

# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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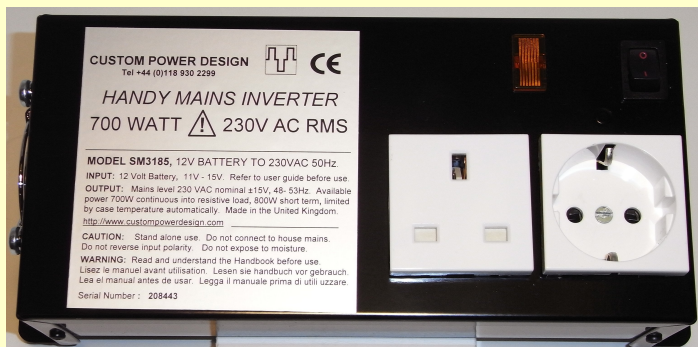
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## 700 WATT 'HANDY MAINS' INVERTERS (115V AND 230V AC).

O/P SOCKET	96V I/P	110V I/P	125V I/P	160V I/P	220V I/P	320V I/P
230V UK	SM3965	SM4105	SM4100	SM4110	SM4103	SM4115
230V IEC	SM3966	SM4106	SM4101	SM4111	SM4109	SM4116
230V SHUKO	SM3967	SM4107	SM4102	SM4112	SM4104	SM4117
115V IEC 50Hz.	SM4120	SM4123	SM4126	SM4130	SM4133	SM4136
115V IEC 60Hz.	SM4121	SM4124	SM4127	SM4131	SM4134	SM4137
115V CABLE, 50Hz.	-----	SM4125	SM4128	-----	-----	-----



Library picture representative of range.

- VIRTUALLY SILENT USE (FAN ONLY).
- HIGH OUTPUT POWER IN COMPACT SIZE.
- LATEST 'POWER PUSH' © SURGE HANDLING.
- VERY HIGH CONVERSION EFFICIENCY.
- INPUT ISOLATED TO EN60 950.

**GENERAL DESCRIPTION.** Small wall mounting converters, available with other input and output voltages, generating mains level power, capable of powering most equipment from any 96, 110, 125, 160, 220 or 320 volt battery system (model specific). Models with appropriate sockets are available to suit all countries. The unit is fitted with an on/off switch near the output socket.

The input is ohmically isolated as required by EN60 950. The output is isolated via a safety barrier from the input.

The output is a stepped quasi AC sine wave of nominally 230V RMS with a peak voltage appropriate to European mains. The output is suitable for almost all equipment. The specification allows for up to 700 watts of continuous power, with up to 5 minutes at 800 watts. New 'power push' technology usually allows operation of equipment drawing a starting surge of over 3 kilowatts.

The battery input is via 2 wires, RED and BLACK, 1.5 metres long, exiting from the side of the unit, for direct

connection. A third GREEN/YELLOW wire provides the ground connection.

**BATTERY SELECTION:** Only heavy-duty (high discharge rate) batteries are suitable. Fully sealed types should be used in enclosed spaces. Ordinary car batteries are only suitable in well-ventilated areas.

### SPECIFICATION:

#### INPUT

Battery: 96V, 110V, 125V, 160V, 220V or 320V Nominal.

Voltage Range: Nominal – 11.7% to +16.7%

Power, No Load: 6W.

Efficiency (approx): 90% (Resistive Load).

#### OUTPUT

Output Voltages: 230V ± 15V RMS from inverter.  
115V ± 7.5V RMS from inverter.

Frequency: Nominal, -2Hz to +3Hz.

Output Wave Form: Quasi sine wave.

Capacitive load (max): 2.0uF (230V). 4.0uF (115V).

Power, Nominal: 700 Watts continuous (resistive).

Power, Short term: 800 Watts for 5 minutes.

'Power Push' onset: >12A (230V), >24A (115V).

Protection: Current and temperature limit.

#### GENERAL

Size: 64mm x 260mm x 103mm.

Weight: 1.55 Kg.

Storage Temperature: -40 to +70C.

Operating Temperature: -40 to +35C.

Manufacture: Made in the United Kingdom.

**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 unless isolation is requested at time of purchase. We reserve the right to change the specification without notice. Document 4100-993

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.