

## CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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## **440 WATT BATTERY CONVERTERS**

OUTPUT	12V INPUT	24V INPUT	36V INPUT	48V INPUT
5.0V at 70.0A	SM4290	SM4300	SM4870	SM4730
9.0V at 45.0A	SM4291	SM4301	SM4871	SM4731
12.0V at 36.7A	SM4292	SM4302	SM4872	SM4732
15.0V at 29.3A	SM4293	SM4303	SM4873	SM4733
18.0V at 24.4A	SM4294	SM4304	SM4874	SM4734
21.0V at 21.0A	SM4295	SM4305	SM4875	SM4735
24.0V at 18.4A	SM4296	SM4306	SM4876	SM4736
48.0V at 9.2A	SM4297	SM4307	SM4877	SM4737



- VERY HIGH CONVERSION EFFICIENCY.
- HIGH OUTPUT POWER IN COMPACT SIZE.
- REMOTE ON / OFF CONTROL.
- LOW BATTERY ALARM WITH AUTO SHUT-OFF.

GENERAL DESCRIPTION: A rugged converter, generating a range of DC outputs when supplied from 12, 24, 36 or 48V batteries with up to 440 watts of continuous power.

The unit incorporates an electronic relay to turn it on/off remotely, driven by a control input, which may be supplied from any low current switch.

The input and output are ohmically isolated, making installation very simple. Input can be isolated from chassis by up to 100V.

The unit is packaged in a powder coated folded metal box. Input wires enter on one side face, and an outlet terminal block is mounted on the top face. Flanges are provided for mounting 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.

## SPECIFICATION: INPUTS

Nominal Voltage: 12V or 24V or 36V or 48V Battery

by model.

Input Voltage Range: Nominal – 11.7% to +16.7% Current, No Load: 0.5A, 0.4A, 0.3A and 0.25A across

range.

Efficiency (approximate): 85%

Low Battery Alarm: Nominal -12.5%Battery Low Latch Off: Nominal -20%

**OUTPUTS** 

Voltage (10% Load): - Nominal +  $100 mV \pm 50 mV$ . Line Regulation: -  $< \pm 0.05 V$  for a 10% input change.

Load Regulation: - <-0.1V for a 10% to 90% load

change.

Low Frequency Ripple: - Less than 50mV pp.

Current Limit: - Nominal plus 10%, ± 7%.

On/Off Control: - The unit will draw less than 0.1mA

until voltage (3V to 72V) is applied

to the control input.

**GENERAL** 

Protection: Over-current and short circuit

output limit plus input fusing.

Size: 247mm x 103mm x 63mm.

Weight: 1200 grams.
Storage Temp Range: -40 to +70C.
Operating Temp Range: -40 to +40C.
Manufacturer Made in UK.

We reserve the right to change this specification without notice.

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