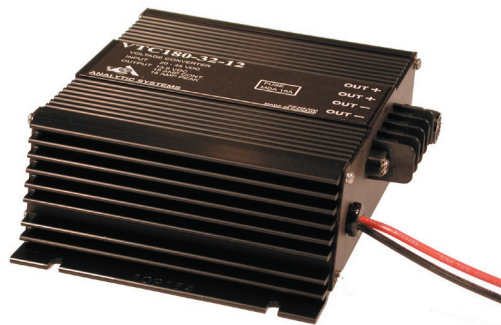


# BCD180 Series DC Battery Charger



A product of:



## Benefits

- Ultra-Quiet
- Convection cooled, no noisy fan
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Fast & Accurate Charging

## Applications

- Marine & other Rugged Environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV / Military
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Backup Power (UPS)
- Charge any 12 or 24V Battery System

# Battery Chargers

## BCD180 Series

### Description

The BCD180 battery charger provides up to 180 watts to charge a 12V or 24V battery system from a 24V, 32V, 48V or 72V source. The source and the batteries under charge must share a common ground.

The all-new single board design incorporates 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.

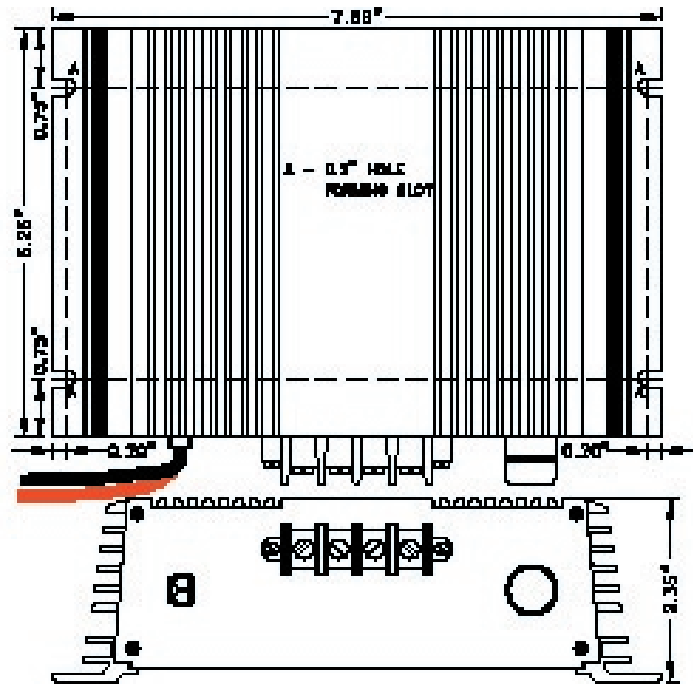
The charging profile charges the batteries at a constant current equal to the maximum continuous output of the unit. The unit can be left permanently connected without fear of overcharge or damage to the batteries.

Available options include a remote control and/or extra wide temperature. We are confident that you will get many years of reliable service from this Battery charger.

### Features

- Input voltage range allows operation from 24, 32, 48, or 72VDC power systems
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Inrush protection
- Current limiting protection
- Short circuit protection
- Reverse input protection
- Output over-voltage crowbar
- Remote control option
- Spark-free connection
- Wide temperature operation available
- Conformal Coating and/or Harsh Environment Ruggedization Available
- 2 years parts and labour warranty

## Mechanical Diagram



## Specifications ( Specifications Subject to Change Without Notice)

### Electrical (Input)

Input Volts (ip)	32	48	72
Actual (VDC)	◆ 20-45	40-65	65-100
Input Amps (max)	13.6	6.8	4.3
Input Fuse (MDA)	15	10	5
Noise on Input	< 10 mV		

◆ 30 - 45 Vdc input range for a 24Vdc output

### Environmental Specifications

<b>Operating Temp. Range</b>	-25° to +50°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide-temp. operation avail.)
<b>Humidity</b>	0 - 95% Relative Humidity (non-condensing) with optional conformal coating
<b>Audible Noise</b>	NONE Ødb @ 3 ft
<b>Typical Service Life</b>	> 10 yrs. (87,600 hrs)
<b>Isolation</b>	Input to Case 1500VDC (500VDC @ 32V Input) 500VDC Output to Case

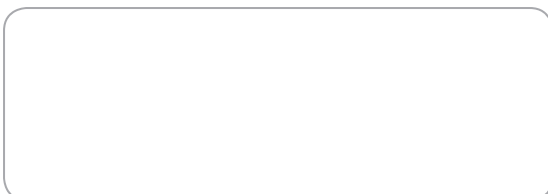
### Electrical (Output)

<b>Output Nominal (op)</b>	12	24
<b>Output Volts (DC)</b>	13.6 ± 0.05	27.2 ± 0.05
<b>Charging Amps</b>	15 cont / 18 peak	7.5 cont / 9.0 peak
<b>Output Crowbar</b>	16.0 ± 0.5V	32.0 ± 1.0V
<b>Output Ripple &amp; Noise</b>	< 10 mV	
<b>Transient Response</b>	< 1V for 50% Surge	
<b>Regulation (Line &amp; Load)</b>	< +/- 0.5%	
<b>Duty Cycle</b>	Peak 20% for 10 min maximum Continuous 100% for 24 hours per day	
<b>Efficiency</b>	> 90% @ Maximum Output	

### Mechanical Specifications

<b>Length</b>	20.1 cm
<b>Width</b>	15.2 cm
<b>Height</b>	6.1 cm
<b>Material</b>	Marine Grade Aluminium
<b>Finish</b>	Black Anodize / Powder Epoxy Coat
<b>Fastenings</b>	All 18-8 Stainless Steel
<b>Weight</b>	1.8 kg
<b>Connections</b>	#12 AWG Input Wires (Positive & Negative) Four contact output terminal
<b>Warranty</b>	2 years

Available from:



## RIPEnergy

The power conversion company

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