

Flexistax® D1001 STEP-UP DC-DC

1000W with 10-36VDC* Input, Single 24 or 28VDC Output

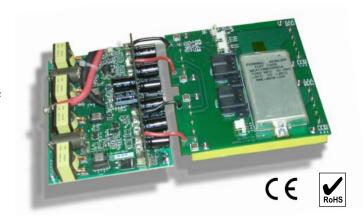
FEATURES

- 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*
- 24 OR 28VDC STANDARD OUTPUTS FOR OTHER VOLTAGES CONTACT THE FACTORY
- HIGH SYSTEM EFFICIENCY TYPICALLY 86%
- COMPREHENSIVE PROTECTION FEATURES, INCLUDING REVERSE INPUT PROTECTION
- LOW PROFILE 30.9MM
- I²C 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 nonisolated 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. Efficiency is in the range of 80-85%.

The open construction unit measures $238 \, \text{mm} \times 145 \, \text{mm}$ with a maximum height of $30.85 \, \text{mm}$ ($9.4 \, \text{in} \times 5.7 \, \text{in} \times 1.2 \, \text{in}$) and can be cold wall mounted allowing the baseplate temperature to be kept at $100 \, ^{\circ} \text{C}$ 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.



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STANDARD MODELS

MODEL NUMBER	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER
D1001-012-240	24.0A	41.7A	1000W
D1001-012-280	28.0V	35.7A	1000W

Other outputs available to special order, please consult sales.

EXAMPLE SPECIFICATIONS

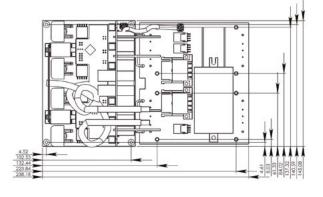
INPUT CHARACTERISTICS	12V Input
Input Voltage (range)	10 - 36VDC *
Input Current (max.)	108A (recommended breaker rating 120ADC)
Protection	automatic reverse polarity

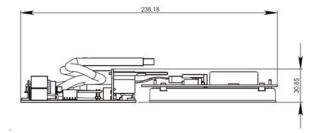
* 20% power de-rating between 10 and 11VDC input

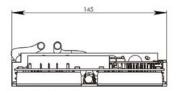
OUTPUT CHARACTERISTICS		
Voltage Setpoint	see model table	
Setting Tolerance	±2%	
Maximum Current	see model table	
Overcurrent Protection	electronic limiting	
Maximum Power	1000W continuous	
Efficiency	overall typically 86%	
Ripple	<2% pk-pk	

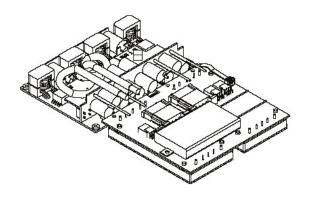
GENERAL & ENVIRONMENTAL		
Safety	CE marked to LVD2006/93/ EC, complies with EN60950-1	
Earthing	Baseplate to be grounded	
Isolation Voltage	2200VDC input/ground 2200VDC input/output 500VDC output/ground	
Construction	Conduction cooled via baseplate with operating temperature range of -25°C to +85°C.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

MECHANICAL OUTLINE









xistax-ds-rev4-0321.ir

Powerstax Europe

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Powerstax North America

12804 W. Santa Ynez Drive Sun City West Arizona 85375 USA Information and specifications contained in this data sheet are believed to be correct at the time of publication. However, Powerstax accept no responsibility for consequences arising from printing errors or inaccuracies. Specifications are subject to change without notice.