FEATURES

• PART OF THE PROVEN FLEXISTAX RANGE
• UP TO 1000W OF OUTPUT POWER
• WIDE INPUT RANGE 10 – 36VDC*
• 18.2ADC CURRENT CONTROLLED OUTPUT
• 55VDC MAXIMUM OUTPUT VOLTAGE
• HIGH SYSTEM EFFICIENCY – TYPICALLY 86%
• COMPREHENSIVE PROTECTION FEATURES, INCLUDING REVERSE INPUT PROTECTION
• LOW PROFILE 30.9MM
• OUTPUT CURRENT AND VOLTAGE MONITOR
• MODULE TEMPERATURE MONITOR
• OUTPUT ENABLE SIGNAL
• TWO YEAR WARRANTY

The Flexistax® FC1001 fuel cell power converter series uses the patented F501 series of brick converters driven from a 4 channel boost converter to allow the fuel cell voltage to be stepped up or down to that required by electronic equipment. Temperature, voltage and current control and monitoring, essential to the effective use of fuel cells, is provided via signals present on the interconnect PCB. The F501 brick converters provide the isolation, regulation and stability needed by modern, sophisticated electronics.

The Flexistax® FC1001 has a field proven pedigree of reliability with many thousands of derivative units having been supplied for mission critical applications.

The Flexistax® FC1001 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 offers solutions that include filter boards, industry standard MIL style connectors and integral cooling.

APPLICATIONS INCLUDE

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

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 55VDC being the highest efficiency of the range.

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® FC1001 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.
Powerstax FC1001-012-550

1000W with 10-36VDC* Input, Single 55VDC Output

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.

**MODEL DETAILS**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>OUTPUT VOLTAGE</th>
<th>OUTPUT CURRENT</th>
<th>OUTPUT POWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC1001-012-550</td>
<td>55.0V</td>
<td>18.2A</td>
<td>960W</td>
</tr>
</tbody>
</table>

**INPUT CHARACTERISTICS**

- 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**

- Current Adjustment: 0-5V = 0-15A
- Setting Tolerance: ±2%
- Maximum Voltage: 55V
- Overcurrent Protection: electronic limiting
- Maximum Power: 1000W continuous
- Efficiency: overall typically 86%
- Ripple: <2% pk-pk

**MONITORS & CONTROLS**

- Output Voltage: 0-5V = 0-55V
- Output Current (max.): 0-5V = 0-15A
- Maximum Voltage: 55V
- Baseplate Temperature (F501’s): Linear signal above 70 deg C
- Output Enable: Short circuit = run, Open circuit = stop

**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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