



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



Tel: + 44 (0)118 983 1222

A DIVISION OF SMET LTD

www.custompsdesign.com

Unit 1, The Forge, Reading Road, Burghfield Common, Reading, RG7 3BL.

custom@custompsdesign.com

BATTERY TO 115V MAINS DC ADAPTERS FOR COMPUTER/CAMCORDER CHARGERS.

SM 2900 12V input, IEC (kettle type) Lead.

SM 2901 12V input, Telefunken (fig of '8') Lead.

SM 2902 12V input, 3 Pin IEC C5 Lead.

SM 2904 24V input, IEC (kettle type) Lead.

SM 2905 24V input, Telefunken (fig of '8') Lead.

SM 2906 24V input, 3 Pin IEC C5 Lead.



Picture shows 220V 'Mains DC' unit, mechanically similar to all versions.

- MAINS POWER FOR OFFICE EQUIPMENT
- RUNS COMPUTER AND CAMCORDER CHARGERS.
- HIGH OUTPUT POWER IN VERY COMPACT SIZE.
- VERY HIGH CONVERSION EFFICIENCY.

GENERAL DESCRIPTION

Small converters generating a 115V mains level output from either a 12 or 24 volt battery (depending on unit). The output is only suitable for powering equipment employing switched mode power conversion, where incoming AC mains is immediately rectified. This is true of most modern equipment especially computer and camcorder chargers.

Output is via a 1.5 metre cable ended socket depending on model. Small computer chargers usually use one of three types of mains connector. One is the common IEC (kettle) type, another is a 'figure of 8' cassette type and the last is the new 3 pin IEC C5 round type. Select the model with the correct lead from the list above.

Input is via a 0.6 metre lead terminated in a plug suitable for use with most cigar lighter sockets. Units with ignition sense on/off control, designed for permanent installation are available, call for details.

COMPATIBILITY CHECK: Measure the resistance between the live and neutral pins of the charger's mains connector (no mains connected). If the resistance is greater than 10K ohms (no mains transformer primary) then the equipment should be compatible.

The Adaptor is fitted with an audible warning indicating that the battery is becoming discharged, prompting battery boost. Should the battery voltage fall below a critical level, the unit will switch off.

CAUTION: This adaptor is supplied on the basis of the user determining the suitability for the purpose for which it is to be used. Do not use in a moving vehicle without the consent of the vehicle manufacturer. Do not use for aviation or marine applications without our written agreement. Do not use for life dependent applications. The negative input lead is connected to case and output ground making the unit suitable only for negative earth systems. The output is only suitable for equipment employing switched mode power conversion, and not having a 50Hz mains transformer or mains heater element. The unit will not operate RCD Breakers.

SPECIFICATION: 12V TYPES. 24V TYPES.

INPUT

Battery:	12V nominal.	24V nominal.
Voltage Range:	11V - 14.5V.	21.6V - 30V.
Current, No Load:	0.5A.	0.35A.
Per 10W loading:	1 A.	0.5A.
Battery Alarm:	10.5V.	20.7V.
Latch off level:	9.6V.	19V.

OUTPUT

Output Voltage:	115V AC equivalent Mains DC actually 165VDC nominal. For use with chargers using switched mode conversion only.
Capacitive load:	Unlimited.
Power, Nominal:	100 Watts continuous (resistive).
Power, Short term:	120 Watts for 1 minute.
Protection:	Current limit and battery fuse.

GENERAL

Size:	30mm x 111mm x 60mm.
Weight:	0.4 Kg.
Storage Temperature:	-40 to +70C.
Operating Temperature:	-40 to +35C.
Manufacturer:	Made in the United Kingdom.

We manufacture a wide range of DC-DC converters, DC-AC (mains) inverters and many other power systems.

We specialise in the custom design of Hydrogen Stack converters up to 10KW.

Made in the UK.

We reserve the right to change the specification without notice.

Document 2900-993.