



# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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## 'HANDY MAINS' 700W HIGH SURGE STATIC INVERTER.

MODEL	BATTERY	SOCKET	MODEL	BATTERY	SOCKET
SM3496	12V	UK 13A AND UK 13A	SM3506	24V	UK 13A AND UK 13A
SM3497	12V	DOUBLE EURO SHUKO	SM3507	24V	DOUBLE EURO SHUKO
SM3498	12V	UK AND EURO SHUKO	SM3508	24V	UK AND EURO SHUKO
SM3499	12V	UK AND IEC 320 C13	SM3509	24V	UK AND IEC 320 C13

NOW A MINIMUM ORDER OF 10 OFF DUE TO LIMITED PRODUCTION.



- SWITCH SELECT 230V / 115V AC OUTPUT
- BUILDING SITE USE (110V RANGE).
- RUNS SMALL MICROWAVES AND FRIDGES.
- HIGH OUTPUT POWER IN COMPACT SIZE.
- HIGH CONVERSION EFFICIENCY.
- REMOTE ON / OFF CONTROL FACILITY.

**GENERAL DESCRIPTION.** Small floor mounting converters, available with other input and output voltages, generating mains level power, capable of powering most small office or laboratory equipment from any 12 or 24 volt battery system They are particularly aimed at small refrigerators and microwave ovens.

Dual outlet sockets are fitted to the unit (see model numbers for details). The input may be isolated from chassis The output is isolated via a safety barrier from the input.

The output is a stepped odd function wave AC output of nominally 230V/115V RMS Switchable, with a peak voltage appropriate to mains, corresponding to a quasi-sine wave. This output, suitable for switched mode supplies, is required for machines employing a mains transformer, making it suitable for almost all equipment.

**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 maker. Do not use for aviation or marine applications without 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.

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.

We reserve the right to change the specification without notice

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The specification allows for up to 700 watts of continuous power to be used, with short surges up to 1200 watts, accommodating starting surge for motors, microwave use and aggressive use of power tools.

The battery input is via internal 5mm stud terminals. The unit may be turned off and on remotely, by a low current control input to a 6.35mm spade terminal. An earth stud is fitted on the outside of the box for chassis connection.

**BATTERY SELECTION:** Only heavy duty (high discharge rate) batteries are suitable as a power source. Fully sealed types should be used in enclosed spaces (especially inside the home). Ordinary car batteries are only suitable in well ventilated areas.

### **SPECIFICATION:**

	12V TYPES	24V TYPES
<b>INPUT</b>		
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
Remote On/Off:	The units draw <1mA until the control input is connected to battery positive.	

### **OUTPUT**

Output Voltage:	115/230V $\pm$ 10% RMS selectable
Frequency:	50Hz nominal, 48Hz to 53Hz.
Output Wave Form:	Quasi sine wave.
Power, Nominal:	700 Watts continuous (resistive).
Power, Short term:	1050 Watts for 5 minutes. 1200Watts for 10 seconds.
Protection:	Current and temperature limit.

### **GENERAL**

Size:	170mm x 155mm x 180mm.
Weight:	7.4 Kg.
Storage Temperature:	-40 to +70C.
Operating Temperature:	-40 to +45C.
Manufacturer:	Made in the United Kingdom