



# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



Tel: +44 (0)118 930 2299

A DIVISION OF SMET LTD

Fax: +44 (0)118 930 2206

www.custompsdesign.com

Unit 19, The Markham Centre, Station Road, Theale, Berks. RG7 4PE.

custom@custompsdesign.com

## 270 WATT 'HANDY MAINS', 115V AND 230V AC OUTPUT (Fan Cooled).

Now with front panel switch instead of remote on/off input (available if required).

**SM4260** 12V input, 115V AC, IEC (50Hz).

**SM4261** 12V input, 115V AC, IEC (60Hz).

**SM4280** 12V input, 230V AC, UK (50Hz).

**SM4281** 12V input, 230V AC, IEC (50Hz).

**SM4283** 12V input, 230V AC, SHUKO (50Hz).

**SM4282** 12V input, 230V AC, SHUKO (50Hz) with front panel switch fitted.

**SM4265** 24V input, 115V AC, IEC (50Hz).

**SM4266** 24V input, 115V AC, IEC (60Hz).

**SM4285** 24V input, 230V AC, UK (50Hz).

**SM4286** 24V input, 230V AC, IEC (50Hz).

**SM4287** 24V input, 230V AC, SHUKO (50Hz).

- INSTANT MAINS POWER FROM YOUR BATTERY
- CAN BE PERMANENTLY INSTALLED.
- HIGH OUTPUT POWER IN COMPACT SIZE.
- VERY HIGH CONVERSION EFFICIENCY.
- REMOTE ON / OFF CONTROL FACILITY.

**GENERAL.** These economic inverters convert battery voltage to 115V or 230VAC, for powering small power tools and domestic appliances, etc. All models have an output power of 300 watts short term, and a continuous power available of 270 watts. Output is either by standard UK, SHUKO or IEC (Kettle type) socket.

The **HANDY MAINS** is fitted with an audible warning indicating that the battery is becoming discharged. The warning tone gets louder as the battery voltage falls, prompting you to charge the battery.

These versions' are designed to be permanently installed with direct connection to the battery. A third low current signal lead taken to the battery positive via a switch turns the unit on and off. The front panel switch overrides the on/off input. The **HANDY MAINS** may be mounted on a flat surface using the mounting bracket kit **SM 2791**.

**BATTERY DRAIN:** A figure of 1 amp (12V input) or 0.5amp (24V input) for every 10 watts of output load is a good guide. Intermittently used power tools will not significantly drain the battery, but anything used continuously could.

**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 only for negative earth systems.

When using appliances outside, an RCD protector ('POWER BREAKER' or similar) must be used in or close to the INVERTER outlet socket.

The fan adds 45mm to the thickness of the standard 200W Handy Mains units.



TEMPORARY PICTURE. Cooling Fan not shown

| <b>SPECIFICATION:</b>  | <b>12V TYPES</b>   | <b>24V TYPES</b> |
|------------------------|--|------------------|
| <b>INPUT</b>           |  |                  |
| Battery:               | 12V nominal.   | 24V nominal.     |
| Voltage Range:         | 11V - 15V.   | 22V - 30V.       |
| Current, No Load:      | 0.4A   | 0.2A             |
| Per 10W loading:       | 1 A  | 0.5A             |
| Remote On/Off:         | The units draw <1mA until the on/off control input is connected to battery +ve or switched on. |                  |
| <b>OUTPUT</b>          |  |                  |
| Output Voltages:       | 230V $\pm$ 10% RMS, 1.1A max.<br>115V $\pm$ 10% RMS, 2.2A max.                                 |                  |
| Frequency:             | Nominal, -2Hz to +3Hz.   |                  |
| Output Wave Form:      | Quasi sine wave.   |                  |
| Capacitive load (max): | 0.68uF (230V), 2uF (115V).   |                  |
| Power, Nominal:        | 270 Watts continuous (resistive).  |                  |
| Power, Short term:     | 300 Watts for 5 minutes.   |                  |
| Protection:            | Current and temperature limit.<br>Internal battery fuse for surge.                             |                  |
| <b>GENERAL</b>         |  |                  |
| Size:                  | 90mm x 141mm x 94mm.   |                  |
| Weight:                | 0.9 Kg.  |                  |
| Storage Temperature:   | -40 to +70C.   |                  |
| Operating Temperature: | -40 to +35C.   |                  |

Made in the UK.

We reserve the right to change the specification without notice.

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