

PRODUCT OVERVIEW

Simple operation

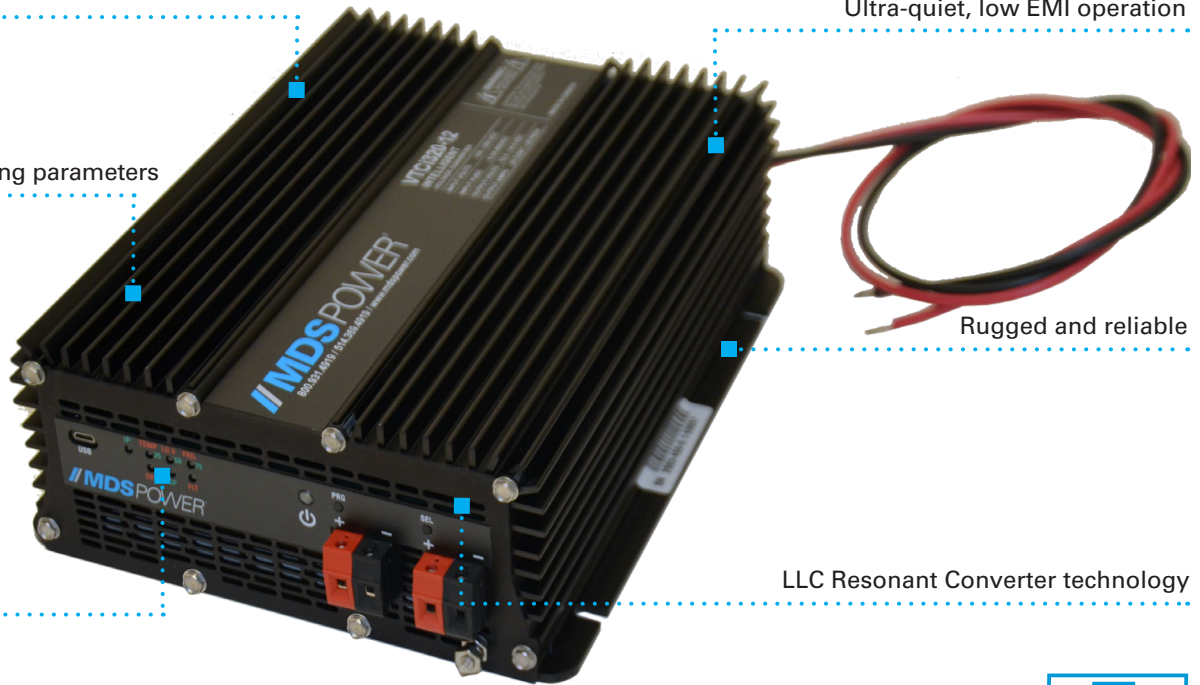
Ultra-quiet, low EMI operation

Programmable operating parameters

Rugged and reliable

Bright LED indicators

LLC Resonant Converter technology



VTCi320 INTELLIGENT VOLTAGE CONVERTER

The VTCi320 series Intelligent DC-source Voltage Converter operates from 100 to 350 VDC to deliver up to 300 watts of precision power to supply your 12, 24, or 48 volt electrical systems.

The unit's front panel features eight-dual color 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.

LLC Resonant Converter technology allows Zero Voltage/Zero Current switching on the primary or high voltage side of the main power transformer. Multiple stages of filtering ensures ultra quiet operation for minimum electromagnetic interference (EMI) near sensitive radio frequency communication equipment.

Available models

Input

100 to 350 VDC

Output

12V

24V

48V

Applications



TECHNICAL SPECIFICATIONS

INPUT			
Nominal Voltage	100 - 350 VDC		
Maximum Current	4 Amps with Inrush Protection (Specified at 85 VDC)		
Input Fuse	6.3 Amp-400 VDC fuse		
OUTPUT			
Nominal Voltage	12 VDC	24 VDC	48 VDC
Voltage Range	12.0-15.5 VDC	24.0-31.0 VDC	48.0-62.0 VDC
Continuous Amps	20 A	10 A	5 A
Peak Amps	25 A	12.5 A	6.25 A
Efficiency	90% @ Full Load		
MECHANICAL			
Length	10.7 in / 27.2 cm		
Width	8.0 in / 20.3 cm		
Height	3.2 in / 8.1 cm		
Clearance	1.0 in / 2.5 cm (all around)		
Weight	6.2 lb / 2.8 kg		
Material and Finish	Marine grade black anodized aluminum		
Fasteners	18-8 stainless steel		
Mounting	Horizontal or vertical mounting		
Input Connection	DC Input: Type-D #14AWG Stranded Input Leads (Red: Positive, Black Negative)		
Output Connection	DC Output: 2x Phoenix VDFK Terminal Block (Red: Positive, Black Negative)		
Other Connection	Data/Communication: MicroUSB port		
ENVIRONMENTAL AND SAFETY			
Operating Temperature	-25°C+ to +40°C (-40°C to +55°C Optional)		
Storage Temperature	-55°C to +105°C		
Cooling	Convection		
Humidity	0 - 95% relative humidity (non-condensing) with standard conformal coating		
Audible Noise	0 dB, None		
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		
Warranty	Five Years		
Safety	Built to meet ABS, CE, UL458 and CSA 22.2.107.1		

OPTIONS

- Special Safety Inspection: Inspected and certified to meet CSA C22.2 No.107.1 and UL 458
- COTS: Military ruggedization package with both MIL461F and MIL810G compliance testing with reports
- IP66/67: Sealed to meet IP66 or IP67 rating. IP67 comes with in-house compliance testing with certification

DIMENSIONS

