



(Also available with Optional Carrying Handle)

Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation

Applications

- Marine & other rugged environments
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- OEM Applications
- Field Work / Construction Sites
- Solar Power Systems
- Emergency Power Backup (UPS)
- Security Systems
- Power any 12, 24 or 48 Volt Electronic Equipment

Description

The VTC1503 Series of voltage converters provides 12, 24 or 48 Volts DC at 25 to 100 Amps of continuous power from a 110, 250, 300 or 360 Volt DC source

Analytic Systems' Voltage Converters use Switchmode technology with powerful IGBT switching transistors for reliability and efficiency with minimum size. Circuit innovations reduce output ripple to levels previously available only from bulky and inefficient linear power supplies. Reliability features include an input fuse, thermal shutdown, current limiting and output short circuit protection with automatic recovery. An Output Over voltage Crowbar circuit protects any powered devices from excessive voltage in the event of a failure of the unit.

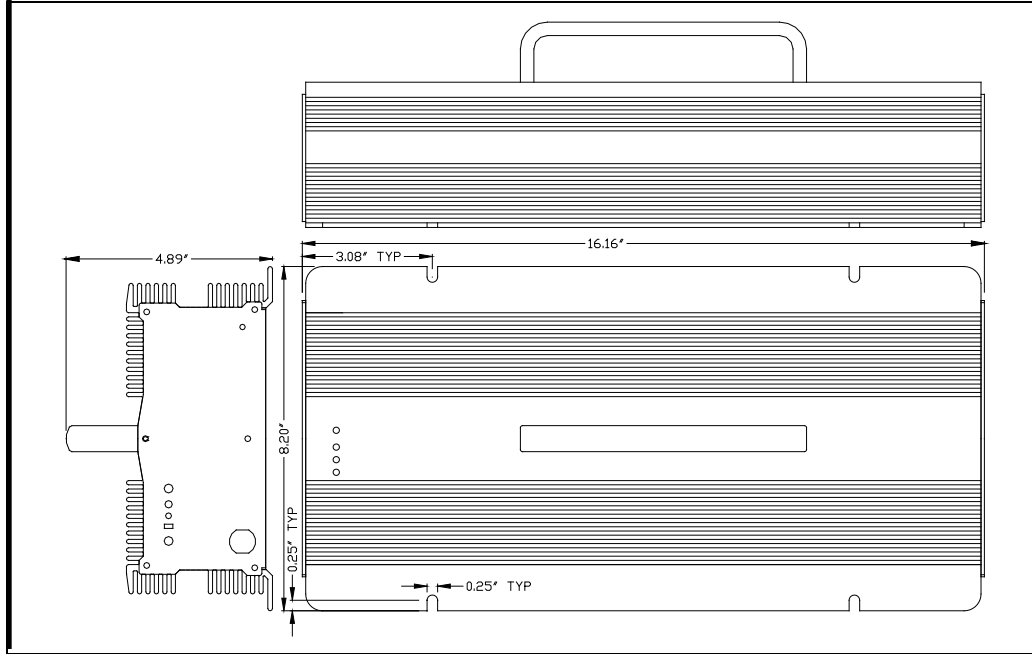
The newly updated single-board VTC1503 is ultra-quiet and features the latest generation of current mode PWM control. Extra features include audible and visual indicators for over temperature and output on.

Features

- Military-Grade extrusion ensures a high tolerance for shock and vibration
- Can be left permanently connected
- 3 Bank Load Splitter Available
- Over-temperature shutdown
- Short circuit protection
- Visual indicators for output voltage & over-temperature
- Output over-voltage crowbar
- Inrush Current Limiting with solid state bypass
- Thermostatically controlled fan
- 3 year parts and labour warranty

VTC1503 Series Voltage Converter

Mechanical Diagram



Specification

Electrical (Input)

Nominal Vdc (ip)	110	250	300	360
Actual (Vdc)	100-140	230-280	280-360	330-415
Input Amps (max)	21	9	7.5	6.5
Input Fuse (MDA)	25	15	10	8
Noise on Input	< 50 mV			

Environmental Specification

Operating Temp. Range	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C to +50°C extra wide temp. operation avail.)
Humidity	0 - 95°C 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

Electrical (Output)

Output Nominal (op)	12	24	32	48
Output Volts (VDC)	13.6 ± 0.05	27.2 ± 0.05	36.6 ± 0.05	54.4 ± 0.05
Output Amps	100A	50A	35.5A	25A
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	43.7 ± 1.3V	63.9 ± 2.0V
Output Ripple & Noise	< 50 mV			
Regulation (Line & Load)	< +/- 0.5%			
Duty Cycle	Continuous 100% for 24 hours per day			
Efficiency	> 80% @ Maximum Output			

Mechanical Specification

Length	17.0 in / 43.2 cm
Width	8.2 in / 20.8 cm
Height	3.5 in / 8.9 cm (without carrying handle)
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Black Anodized
Fastenings	All 18-8 Stainless Steel
Weight	14.4 lb / 6.6 kg
Connections	4ft #6awg input, blk/red #6awg output wires
Safety	Design to meet UL1012 & CSA 22.2
Warranty	3 years

Available From: