



# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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## 65 WATT BATTERY CONVERTERS.

OHMICALLY ISOLATED AND CURRENT LIMITED FOR BATTERY CHARGING.  
ALLOWS DIRECT POWERING OF THE LATEST MULTI-MEDIA NOTEBOOK COMPUTERS.

OUTPUT	12V BATTERY	24V BATTERY	48V BATTERY
5V at 13A	SM4660	SM4670	SM5040
9V at 7.2A	SM4661	SM4671	SM5041
12V at 5.4A	SM4662	SM4672	SM5042
15V at 4.3A	SM4663	SM4673	SM5043
18V at 3.6A	SM4664	SM4674	SM5044
21V at 3.1A	SM4665	SM4675	SM5045
24V at 2.7A	SM4666	SM4676	SM5046
48V at 1.35A	SM4667	SM4677	SM5047
13.8V at 4.7A	SM4668	SM4678	SM5048
27.6V at 2.3A	SM4669	SM4679	SM5049



### SPECIFICATION:

Output variation for 0-90% load change: 0.5% max. (plus drop in cable. See note).

Output variation for 2V input change: 50mV max.

Output current limit: 110% -120%

Output low frequency ripple: 100mV max.

12V Input Supply Range: 10.6VDC - 15VDC

24V Input Supply Range: 21.6VDC - 32VDC

48V Input Supply Range: 43.2VDC - 56VDC

No load current: 0.1A typical.

Input to output isolation: 500Kohm  $\pm$  100VDC.

Protection: Current limit & fuse.

Size: 111mm x 60mm x 30mm.

Weight: 440 grams including wires.

Operating Temp Range: -40 to +30C.

Storage Temp Range: -40 to +70C.

**GENERAL:** These small but powerful converters provide a source of stabilised low voltage suitable for running many different items of equipment. Their output is ohmically isolated from the system chassis and constant current limited. Continuous operation in current limit is allowed making them suitable for battery charging. Connection to the system is by a 'cigar' plug (12 & 24V Input) lead or just a flying lead (48V input), and output is by flying lead (5V-15V units) or 2.5mm concentric connector (18V- 48V units).

The converters are mainly designed for use with notebook computers that have two wire input. These converters are current limited above a certain level of demand. The output isolation of the converter from system ground ensures that earth currents do not flow.

**BATTERY DRAIN:** These converters take c1A at 12V, c0.5A at 24V or c0.25A at 48V for every 10 watts of load.

**NOTES:** The main variation of output voltage with load is due to the resistance of the output cable. An internal potentiometer is available to adjust the output voltage over a range of  $\pm$  5% to compensate.

**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. For 12V and 24V input units, the negative input lead is connected to case making the unit suitable only for negative earth systems. 48V units are isolated  $\pm$  100VDC.

Made in the United Kingdom.

We reserve the right to change the specification without notice.

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