



# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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## 35 WATT BATTERY CONVERTERS.

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

MODEL	INPUT	OUTPUT	MODEL	INPUT	OUTPUT
SM3750	12V DC	5V at 6.5A	SM3760	24V DC	5V at 6.5A
SM3751	12V DC	9V at 3.9A	SM3761	24V DC	9V at 3.9A
SM3752	12V DC	12V at 3.0A	SM3762	24V DC	12V at 3.0A
SM3753	12V DC	15V at 2.4A	SM3763	24V DC	15V at 2.4A
SM3754	12V DC	18V at 2.0A	SM3764	24V DC	18V at 2.0A
SM3755	12V DC	21V at 1.7A	SM3765	24V DC	21V at 1.7A
SM3756	12V DC	24V at 1.5A	SM3766	24V DC	24V at 1.5A
SM3757	12V DC	48V at 0.8A	SM3767	24V DC	48V at 0.8A
SM3758	12V DC	13.8V at 2.6A	SM3768	24V DC	13.8V at 2.6A
SM3759	12V DC	27.6V at 1.3A	SM3769	24V DC	27.6V at 1.3A



**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 ground and constant current limited. Continuous operation in current limit is allowed making them suitable for battery charging providing charge time is controlled. Connection to the battery is by a plug with a flying lead, that fits a standard cigar lighter socket, and output is by flying lead terminated in a popular 2.5mm concentric plug (Bare ended for 5V and 9V output 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 ensures that earth currents do not flow.

**BATTERY DRAIN:** These converters draw about 1A at 12V or 0.5A at 24V i/p for every 10 watts of load applied.

### SPECIFICATION:

Output variation for 0-90% load change: (plus drop in cable).	0.5% max.
Output variation for 2V input change:	50mV max.
Output current limit See note 2:	125%± 17%
Output low frequency ripple:	200mV max.
12V Input Supply Range:	10.6VDC-15VDC
24V Input Supply Range:	21.6VDC-32VDC
No load current:	0.1A typical.
Input to output isolation:	500Kohm ± 63VDC.
Protection:	Current limit & fuse.
Size:	111mm x 60mm x 30mm.
Weight:	380 grams including wires.
Operating Temp Range:	-20 to +50C.
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 ± 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. The negative input lead is connected to case making the unit suitable only for negative earth systems.

Made in the United Kingdom.

We reserve the right to change the specification without notice.

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