



300 Watts Charging Power

Two Stage Charging

Adjustable Float Voltage

Common Negative Design

Buck Topology



**3 YEAR WARRANTY**



## BCD300 DC SOURCE BATTERY CHARGER

The BCD300 battery charger outputs up to 300 watts to charge a 12V or 24V battery system (1 or 2 banks) from any higher voltage between 20 and 45 volts. The source and the batteries under charge must share a common ground. Multiple stages of filtering reduce radiated or conducted noise to very low levels.

The two stage charging profile charges the batteries at a constant current until the battery voltage reaches the float voltage that the unit is set to and then 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 models

#### Input

24, 28, 32 & 36V

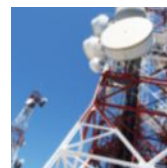
32 & 36V

#### Output

12V

24V

### Applications



# BCD300 | DC SOURCE BATTERY CHARGER

## INPUT

|                         |                         |                 |
|-------------------------|-------------------------|-----------------|
| Model Number            | BCD300-32-12            | BCD300-32-24    |
| Input Volts Nominal     | 24, 28, 32 and 36 Volts | 32 and 36 Volts |
| Input Volts Actual      | 20 - 45                 | 30 - 45         |
| Input Amps (max)        | 20                      | 22              |
| Input Fuse (AGC)        | 25A                     |                 |
| Noise on Input          | <10 mV                  |                 |
| Low Input Voltage Alarm | 10.5 V                  |                 |

## OUTPUT

|                          |                                      |              |
|--------------------------|--------------------------------------|--------------|
| Output Volts Nominal     | 12                                   | 24           |
| Output Volts Actual      | 13.6 ± 0.05                          | 27.2 ± 0.05  |
| Charging Current (amps)  | 25                                   | 20           |
| Output Adjustment        | ± 0.5 V                              | +/- 1.0 V    |
| Output Crowbar           | 16.0 ± 0.5 V                         | 32.0 ± 1.0 V |
| Output Fuse (AGC)        | 30 A x 2                             | 25 A x 2     |
| Output Ripple & Noise    | < 10 mV                              |              |
| Battery Banks            | 1 or 2                               |              |
| Charging 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

|                     |   |
|---------------------|---|
| Dimensions          | 9.1 in / 23.1 cm Long x 7.8 in / 19.8 cm Wide x 2.5 in / 6.4 cm High      |
| Clearance           | 1.0 in / 2.5 cm all around  |
| Weight              | 4.0 lb / 1.8 kg   |
| Material and Finish | Marine Grade Black Anodized Aluminum Chassis c/w 18-8 Stainless Fasteners |
| Mounting            | Wall or Shelf Mount   |
| Connections         | #12 AWG Input Wires (Positive & Negative). Four contact output terminal   |

## ENVIRONMENTAL AND SAFETY

|                             |  |
|-----------------------------|--|
| Operating Temperature Range | -25°C to +40°C @ maximum output. Derate Linearly 2.5% per °C from 40°C (Optional -40°C wide temperature range available) |
| Humidity                    | 0 - 95% Relative Humidity (non-condensing) with standard conformal coating   |
| Audible Noise               | NONE 0db @ 3ft   |
| Typical Service Life        | > 10 years (87,600 hrs)  |
| Isolation                   | Input – Output Common Negative, Input or Output – Case 500 VDC   |
| Warranty                    | Three years parts and labor  |

## OPTIONS

European ROHS compliant  
(Lead Free Manufactured)

Electric Fork Lift  
(Filtering and Surge Suppression)

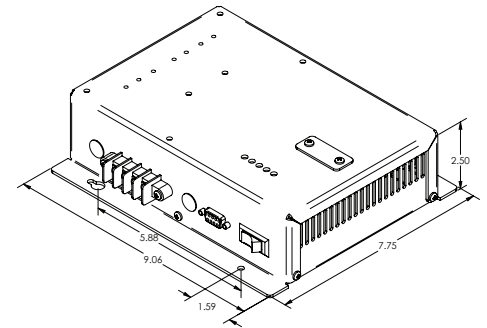
Open frame  
(No chassis, just heat sink bars)

Safety Special Inspection (CSA/UL)

Heavy duty ruggedization with wide temperature range

Custom input/output available

## DIMENSIONS



**ANALYTIC SYSTEMS**  
Power Conversion Solutions



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