



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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100 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 15A	SM4960	SM4970	SM4980
9V at 9.4A	SM4961	SM4971	SM4981
12V at 8.5A	SM4962	SM4972	SM4982
15V at 6.7A	SM4963	SM4973	SM4983
18V at 5.6A	SM4964	SM4974	SM4984
21V at 4.8A	SM4965	SM4975	SM4985
24V at 4.2A	SM4966	SM4976	SM4986
48V at 2.1A	SM4967	SM4977	SM4987
13.8V at 7.2A	SM4968	SM4978	SM4988
27.6V at 3.6A	SM4969	SM4979	SM4989



Library picture representative of range.

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 barrel 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.

CAUTION: This adaptor is supplied based on 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.

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.

We reserve the right to change the specification without notice.

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

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: 470 grams including wires.

Operating Temp Range: -40 to +30C.

Storage Temp Range: -40 to +70C.

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.