



300 watts of charging power

Low EMI

110 and 220 VAC inputs

One, two or three bank charging

Adjustable float voltage

Manual equalization mode

Temperature compensation



Two or three stage charging profiles

**3 YEAR WARRANTY**



**BCA310 AC SOURCE BATTERY CHARGER**

The traditional BCA310 series chargers feature 300 watts of precision charging power for 1, 2 or 3 banks of batteries at 12, 24, 32, 36, 48 or 72(rail) volts DC. Models are available to operate from 110 or 220 volts AC at 50, 60 or 400 Hz.

All models feature user selectable 2-stage or 3-stage charging profiles, temperature compensation and user initiated equalization for optimum charging and maximum battery life.

**Certifications**



**Available models**

Input

110 VAC

220 VAC

Output

12V

24V

32V

48V

72V (rail)

**Applications**



# BCA310 | AC SOURCE BATTERY CHARGER

## INPUT

Input Volts Nominal	110 VAC	220 VAC
Input Volts Actual	90-130	180-260
Input Amps (max)	5.0	2.5
Input Fuse (MDA)	7A	4A
Input Frequency	45-65 Hz	
Noise on Input	< 100 mV	

## OUTPUT

Output Volts Nominal	12	24	32	48	72 (rail)
Output Volts Actual (DC)	13.6 ± 0.05	27.2 ± 0.05	36.3 ± 0.05	54.4 ± 0.05	72.6 ± 0.05
Absorption Voltage (Vdc)	14.4	28.8	38.4	57.6	76.8
Charging Amps	20	10	7.5	5	3.7
Absorption to Float (15%)	3.0 Amps	1.5 Amps	1.1 Amps	0.7 Amps	0.5 Amps
Output Adjustment	± 1.0 V	± 2.0 V	± 3.0 V	± 4.0 V	± 6.0 V
Output Fuses (AGC)	25 Amp x1	15 Amp x1	10 Amp x1	7 Amp x1	6 Amp x1
Battery Banks	1, 2 or 3 Banks				
Battery Size (Amp Hrs)	80 - 120	40 - 60	30 - 45	20 - 30	10 - 15
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	42.7 ± 1.3V	64.9 ± 2.0V	85.4 ± 4V
Output Ripple & Noise	< 100 mV				
Regulation (Line & Load)	< +/- 0.5%				
Temperature Comp.	-30 mV/°C	-60 mV/°C	-80 mV/°C	-120 mV/°C	-160 mV/°C
Duty Cycle	Continuous 100% for 24 hours per day				
Efficiency	> 75% @ Maximum Output				
Stages	2 or 3 (user selectable)				

## MECHANICAL

Dimensions	9.6 in / 24.4 cm Long x 8.2 in / 20.8 cm Wide x 3.5 in / 8.8 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	7 lb / 3.2 kg
Material and Finish	Marine Grade Black Anodized Aluminum
Mounting	Wall or Shelf Mount
Connections	Four contact output terminals

## 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-Case, Input-Output and Output-Case 1500 VDC
Warranty	Three Years Parts and Labor
Safety	Built to meet CSA 22.2.107.1 & UL458

## OPTIONS

COTS - MIL-STD-461F and MIL-STD-810G In-house test & report

MIL-STD-461F  
Stand alone test & report

MIL-STD-810G  
Stand alone test & report

European ROHS compliant  
(Lead Free Manufactured)

GMDSS - Digital Volt/Amp Meter & Remote control kit.

Military Rugged Package with MIL Connectors

Open frame  
(No chassis, just heat sink bars)

Portable  
(Carrying handle, rubber feet)

Safety Special Inspection (CSA/UL)

Integrated Digital Volt/Ammeter

IP66 or IP67 Water Resistant Chassis

Heavy duty ruggedization with wide temperature range

Custom input/output available



**ANALYTIC SYSTEMS**  
Power Conversion Solutions

AnalyticSystems.com  
 sales@analyticsystems.com  
 604.946.9981 800.668.3884

8128 River Way  
Delta BC V4G 1K5