



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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A DIVISION OF SMET LTD

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250 WATT BATTERY CONVERTERS.

OPTIONAL DELAYED ON/OFF RELAY AND INPUT OVERVOLTAGE / UNDERVOLTAGE PROTECTION.

Available in other input and output voltages to special order. Call Sales.

SM 4722 12V INPUT, 13.8V, 18.0A DC OUTPUT.
 SM 4728 12V INPUT, 27.6 V, 9.0A DC OUTPUT.
 SM 4729 12V INPUT, 55.2V, 4.6A DC OUTPUT.
 SM 4721 24V INPUT, 13.8V, 18.0A DC OUTPUT.
 SM 4726 24V INPUT, 27.6 V, 9.0A DC OUTPUT.

SM 4723 24V INPUT, 55.2V, 4.6A DC OUTPUT.
 SM 4724 48V INPUT, 13.8V, 18A DC OUTPUT.
 SM 4727 48V INPUT, 27.6 V, 9A DC OUTPUT.
 SM 4725 48V INPUT, 55.2V, 4.6A DC OUTPUT.
 SM 4720* 48V INPUT, 24.0 V, 10A USE SM4776*

- **CONSTANT CURRENT LIMIT.**
- **HIGH OUTPUT POWER IN COMPACT SIZE.**
- **OPTIONAL DELAYED ON/OFF FACILITY.**
- **REMOTE ON / OFF CONTROL FACILITY.**
- **FLOAT CHARGE LEAD ACID BATTERIES.**



Library picture representative of range.

GENERAL DESCRIPTION.

A small converter, generating 13.8V or 27.6V or 55.2V DC (lead acid float voltage), capable of powering most battery equipment when supplied from 12, 24, or 48V batteries. The input and output are ohmically isolated, making installation very simple. The output has a constant current characteristic so that lead acid batteries may be charged.

The specification, given in detail opposite, allows for up to 250 watts of continuous power to be used. The unit incorporates an electronic relay to turn it on/off remotely, driven by a logic compatible control input (or connect to battery positive), which may be supplied from any low current switch. Input and output is via 0.25" Fast-on tabs, which are located on the end face of the unit.

The unit is packaged in a powder coated metal box measuring 46mm high by 94mm wide by 191mm long, with mounting

flanges at each end, increasing overall length to 226mm. Fixing centres 70mm by 214mm (6mm holes).

FIXING: -

Four 3.5mm diameter-fixing holes are available on the mounting flanges, with centres of 214mm by 70mm, symmetrically placed.

The converter employs switched mode conversion, which generates some electrical noise. In sensitive installations, to minimise interference, it is advisable to ground the case of the unit directly to the system chassis.

SPECIFICATION.

INPUT: -

10.5V to 15V DC or 21V to 32V or 42V to 64V, by model. This covers general 12V, 24V or 48V battery systems.

O/P VOLTAGE (10% Load): - Nominal +100mV ±50mV.

LINE REGULATION: - Less than ± 0.1V for a 10% static input change.

LOAD REGULATION: - Less than 0.2V for a 10% to 90% static load change.

LOW FREQUENCY RIPPLE: - Less than 50mV pp.

CURRENT LIMIT: -

13.8V output models: 19.0 A +- 0.5A.

27.6V output models: 9.5A +- 0.3A.

55.2V output models: 4.8A +- 0.2A.

ON/OFF CONTROL: -The unit will draw less than 0.1mA until +3V to +72V is applied to the control input (battery).

SIZE: 46mm x 98mm x 226mm.

WEIGHT: 820 grams.

TEMPERATURE RANGE: -40C to +50C operating, -40C to +70C storage.

MANUFACTURER: SMET Ltd. Reading, UK.

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 maker. Do not use for aviation or marine applications without written agreement. Do not use for life dependent applications. We reserve the right to change the specification without notice.

Document 4720-993

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.