



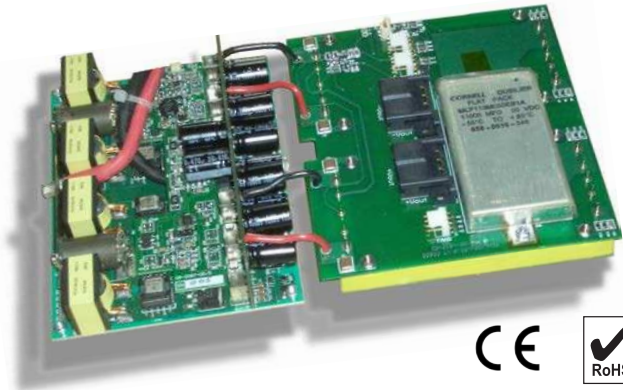
## FEATURES

- RAPID SOLUTION FOR DC-DC VEHICLE POWER APPLICATIONS
- VERSATILE DESIGN MEETS WIDE RANGE OF INPUT AND OUTPUT REQUIREMENTS
- STEP-UP AND STEP-DOWN DC-DC CONVERSION
- UP TO 1000W OF OUTPUT POWER
- WIDE INPUT RANGE 10 – 36VDC\*
- 12 – 48VDC STANDARD OUTPUT VOLTAGES
- HIGH SYSTEM EFFICIENCY – TYPICALLY 86%
- COMPREHENSIVE PROTECTION FEATURES, INCLUDING REVERSE INPUT PROTECTION
- LOW PROFILE 30.9MM
- I<sup>2</sup>C TEMPERATURE SENSOR
- TWO YEAR WARRANTY

The Flexistax® DC-DC power converter series uses the patented F501 series of brick converters driven from a 4 channel boost converter to allow vehicle or other DC voltages to be stepped up or down to those required by electronic equipment such as transmitters or guidance systems. The boost converter gives a non-isolated bus voltage of 32VDC that drives a pair of F501 brick converters in a parallel configuration that provide the isolation, regulation and stability needed by modern, sophisticated electronics.

The Flexistax® D1001 has a field proven pedigree of reliability with many thousands of these and derivative units having been supplied for mission critical applications.

This D1001 is supplied as a baseplate cooled board set with heavy gauge wire input leads and an industry standard output connector for the system builder to incorporate within their system. However, if a full turnkey solution is required Powerstax has many



## APPLICATIONS INCLUDE

- FUEL CELLS
- MOBILE POWER
- MILITARY AND COMMERCIAL VEHICLES
- REMOTE AND UP-MAST SITES
- BATTERY AND GENERATOR POWERED SYSTEMS

configurations including filter boards, industry standard MIL style connectors and integral cooling.

The patented high efficiency topology and signal and monitoring features of the F501 DC-DC converter modules means that the full range of standard output voltages can be supplied. A typical system efficiency of 86% is achieved with the 48VDC being the highest efficiency and the 12VDC output being a little lower.

The open construction unit measures 238mm x 145mm with a maximum height of 30.85mm (9.4in x 5.7in x 1.2in) and can be cold wall mounted allowing the baseplate temperature to be kept at 100°C or lower.

The Flexistax® D1001 is ideal for use in vehicle mounted applications, remote battery, generator or fuel cell powered sites and up-mast applications.

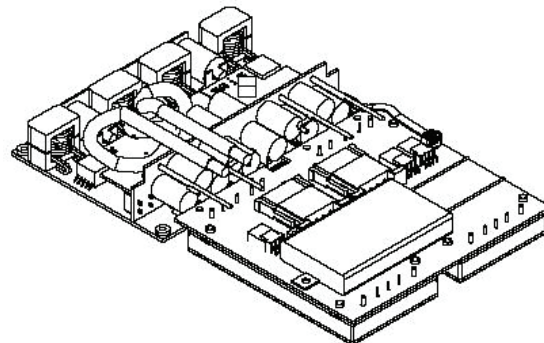
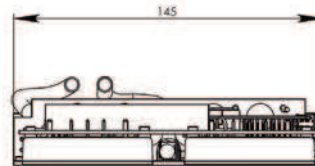
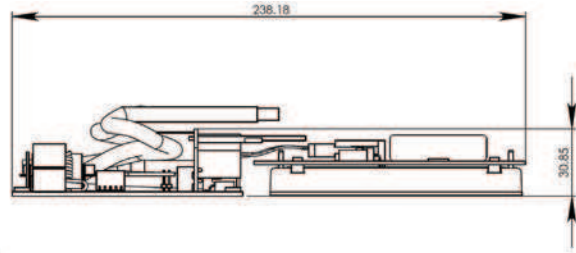
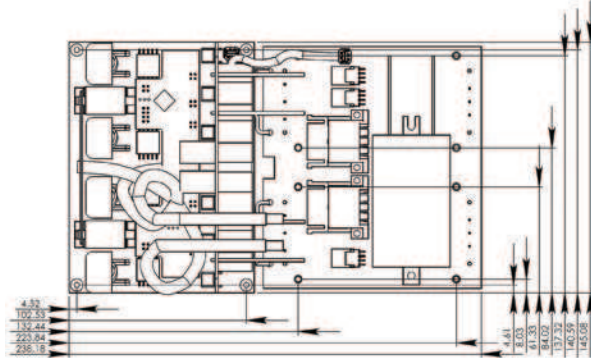
To discuss your requirements further please call or email us.



## STANDARD MODELS

MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER
D1001-012-120	12.0V	80.0A	960W
D1001-012-138	13.8V	72.5A	1000W
D1001-012-150	15.0V	66.7A	1000W
D1001-012-240	24.0A	41.7A	1000W
D1001-012-280	28.0V	35.7A	1000W
D1001-012-480	48.0V	20.8A	1000W

## MECHANICAL OUTLINE



FLEXISTAX - DC/DC

## EXAMPLE SPECIFICATIONS

INPUT CHARACTERISTICS	12V Input
Input Voltage (range)	10 - 36VDC *
Input Current (max.)	108A (recommended breaker rating 120ADC)
Protection	automatic reverse polarity

\* 20% power de-rating between 10 and 11VDC input

OUTPUT CHARACTERISTICS	
Voltage Setpoint	see model table
Setting Tolerance	±2%
Maximum Current	see model table
Overcurrent Protection	electronic limiting
Maximum Power	1000W continuous
Efficiency	overall typically 86%
Ripple	<2% pk-pk

GENERAL & ENVIRONMENTAL	
Safety	CE marked to LVD2006/93/EC, complies with EN60950-1
Earthing	Baseplate to be grounded
Isolation Voltage	2200VDC input/ground 2200VDC input/output 500VDC output/ground
Construction	Conduction cooled via baseplate with operating temperature range of -25°C to +85°C. Baseplate limited to 100°C.

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