



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

'HANDY MAINS' 700W HIGH SURGE STATIC INVERTER.

MODEL NUMBER ALLOCATION:

OUTPUT SOCKETS	48V INPUT	60V IINPUT	96V IINPUT	120V INPUT
DOUBLE UK 13A	SM3980	SM3984	SM3985	SM3989
DOUBLE EURO SHUKO	SM3981	-----	SM3986	-----
UK AND EURO SHUKO	SM3982	-----	SM3987	-----
UK AND IEC	SM3983	-----	SM3988	-----

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



- SWITCH SELECT 230V / 115V AC OUTPUT
- SILENT TELECOM AND MARINE USE.
- RUNS MICROWAVES AND SMALL FRIDGES.
- HIGH OUTPUT POWER IN COMPACT SIZE.
- 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 48V, 60V, 96V or 120 volt battery systems.

Dual outlet sockets are fitted to the unit, as given in the table above. The input is isolated from chassis (floating). 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, 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

Document 3980-993

The specification allows for up to 700 watts of continuous power available, with short surges up to 1000 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 spade terminal. A grounding stud is fitted.

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:

INPUT

Batteries:	48V, 60V, 96V or 120V Nominal.
Voltage Range:	Nominal -11.7% to +16.7%
Power, No Load:	12W.
Efficiency (approx):	85% (Resistive Load).
Remote On/Off:	The units draw <1mA until the control input is connected to battery positive.

OUTPUT

Output Voltage:	115/230V ± 10% RMS selectable
Frequency:	50Hz nominal, 48Hz to 53Hz.
Output Wave Form:	Quasi sine wave.
Power, Nominal:	700 Watts continuous (resistive).
Power, Short term:	1000 Watts for 5 minutes. 1200 Watts 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.