



POWERSTAX TVS1001 DC-DC **Ruggedized DC-DC Power supply 1000W**

Product Details

- ***Step-up and step-down DC-DC conversion***
- ***1000W of output power***
- ***Wide Input Range 11 - 36Vdc***
- ***12 - 48Vdc standard output voltages***
- ***High Efficiency - typically 86%***
- ***Sealed to provide protection against harsh environments***
- ***Reduced system heat dissipation***
- ***Comprehensive protection features***
- ***I²C temperature sensor***

The TVS1001 is a 1000W DC-DC power conversion module developed specifically for harsh environmental conditions.

In a highly efficient configuration, two of Powerstax's versatile F501 full brick DC-DC converters are coupled with a 2 phase boost converter to provide a standalone power solution.

High system efficiency provides a low level of heat dissipation allowing the unit to be forced air cooled with the cooling air separated from the electronics.

The TVS1001 is ideal for use in vehicle or remote applications. The unit's electronics are sealed to provide protection against adverse conditions.





POWERSTAX TVS1001 DC-DC

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Input characteristics

Supply voltage	11-36Vdc Suitable for MIL-STD-1275.
Supply current up to	108Adc for low range recommended breaker rating 120Adc.
Protection	Automatic input reverse polarity protection
Remote On/Off	

Output characteristics

Output voltage & current	12V (83A), 15V (67A), 24V (42A), 28V (34A), 48V (21A)
Setting tolerance	+/-2%
Overcurrent protection	Electronic limiting
Output power	1000W continuous
Efficiency	Typically 86%
Output ripple	Less than 2% p-p

Features

Remote On/Off	Unit draws less than 15mA in the OFF condition (up to 28V input)
Temperature monitor	Output from an I ² C temperature sensor (TC74A) is available.

Safety

The equipment is CE marked for compliance with the LVD 73/23/EEC. It complies with the requirements of EN60950.

Earthing	Chassis to be grounded
Voltage proof	Input to ground 2200Vdc Input to output/ground 2200Vdc Output to ground 500Vac

Environmental

Cooling	Forced cooled via integral fans with operating temperature range of -25°C to +60°C.
EMC	Designed to meet MIL-STD-461E tests CE102, RE101 & RE102
Bump & vibration	Designed to meet MIL-STD-810F Method 516.5 Procedure IV & Method 514.5 Procedure 1, Annex A, Category 20
Environment	Designed to meet MIL-STD-810F Method 506.4 Procedure 1 for rain & Method 510.4 Procedure II (blowing sand).

