CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT

Tel: + 44 (0)118 983 1222 *A DIVISION OF SMET LTD*

www.custompsudesign.com Unit 1, The Forge, Reading Road, Burghfield Common, Reading, RG7 3BL. custom@custompsudesign.com

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

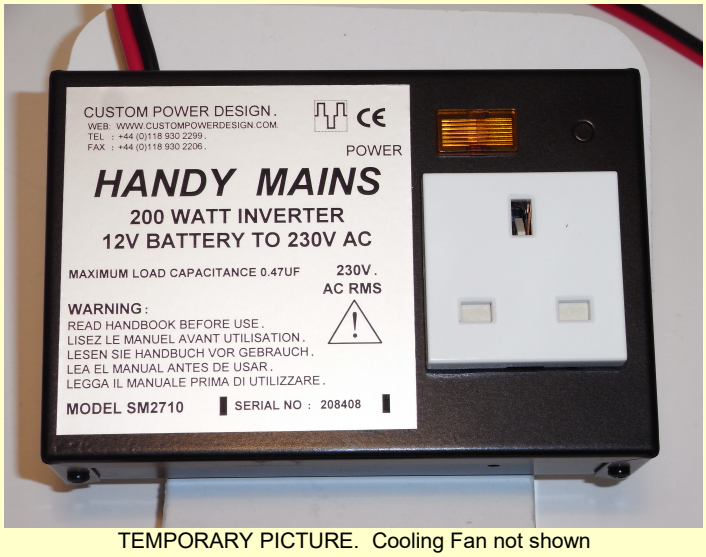
Now with front panel switch instead of remote on/off input (available if required).

SM4260 12V input, 115V AC, IEC (50Hz).
SM4261 12V input, 115V AC, IEC (60Hz).
SM4265 24V input, 115V AC, IEC (50Hz).
SM4266 24V 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).
SM4285 24V input, 230V AC, UK (50Hz).
SM4286 24V input, 230V AC, IEC (50Hz).
SM4287 24V input, 230V AC, SHUKO (50Hz).

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

- **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.**



TEMPORARY PICTURE. Cooling Fan not shown

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.

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.

SPECIFICATION:	**12V TYPES**	**24V TYPES**
INPUT		
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.	
OUTPUT		
Output Voltages:	230V ± 10% RMS, 1.1A max. 115V ± 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. Internal battery fuse for surge.	
GENERAL		
Size:	90mm x 141mm x 94mm.	
Weight:	0.9 Kg.	
Storage Temperature:	-40 to +70C.	
Operating Temperature:	-40 to +35C.	

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 reserve the right to change the specification without notice. Document 4280-993

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.