



- Step-up DC-DC conversion
- 1000W of output power
- Wide Input Range 11 - 36Vdc
- 24, 28 & 48Vdc standard output voltages
- High Efficiency - typically 86%
- Sealed to provide protection against harsh environments
- Reduced system heat dissipation
- Comprehensive protection features
- I<sup>2</sup>C temperature sensor



LVD2006/95/EC

TVS1001 SERIES

### POWER SUPPLY DESIGN EXCELLENCE

The TVS1001 is a 1000W DC-DC power 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 4 channel 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.

STANDARD MODEL	OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT POWER	INPUT VOLTAGE
TVS1001-012-240	24V	38A	1000W	11-36VDC
TVS1001-012-280	28V	34A	1000W	11-36VDC
TVS1001-012-480	48-50V	20A	1000W	11-36VDC



### SPECIFICATIONS

INPUT	
Voltage Range	11-36VDC (Suitable for MIL-STD-1275)
Current	108A for low range, recommended breaker rating 120A
Protection	Automatic input reverse polarity protection
Remote ON/OFF	

OUTPUT	
Voltage	See model table
Current	see model table
Setting tolerance	±2%
Overcurrent protection	Electronic limiting
Output power	1000W max. continuous
Efficiency	Typically 86%
Output ripple	<2% p-p

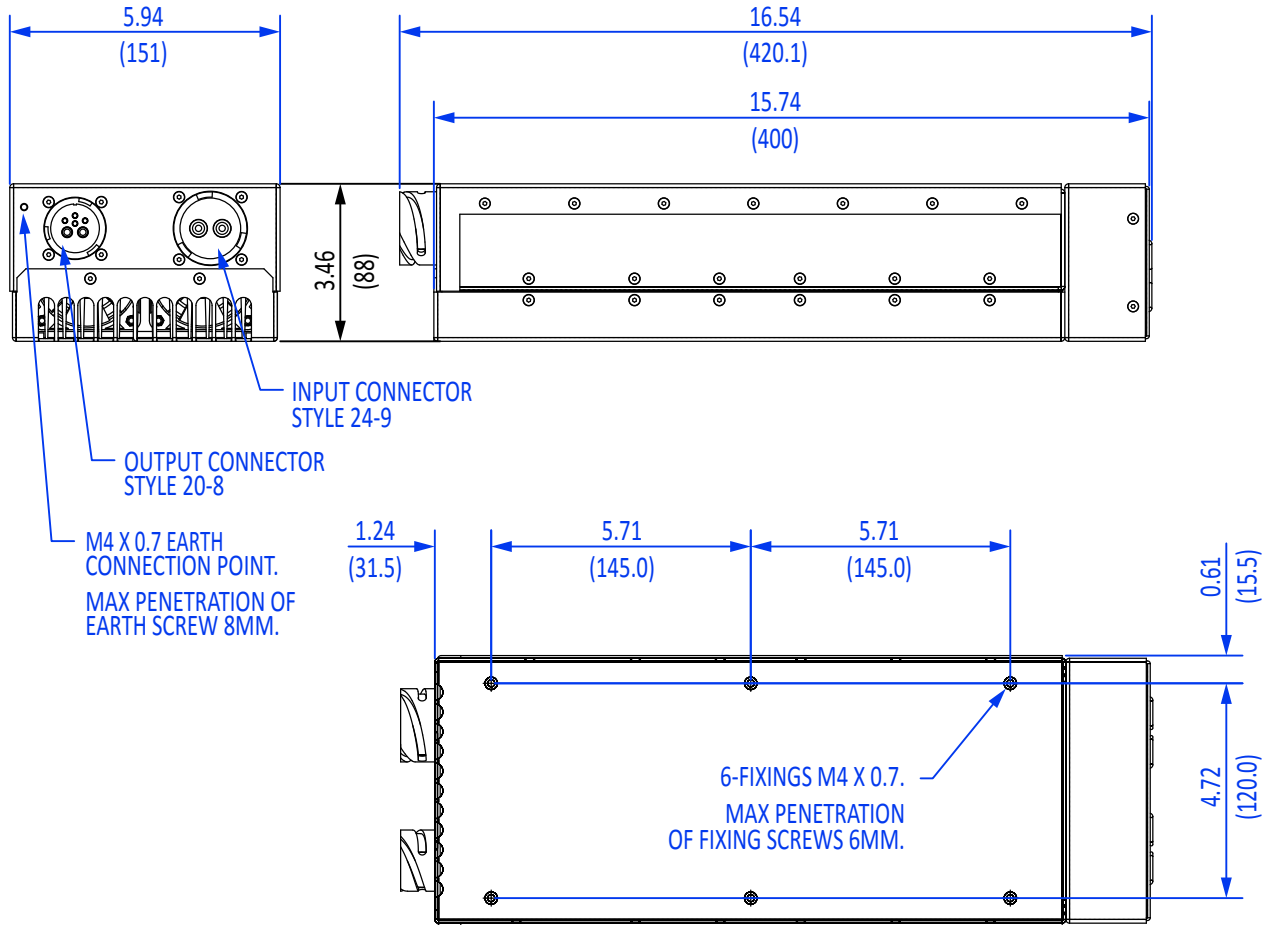
FEATURES	
Remote On/Off	Unit draws less than 15mA in the OFF condition (up to 28V input)
Temperature monitor	Output from an I <sup>2</sup> C temperature sensor (TC74A) is available

SAFETY	
Standards	Complies with EN60950
Earthing	Chassis to be grounded
Isolation	Input to ground - 2200VDC Input to output/ground - 2200VDC Output to ground - 500VDC

ENVIRONMENTAL	
Cooling	Force cooled via integral fans
Operating Temperature	-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)



### MECHANICALS



TVS1001 SERIES

### Powerstax Europe

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Wickford  
Essex  
SS11 8DL, UK

### Powerstax North America

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