ANALYTIC SYSTEMS
Power Conversion Solutions

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DC Battery Chargers

BCD300 DC Battery Charger

Benefits

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

Description

The BCD300 battery charger provides up to 300 watts to charge a 12V or 24V battery system (1 or 2 banks) from a 24V, 32V or 36V 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-quite operation. Multiple stages of filtering reduce radiated or conducted noise to very low levels. The BCD300 Series is capable of charging up to two independent banks of batteries. The two stage charging profile charges the batteries at a constant current equal to the maximum continuous output of the unit. When the battery voltages come up to the float voltage that the unit is set to, the current into the batteries will taper off as necessary to maintain the batteries at the float voltage.

The unit can be left permanently connected without fear of overcharge or damage to the batteries. The adjustable float voltage feature allows the unit to be used for any type of lead-acid battery including lead acid and gel cell. 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.

Applications

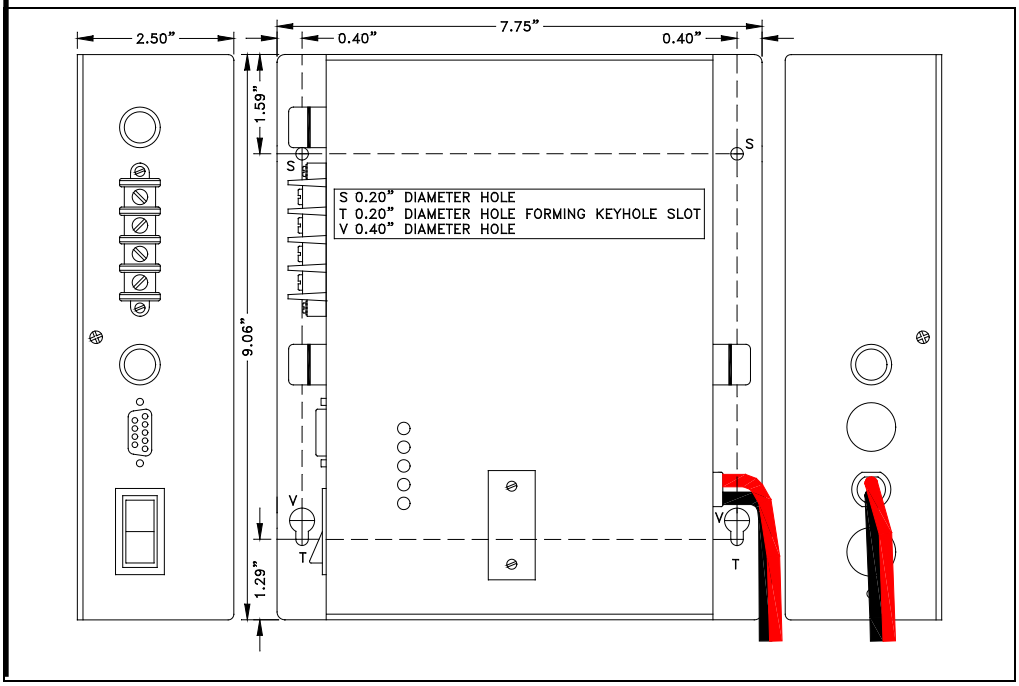
- Marine & other rugged environments
- Mobile Offices (TV and Radio Vans)
- Automotive / RV / Military
- Electric Utilities and Substations
- Base Station Power (Radio & Telecommunications)
- Industrial Controls
- Field Work / Construction Sites
- Solar / Alternative Power Systems
- Emergency Backup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

Features

- Adjustable output voltage for charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- Audible & visual indicators for constant current, low input voltage, low output voltage & over-temperature
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Current limiting protection
- Short circuit protection
- Reverse input protection
- Output over-voltage crowbar
- Dry contact output fail relay
- Over-temperature shutdown
- Spark-free connection
- Wide temperature operation available
- Can function as a DC/DC Voltage Converter
- Conformal coating and/or harsh environment ruggedization available
- Optional portable features for automotive use
- 3 year parts and labour warranty

BCD300 Series DC Battery Chargers

Mechanical Diagram



Specification

Electrical (Input)

Model Number	BCD300-32-12	BCD300-32-24
Input Volts (DC)	20 – 45	30 – 45
Input Amps (max)	20	22
Input Fuse (AGC)	25A	
Noise on Input	< 10 mV	
Low Input Voltage Alarm	10.5V	

Environmental Specification

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

Electrical (Output)

Output Nominal (op)	12	24
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05
Charging Amps	25	20
Output Adjustment (Vdc)	± 0.5V	
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V
Output Fuse (AGC)	30A x 2	25A x 2
Output Ripple & Noise	< 10 mV	
Battery Banks	1 or 2	
Stages	2	
Battery Size (Amp Hours)*	100-150	80-120
Regulation (Line & Load)	< +/- 0.5%	
Duty Cycle	Continuous 100% for 24 hours per day	
Efficiency	> 85% @ Maximum Output	

Mechanical Specification

Length	9.1 in / 23.1 cm
Width	7.8 in / 19.8 cm
Height	2.5 in / 6.4 cm
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	4.0 lb / 1.8 kg
Connections	#12 AWG Input Wires (Positive & Negative) Four contact output terminal
Warranty	3 years
Safety	Built to meet UL458 & CSA22.2.107.1

Available From:

ANALYTIC SYSTEMS
INNOVATIVE POWER CONVERSION SOLUTIONS
ISO 9001:2008 Certified Quality System