



# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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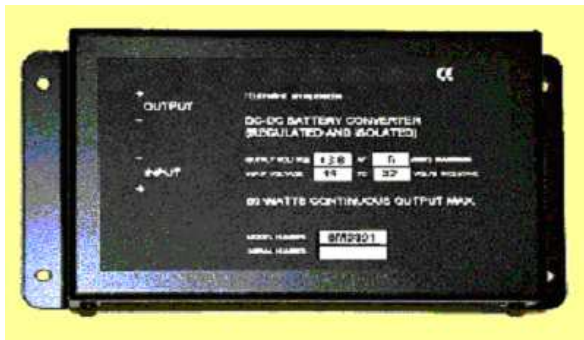
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## 138 WATT DC - DC CONVERTERS.

**NOTE: 48V input models must be used with a supply fused at source (5A).**

MODEL	INPUT	OUTPUT	MODEL	INPUT	OUTPUT	MODEL	INPUT	OUTPUT
SM3350	12V	5V at 20A	SM3360	24V	5V at 20A	SM3370	48V	5V at 20A
SM3351	12V	9V at 12.5A	SM3361	24V	9V at 12.5A	SM3371	48V	9V at 12.5A
SM3352	12V	12V at 11.5A	SM3362	24V	12V at 11.5A	SM3372	48V	12V at 11.5A
SM3353	12V	15V at 9.2A	SM3363	24V	15V at 9.2A	SM3373	48V	15V at 9.2A
SM3354	12V	18V at 7.7A	SM3364	24V	18V at 7.7A	SM3374	48V	18V at 7.7A
SM3355	12V	21V at 6.6A	SM3365	24V	21V at 6.6A	SM3375	48V	21V at 6.6A
SM3356	12V	24V at 5.8A	SM3366	24V	24V at 5.8A	SM3376	48V	24V at 5.8A
SM3357	12V	48V at 2.9A	SM3367	24V	48V at 2.9A	SM3377	48V	48V at 2.9A
SM3358	12V	13.8V at 10.0A	SM3368	24V	13.8V at 10.0A	SM3378	48V	13.8V at 10.0A
SM3359	12V	27.6V at 5.0A	SM3369	24V	27.6V at 5.0A	SM3379	48V	27.6V at 5.0A

- **CONSTANT CURRENT LIMIT.**
- **HIGH OUTPUT POWER IN COMPACT SIZE.**
- **REMOTE ON / OFF CONTROL FACILITY.**
- **INPUT UNDER / OVERVOLTAGE SHUTDOWN.**



**GENERAL DESCRIPTION.** A small converter, generating a range of standard voltages, capable of powering most battery equipment when supplied from 12, 24V or 48V batteries. The input and output are ohmically isolated, making installation very simple. The output has a constant current limit.

The specification allows for up to 138 watts of continuous power to be used. The unit incorporates an electronic relay to turn it on/off remotely, driven by a control input.

Power input and output is via 0.25" Fast-on tabs, which are located on the end face of the unit. The unit is packaged in a powder coated metal box measuring 49mm high by 94mm wide by 168mm long, including mounting flanges at each end.

**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.

### INSTALLATION INSTRUCTIONS.

**FIXING:** - Four 3.5mm diameter-fixing holes are available on the mounting flanges, with centres of 155mm by 70mm, symmetrically placed.

The converter employs switched mode conversion, which generates some electrical noise. In sensitive installations, to minimise interference, it is advisable to ground the case of the unit directly to the system chassis.

### SPECIFICATION.

**INPUT:** -10.5V - 15V or 21V - 32V or 44V - 56V.

This covers general 12V, 24V and 48V battery systems. Do not reverse battery polarity.

**VOLTAGE (10% LOAD):** - Nominal + 100mV  $\pm$ 50mV.

**LINE REGULATION:** - Less than  $\pm$  0.05V for a 10% static input change.

**LOAD REGULATION:** - Less than 0.1V for a 10% to 90% static load change.

**LOW FREQUENCY RIPPLE:** - Less than 50mV pp.

**CURRENT LIMIT:** - Nominal plus 10%,  $\pm$  7%.

**ON/OFF CONTROL:** -The unit will draw less than 0.1mA until voltage (3V to 72V) is applied to the control input. Units can be supplied set permanently 'on'.

**SIZE AND WEIGHT:-** 168 x 49 x 94mm, 0.7Kg

**TEMPERATURE RANGE:** - -40C to +45C operating, -40C to +70C storage.

**MANUFACTURER:** - SMET Ltd. Theale, UK.

We reserve the right to change the specification without notice.

Document 3350-993.

We manufacture a large range of Battery and DC-DC converters, DC-AC (mains) inverters and many other power systems.