



CUSTOM POWER DESIGN

ELECTRONICS CONSULTANTS PROVIDING CUSTOM DESIGN, DEVELOPMENT, TEST & SUPPORT



Tel: + 44 (0)118 983 1222

A DIVISION OF SMET LTD

www.custompsdesign.com

Unit 1, The Forge, Reading Road, Burghfield Common, Reading. RG7 3BL.

custom@custompsdesign.com

120 WATT (TOTAL) DUAL OUTPUT DC - DC CONVERTERS. ADJUSTABLE SECOND POSITIVE OUTPUT BY 3A SWITCHING REGULATOR.

MODEL	INPUT	MAIN O/P	MODEL	INPUT	MAIN O/P	MODEL	INPUT	MAIN O/P
SM4930	12V	8V at 12A	SM4940	24V	8V at 12A	SM4950	48V	8V at 12A
SM4931	12V	9V at 12A	SM4941	24V	9V at 12A	SM4951	48V	9V at 12A
SM4932	12V	12V at 10A	SM4942	24V	12V at 10A	SM4952	48V	12V at 10A
SM4933	12V	15V at 8A	SM4943	24V	15V at 8A	SM4953	48V	15V at 8A
SM4934	12V	18V at 6.7A	SM4944	24V	18V at 6.7A	SM4954	48V	18V at 6.7A
SM4935	12V	21V at 5.7A	SM4945	24V	21V at 5.7A	SM4955	48V	21V at 5.7A
SM4936	12V	24V at 5A	SM4946	24V	24V at 5A	SM4956	48V	24V at 5A
SM4937	12V	48V at 2.5A	SM4947	24V	48V at 2.5A	SM4957	48V	48V at 2.5A
SM4938	12V	13.8V at 8.7A	SM4948	24V	13.8V at 8.7A	SM4958	48V	13.8V at 8.7A.
SM4939	12V	27.6V at 4.4A	SM4949	24V	27.6V at 4.4A	SM4959	48V	27.6V at 4.4A

- 120 W TOTAL OUTPUT POWER IN SMALL SIZE.
- HIGH POWER AUXILIARY OUTPUT (3A).
- VERY HIGH CONVERSION EFFICIENCY.
- REMOTE ON / OFF CONTROL FACILITY.



Library picture representative of range.

GENERAL DESCRIPTION.

A small converter, generating a standard range of output voltages when supplied from 12, 24, or 48V batteries. An auxiliary output is generated from the main output (common zero-volt connection) using a high efficiency switching regulator. The auxiliary output may be set to any voltage between 5V and main output voltage less 3V. Up to 3A is available from this output. A total of 120W may be drawn. Power input and output is via 0.25" Fast-on tabs, which are located on the end face of the unit.

The input and output are ohmically isolated, making installation simple. The main output has a constant current limit so that lead acid batteries may be charged.

The unit is packaged in a powder coated metal box measuring 49mm high by 94mm wide by 141mm long,

with mounting flanges at each end, increasing overall length to 168mm.

FIXING: -

Four 3.5mm diameter-fixing holes are available on the mounting flanges, with centres of 155mm by 70mm, symmetrically placed.

SPECIFICATION.

INPUT: -

10.5V to 15V DC or 21V to 32V or 44V to 56V, by model. This covers general 12V, 24V or 48V battery systems.

MAIN OUTPUT VOLTAGE (10% LOAD):

Nominal + 100mV \pm 50mV.

AUXILIARY OUTPUT VOLTAGE (SET BY USER) :

May be set between 4.9V and Main Output Voltage less 3V.

MAXIMUM AUXILIARY OUTPUT CURRENT: 3.0A

LINE REGULATION: - Less than \pm 0.05V for a 10% static input change.

LOAD REGULATION: - Less than 0.1V for a 10% to 90% static load change.

LOW FREQUENCY RIPPLE: - Less than 50mV pp.

MAIN CURRENT LIMIT : Nominal plus 10%, \pm 7%.

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

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 manufacturer. Do not use for aviation or marine applications without our written agreement. Do not use for life dependent applications. 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.