



ANALYTIC SYSTEMS

Power Conversion Solutions

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Benefits

- Ultra-Quiet
- Economical
- Rugged & Reliable

Applications

- Marine & other rugged environments
- Automotive / RV
- Solar / Alternative Power Systems
- Oil Patch
- Base Station Power
(Radio & Telecommunications)
- Industrial Controls
(OEM Applications)
- Field Work / Construction Sites
- Security Systems
- Most 12V Equipment

DC/DC Converters

VTC140/240 Series DC/DC Converters

Description

The VTC140 and VTC240 Voltage Converters are variable duty cycle switching power supplies incorporating state of the art switchmode technology for unmatched efficiency and ultra-quiet operation.

Multiple stages of filtering reduce radiated or conducted noise to very low levels. They can be run from a 24 VDC or 28 VDC battery system. Safety features include reverse input protection, current limiting, and output overvoltage crowbar.

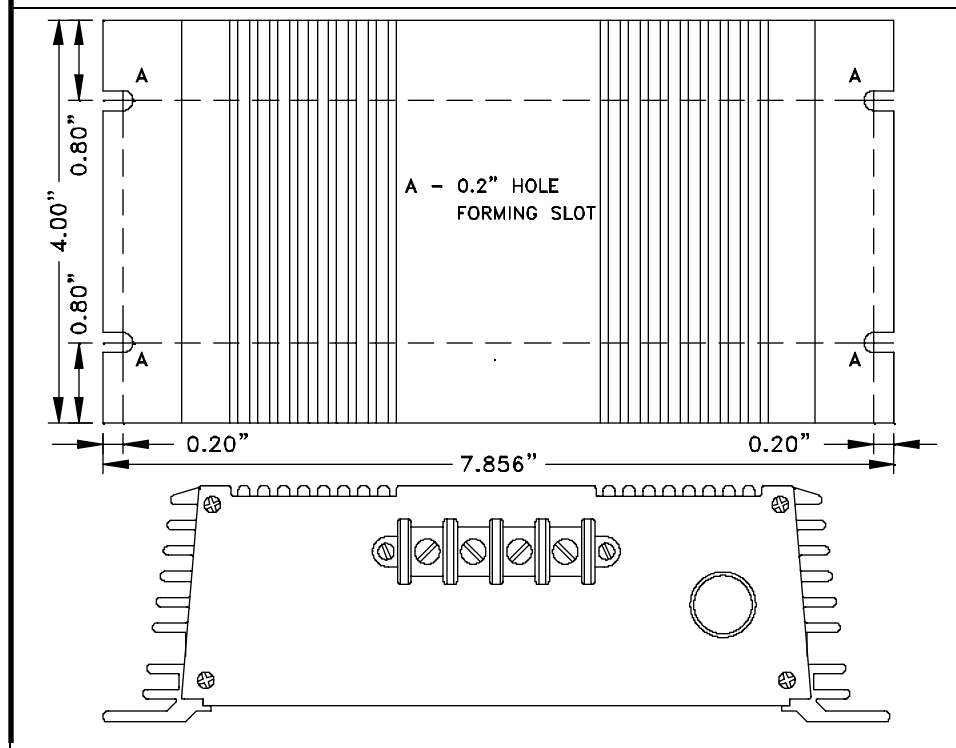
We are confident that you will get many years of reliable service from these Voltage Converters.

Features

- Input voltage range allows operation from 24 or 28 volt batteries
- Reverse input protection
- Rugged Design suited for Mobile Environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Short circuit protection
- Output over-voltage crowbar
- Run 12 volt electronics from 24 volt systems
CD or VHF Radios to 100 Watts, GPS receivers, Autopilots, Sound equipment, 12V lighting systems, etc.
- Easily Mounted
- 3 year parts and labour warranty

VTC140/240 Series DC/DC Voltage Converter

Mechanical Diagram



Specifications

Electrical (Input)

Model Number	VTC140-24-12	VTC240-24-12
Input Volts (DC)	20 – 35	20 – 35
Input Amps (max)	11.6	17.8
Input Fuse (AGC)	10	15
Noise on Input	< 10 mV	

Environmental Specifications

Operating Temp. Range	0° - 40°C @ maximum output Derate Linearly 2.5% per °C from 40°C
Humidity	0 - 95°C Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	NONE Ødb @ 3 ft
Isolation	Any Input or Output to Case 500 VDC Input to Output – Common Negative

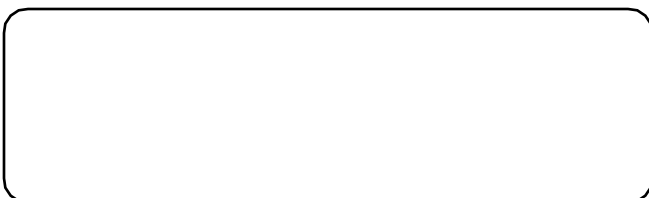
Electrical (Output)

Output Nominal (op)	12
Output Volts (DC)	13.6 ± 0.05
Output Amps	12 cont. / 15 peak 20 cont. / 23 peak
Output Adjustment	± 0.5
Output Crowbar	16.0 ± 0.5V
Output Ripple & Noise	< 10 mV
Transient Response	< 1V for 50% Surge
Regulation (Line & Load)	< +/- 0.5%
Duty Cycle	Peak 20% for 5 min maximum Continuous 100% for 24 hours per day
Efficiency	> 88% @ Maximum Output

Mechanical Specifications

Length	7.9 in / 20.1 cm
Width	4.0 in / 10.2 cm
Height	2.4 in / 6.1 cm
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	3.0 lb / 3.5 lb / 1.4 kg 1.6 kg
Connections	Four contact output terminals
Warranty	3 years

Available From:



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Quality since 1976

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