



PDS Design Solutions Limited

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48 WATT BATTERY CONVERTERS.

OHMICALLY ISOLATED AND CURRENT LIMITED.
 ALLOWS DIRECT POWERING OF NOTEBOOK COMPUTERS INCLUDING BATTERY CHARGING.

OUTPUT	12V BATTERY	24V BATTERY	48V BATTERY
5V at 8.5A	SM4450	SM4470	SM3770
9V at 5.0A	SM4451	SM4471	SM3771
12V at 4.0A	SM4452	SM4472	SM3772
15V at 3.2A	SM4453	SM4473	SM3773
18V at 2.7A	SM4454	SM4474	SM3774
21V at 2.3A	SM4455	SM4475	SM3775
24V at 2.0A	SM4456	SM4476	SM3776
48V at 1.0A	SM4457	SM4477	SM3777
13.8V at 3.4A	SM4458	SM4478	SM3778
27.6V at 1.7A	SM4459	SM4479	SM3779



SPECIFICATION:

Output variation for 0-90% load change: (plus drop in cable. See note).	0.5% max.
Output variation for 2V input change:	50mV max.
Output current limit:	125%± 17%
Output low frequency ripple:	100mV max.
12V Input Supply Range:	10.6VDC - 15VDC
24V Input Supply Range:	21.6VDC - 32VDC
24V Input Supply Range:	43.2VDC - 56VDC
No load current:	0.07A typical.
Input to output isolation:	500Kohm ± 100VDC.
Protection:	Current limit & fuse.
Size:	111mm x 60mm x 30mm.
Weight:	380 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 - 12V units) or 2.5mm concentric connector (13.8V - 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.

Made in the United Kingdom.

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 ± 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 ± 100VDC.