

PRODUCT OVERVIEW



VTC1050 DC/DC VOLTAGE CONVERTER

The VTC1050 series DC-source voltage converter operates from 100 to 400 VDC to deliver up to 1000 watts of precision power to supply your 12, 24, or 48 volt electrical systems.

Two positive and two negative output connections are provided for easy connection to multiple devices. The recently updated single board design incorporates power factor correction technology for unmatched efficiency. Multiple stages of filtering reduce radiated and conducted noise to MIL461 levels for ultra-quiet operation.

The unit's front panel features five LEDs to clearly indicate operating condition and alarm states. Other safety features include over temperature derating with shutdown, current limiting, output short circuit protection, input under voltage shutdown and output over voltage protection all with automatic recovery.

Available models

Input

100 to 400 VDC

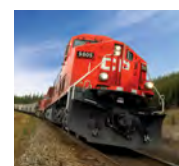
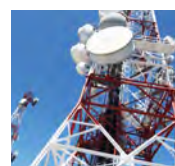
Output

12V

24V

48V

Applications



TECHNICAL SPECIFICATIONS

INPUT

Nominal Voltage	100 - 400 VDC
Maximum Current	15 Amps with Inrush Protection
Input Fuse	16 Amp, 400 VDC fuse

OUTPUT

Nominal Voltage	12 VDC	24 VDC	48 VDC
Actual Voltage	12.0-13.6 VDC	24.0-27.2 VDC	48.0-54.4 VDC
Output Adjustment	±1.0 V		
Continuous Amps	80 Amps	40 Amps	20 Amps
Peak Amps	88A	44A	22A
Efficiency	>90% Full Load		

MECHANICAL

Dimensions	17.4 in. / 44.2 cm Long x 8.35 in. / 21.2 cm Wide x 4.0 in. / 10.2 cm High
Clearance	1.0 in / 2.5 cm (all around)
Weight	18.0 lb / 8.2 kg
Material and Finish	Marine grade black anodized aluminum
Fasteners	18-8 stainless steel
Mounting	Horizontal or vertical mounting
Input Connection	AC Input: Type-D #12AWG Stranded Input Leads 30cm/1ft (Red: Positive, Black Negative)
Output Connection	DC Output: 2x sets of Phoenix VDFK Terminal Block (Red and Black)

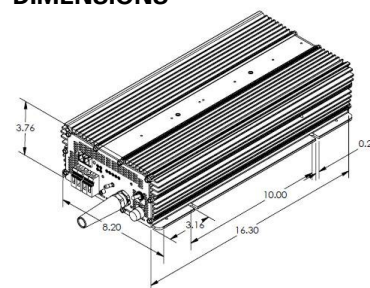
ENVIRONMENTAL AND SAFETY

Operating Temperature	-25°C+ to +40°C (-40°C to +55°C Optional)
Storage Temperature	-55°C to +105°C
Cooling	Two thermostatically-controlled cooling fans
Humidity	0 - 95% relative humidity (non-condensing) with standard conformal coating
Audible Noise	30 dB @ 3ft/1m
Emissions	Complies with FCC Class B, Part 15
Typical Service Life	> 10 years (87,600 hrs)
Isolation	Input to Chassis, Input to Output, Output to Chassis: 1500 VDC
Duty Cycle	Continuous: 24 hours per day, Peak: 1 minute per hour
Warranty	Five Years
Safety	Built to meet ABS, CE, UL458 and CSA 22.2.107.1

OPTIONS

- Ruggedized and wide temperature
- UL/CSA special inspection
- Waterproof - sealed to IP66

DIMENSIONS



Note: Specifications are subject to change without notice.