

### PRODUCT OVERVIEW



The VTC1000R Rackmount Voltage Converters supply 12, 24 or 48VDC from a 130VDC battery or power source.

All new Current Mode switching design offers increased power and reliability in a compact package. Extra input and output filtering reduce EMI to extremely low levels. Reliability features include an input fuse, thermal shutdown, current limiting, reverse battery hookup protection and output short circuit shutdown with automatic recovery. The output voltage is easily adjusted 1.0 volts above or below the standard output voltage. Devices connected to the converter are protected by an output overvoltage crowbar circuit.

All rackmount units come standard with high quality digital output meters to allow monitoring of output current and output voltage.

### Available models

12V	24V	48V
1000W		

### Applications

- Electric Utilities and Substations
- Telecom Power Plants
- Manufacturing Plants
- Base Station Power (Radio & Telecommunications)
- Industrial Controls (OEM Applications)
- Solar / Alternative Power Systems

### TECHNICAL SPECIFICATIONS

INPUT	VTC1000R
Nominal	130 VDC
Actual (Vdc)	100-150
Input Amps (max)	14.5
Input Fuse (MDA)	20
Noise in Input	< 50 mV

OUTPUT			
Output Nominal	12 VDC	24 VDC	48 VDC
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	54.4 ± 0.05
Output Amps	60 cont. / 70 peak	40 cont. / 45 peak	20 cont. / 22.5 peak
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	63.9 ± 2.0V
Output Adjustment (Vdc)	± 1.0 Vdc		
Switching Frequency	60 ± 2.0 KHz		
Idle Power	< 10 Watts		
Output Ripple & Noise	< 50 mV		
Transient Response	< 2V for 50% Surge		
Regulation (Line & Load)	< +/- 0.5%		
Duty Cycle	Peak 20% for 10 min max Continuous 100% for 24 hours per day		
Efficiency	> 85% @ Maximum		

MECHANICAL	
Dimensions	19.0 in / 48.3 cm Long x 13.5 in / 34.3 cm Wide x 3.5 in.(2U) / 8.3 cm High
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	12.0 lb / 5.5 kg
Connections	Four contact output terminals

ENVIRONMENTAL AND SAFETY	
Operating Temp. Range	-25° to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C. (Optional -40°C extra wide temp. operation)
Humidity	0 - 95% relative humidity (non-condensing) with optional conformal coating
Audible Noise	None Ødb @ 3 ft (34.5 dB when fan operating)
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Input-Case & Input-Output 1500VDC Output-Case 500VDC (1500VDC @ 48V O/P)
Warranty	5 years
Safety	Designed to meet CSA 22.2.107.1 & UL458

### FEATURES

- Fully Isolated Design
- Adjustable output voltage
- Audible & visual indicators for constant current, low input voltage, low output voltage & over-temperature
- Over-temperature shutdown
- Short circuit protection
- Reverse input protection
- Ultra-quiet low EMI operation
- Dry contact output fail relay

### OPTIONS

- Ruggedization
- Wide-Temperature operation
- Battery Back-up option

### DIMENSIONS

