



# CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



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## FULL RANGE DC - DC CONVERTERS. 24V AND 48V BATTERY (21.6V TO 63V) INPUT. NOW AVAILABLE WITH DELAYED ON OFF FACILITY

### 120 WATT MODELS

SM4780	5.0V, 18.0A
SM4781	9.0V, 11.5A
SM4782	12.0V, 10.0A
SM4783	15.0V, 8.0A
SM4784	18.0V, 6.7A
SM4785	21.0V, 5.7A
SM4786	24.0V, 5.0A
SM4787	48.0V, 2.5A
SM4788	13.8V, 8.6A
SM4789	27.6V, 4.3A

### 200WATT MODELS

SM4790	5.0V, 30.0A
SM4791	9.0V, 19.2A
SM4792	12.0V, 16.7A
SM4793	15.0V, 13.4A
SM4794	18.0V, 11.2A
SM4795	21.0V, 9.5A
SM4796	24.0V, 8.4A
SM4797	48.0V, 4.2A
SM4798	13.8V, 14.3A
SM4799	27.6V, 7.2A

- **CONSTANT CURRENT LIMIT.**
- **HIGH OUTPUT POWER IN COMPACT SIZE.**
- **REMOTE ON / OFF CONTROL FACILITY.**
- **INPUT UNDER / OVERVOLTAGE SHUTDOWN.**



Library picture representative of range.

**GENERAL DESCRIPTION.** A small converter producing up to 120W (478X series) or 200W (479X series) with a range of dc outputs, when supplied from a 24 or 48V battery. The input and output are ohmically isolated, making installation very simple. The output has a constant current limit and the unit incorporates an electronic relay to turn it on/off remotely, via a control input.

Power input and output is via 0.25" Fast-on tabs, on the end face of the unit. The unit is packaged in a metal box, measuring 49mm x 94mm x 168mm (332Xseries) or 226mm (333X series), including mounting flanges.

**FIXING:** - Four 3.5mm diameter-fixing holes are available on the mounting flanges, with centres of 70mm by 155mm (478X series) or 214mm (479X series), 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:** -21.6V to 63V.

This covers both 24V and 48V battery systems.

**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:** - Nominal plus 10%, ± 7%.

**ON/OFF CONTROL:** -The unit will draw less than 0.1mA until a positive voltage (3V to 72V) is applied to this input. Units can be supplied set permanently 'on' or with delayed 'off'. Contact sales to order.

**TEMP:** - -40C to +55C operating, -40C to +70C storage.

Made in the 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. The negative input lead is connected to case and output ground making the unit suitable only for negative earth systems.

We reserve the right to change the specification without notice.

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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.