



# 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

## 2700 WATT 'HANDY MAINS' INVERTERS (115V AC).

| MODEL   | INPUT  | OUTPUT SOCKET       | MODEL   | INPUT  | OUTPUT SOCKET       |
|---------|--------|---------------------|---------|--------|---------------------|
| SM 4360 | 24V DC | DOUBLE CEE FORM     | SM 4365 | 48V DC | DOUBLE CEE FORM     |
| SM 4361 | 24V DC | DOUBLE IEC 'KETTLE' | SM 4366 | 48V DC | DOUBLE IEC 'KETTLE' |
| SM 4362 | 24V DC | DOUBLE EURO SHUKO   | SM 4367 | 48V DC | DOUBLE EURO SHUKO   |
| SM 4363 | 24V DC | DOUBLE IEC (60Hz.)  | SM 4368 | 48V DC | DOUBLE IEC (60Hz.)  |

**ACCESSORIES:** 2 off SM 2793 Heavy Duty Wiring Kit, 2 metres long, for easy battery connection.



Library picture representative of range. Front to back dimension is 276mm for 2700W version.

- VIRTUALLY SILENT USE (FAN ONLY).
- HIGH OUTPUT POWER IN COMPACT SIZE.
- LATEST 'POWER PUSH' © SURGE HANDLING.
- VERY HIGH CONVERSION EFFICIENCY.
- REMOTE ON / OFF CONTROL FACILITY.

**GENERAL DESCRIPTION.** Small floor mounting converters, available with other input and output voltages, generating 115V mains level power, capable of powering most equipment from any 36V or 48V battery systems (model specific). Models with appropriate sockets are available to suit all countries.

Input negative is connected to case but can be isolated by special order (contact sales). The output is isolated via a safety barrier from the input.

The output is a stepped quasi AC sine wave of nominally 115V RMS with a peak voltage appropriate to 115VAC mains. The output is suitable for almost all equipment.

The specification allows for up to 2700 watts of continuous power to be used, with up to 2 minutes at 3200 watts, 'Power push' technology usually allows operation of equipment drawing a starting surge of over 9 kilowatts.

The battery input is via flat 5 mm screw terminals mounted on the rear of the unit. The unit may be turned off and on

remotely, by a low current control input supplied from battery positive via a small switch.

**CONNECTION:** A **Heavy Duty Wiring Kit**, part no. SM2793, is available, consisting of 16sqmm 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. Fuse Battery at source.

| SPECIFICATION:    | 24V TYPES   | 48V TYPES    |
|-------------------|---|--------------|
| <b>INPUT</b>      |   |              |
| Battery:          | 24V nominal.  | 48V nominal. |
| Voltage Range:    | 21.6V - 30V   | 43.2V - 63V  |
| Current, No Load: | 0.3A  | 0.2A         |
| Per 10W loading:  | 0.5A  | 0.25A        |
| Remote On/Off:    | The units draw <1mA until the control input is connected to battery positive. |              |

| <b>OUTPUT</b>       |                                |
|---------------------|--------------------------------|
| Output Voltage:     | 115V ± 7V RMS. from inverter.  |
| Frequency:          | 50Hz nominal, 48Hz to 53Hz.    |
| Output Wave Form:   | Quasi sine wave.               |
| Capacitive load:    | 6uF maximum.                   |
| Power, Nominal:     | 2700W continuous (resistive).  |
| Power, Short term:  | 3200W for 2 minutes.           |
| 'Power Push' onset: | Output current >100A minimum.  |
| Protection:         | Current and temperature limit. |

| <b>GENERAL</b>         |                             |
|------------------------|-----------------------------|
| Size:                  | 170mm x 280mm x 180mm.      |
| Weight:                | 6 Kg.                       |
| Storage Temperature:   | -40 to +70C.                |
| Operating Temperature: | -40 to +45C.                |
| Manufacturer:          | 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 maker. Do not use for aviation or marine applications without written agreement. Do not use for life dependent applications. We reserve the right to change the specification without notice.

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We manufacture a large 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.