



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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HANDY MAINS 450W INVERTER

WIDE INPUT RANGE, 10.6V – 30V OR 21.6V – 56V, (ISOLATED).

OUTPUT/SOCKET(S)	12/24V INPUT	24/48V INPUT
230V AC, UK AND SHUKO	SM4080	SM4085
230V AC, 1 x IEC	SM4081	SM4086
230V AC, 1 x SHUKO	SM4082	SM4087
230V AC, 2 x UK	SM4083	SM4088
115V AC, 1 x IEC (50Hz).	SM4070	SM4075
115V AC, 1 x IEC (60Hz).	SM4071	SM4076



- DUAL BATTERY RANGE INPUT, 12/24V OR 24/48V.
- ISOLATED FOR POSITIVE OR NEGATIVE GROUND.
- HIGH OUTPUT POWER IN COMPACT SIZE.
- REMOTE ON / OFF CONTROL FACILITY.

GENERAL DESCRIPTION. Small converters, available with other input and output voltages, generating mains level power, capable of powering most equipment from any 12/24V or 24/48V battery systems. Models with different sockets are available to suit all needs.

The input and the output are fully isolated from ground and each other permitting use on either positive or negative ground systems.

The output is a quasi sine wave of nominally 115V or 230V RMS. The output is suitable for almost all equipment.

The specification allows for up to 450 watts of continuous power to be used, with up to 5 minutes at 550 watts. New 'power push' technology usually allows operation of equipment drawing a starting surge of over 3 kilowatts.

The battery input is via flat 5 mm screw terminals mounted under the raised body of the unit. The unit may be turned off and on, either by the front panel switch or remotely, by a low current control input, switched to battery positive via a small switch.

CONNECTION: A Heavy Duty Wiring Kit, part no. SM2793, is available, consisting of 16mm² cable, 2 metres long, terminated in suitable heavy duty eyelet terminals.

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

Voltage Ranges:	10.6V - 32V. (10V - 38V for 10S). 21.6V - 56V. (20V - 63V for 10S).
Efficiency:	86 Percent Typical.
Power, No Load:	7W
Remote On/Off:	The units draw <1mA until the on/off control input is connected to battery positive.

OUTPUT

Output Voltage:	230V or 115V AC RMS \pm 6%.
Frequency:	Nominal, -2Hz to +3Hz.
Output Wave Form:	Quasi sine wave.
Capacitive load (max):	2.0uF (230V) or 4.0uF (115V).
Power, Nominal:	450 Watts continuous (resistive).
Power, Short term:	500 Watts for 5 minutes.
'Power Push' onset:	>12A (230v), 24A (115V).
Protection:	Current and temperature limit. Internal battery fuse for surge.

GENERAL

Size:	64mm x 260mm x 103mm.
Weight:	1.55 Kg.
Storage Temperature:	-40 to +70C.
Operating Temperature:	-40 to +35C.

We reserve the right to change the specification without notice.

Made in the UK

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