrical fast transient/burst immunity test Surge immunity test Conducted Immunity vehicle directive	IEC61000-4-2, 4kV contact, 8kV air IEC61000-4-3,80-1000MHz, 3V/m, modulation 80%/200Hz IEC61000-4-4, +/-1kV, 5/50ns IEC61000-4-5, +/- 1kV, 1.2/50(8/20)µs IEC61000-4-6, 0.15-230MHz, 10V, 80%, 1KHz, AM E13 ECE Reg. 10

- other approvals on request

Mechanical Details	
Housing dimensions (LxWxH)	61 x 41 x 29mm, without cables and connectors
Input cable length	100cm ±5%
Output cable length	100cm ±5%
Weight	approx. 34g without cables and connectors

Notes

1. Load regulation is measured at the output connector and includes the voltage drop across the output cable.
2. Measured with a 0.1µF ceramic and a 10µF electrolytic capacitors across the output terminals. The oscilloscope bandwidth is set at 20MHz a co-axial cable will be used to measure it. The test condition is maximum load.
3. Power losses of input and output cables are not considered here.

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