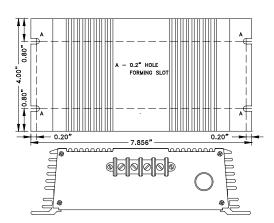


# DC/DC CONVERTER

# MODEL VTC140/240





## **Description**

The VTC140 and VTC240 Voltage Converters are variable duty cycle switching power supplies incorporating state of the art switch mode 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 over voltage crowbar.

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

#### **Benefits**

- Ultra-quiet
- Power sensitive electronics without interference
- Rugged and reliable to ensure years of safe and trouble free operation

## **Design 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

### **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

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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 (MDA)	12	20	
Noise on Input	< 10 mV		
Electrical (Output)			
Output Nominal (op)	12		
Output Volts (DC)	13.8 ± 0.1		
Output Amps	12 cont. / 15 peak	20 cont. / 23 peak	
Output Crowbar	16.5 ± 0.5V		
Output Ripple & Noise	< 10 mV	< 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		
Environmental Specification			
Operating Temp. Range	0° - 40°C @ maximum output Derate Linearly 2.5% per °C from 40°C		
Humidity	0 - 95% Relative Humidity (non-condensing) with optional standard conformal coating		
Audible Noise	NONE Ødb @ 3 ft		
Isolation	Any Input or Output to Case 500 VDC Input to Output — Common Negative		
Mechanical Specification			
Length	7.9 in / 20.1 cm		
Width	4.0 in / 10.2 cm	4.0 in / 10.2 cm	
Height	2.4 in / 6.1 cm		
Material	Marine Grade Aluminium		
Finish	Black Anodize / Black Powder Epoxy		
	All 18-8 Stainless Steel		
Fastenings	All 18-8 Stainless Steel		
Fastenings Weight	2 lb /0.9 kg	2.2 lb / 1 kg	
		2.2 lb / 1 kg	

Note: Specifications are subject to change without notice.



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