

Adjustable float voltage

Temperature compensation

Manual equalization mode

Two or three stage charging profiles

Low EMI

One or two bank charging  
(three bank optional)



**3 YEAR WARRANTY**



**BCA1000 AC SOURCE BATTERY CHARGER**

The BCA1000 provides up to 1000 watts of precision charging power to up to two banks of batteries at 12, 24, 32, 36, 48 or 72(rail) volts DC from a 110 or 220 volts AC power source. The output voltage is easily adjusted 1.0 volts above or below the standard output voltage for standard or deep cycle lead-acid, VRLA or Gel cell type battery.

All models feature user selectable 2-stage or 3-stage charging profiles and temperature compensation for optimum charging. Additionally, user-initiated equalization and voltage temperature compensation greatly increases the lifetime of expensive battery systems.

Extra input and output filtering reduce EMI to extremely low levels and operation is monitored by a bright status indicator LED panel. Reliability features include an input fuse, thermal shutdown, current limiting, reverse battery hookup protection and output short circuit shutdown with automatic recovery.

Available models

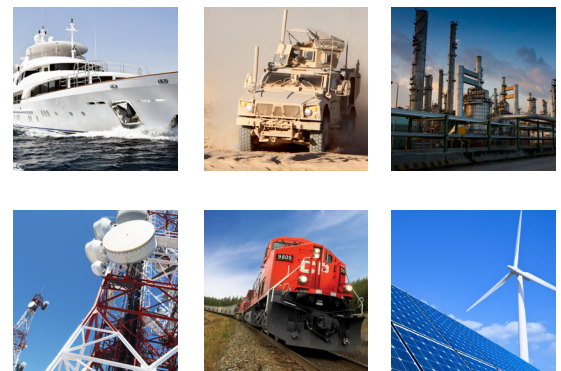
Input

110V	220V
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Output

12V	24V	32V	48V	72V (rail)
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Applications



# BCA1000 | AC SOURCE BATTERY CHARGER

## INPUT

Input Volts Nominal	110	220
Input Volts Actual	90-130	180-260
Input Amps (max)	13.2(12V)   17(24/32/48V)	6.6(12V)   8.5(24/32/48V)
Input Fuse (MDA)	20A(12V)   25A (24/32/48V)	10A(12V)   15A(24/32/48V)
Input Frequency	45-65 Hz	
Noise on Input	< 50 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	60	40	30	20	15
Absorption to Float (15%)	9.0 Amps	6.0 Amps	4.5 Amps	3.0 Amps	2.2 Amps
Output Adjustment	± 1.0 V	± 2.0 V	± 3.0 V	± 4.0 V	± 6.0 V
Output Fuses (ATC)	40 Amp x2	40 Amp x2	40 Amp x2	25 Amp x2	15 Amp x2
Battery Banks	1 or 2 (3 bank option available)				
Battery Size (Amp Hrs)	240 - 360	160 - 240	120 - 180	80 - 120	60 - 90
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	42.7 ± 1.3V	63.9 ± 2.0V	85.4 ± 4.0V
Output Ripple & Noise	< 50 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	14.5 in / 36.8 cm Long x 9.9 in / 25.1 cm Wide x 5.0 in / 12.7 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	12 lb / 5.5 kg
Material and Finish	Marine Grade Black Anodized Aluminum with 18-8 Stainless Fasteners
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	Certified to CSA C22.2 No.107.1 and UL 1012

## OPTIONS

European ROHS compliant  
(Lead Free Manufactured)

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

Open frame  
(No chassis, just heat sink bars)

19" or 23" Rackmount Chassis  
c/w Digital Volt/Ammeter

3 Bank charging output

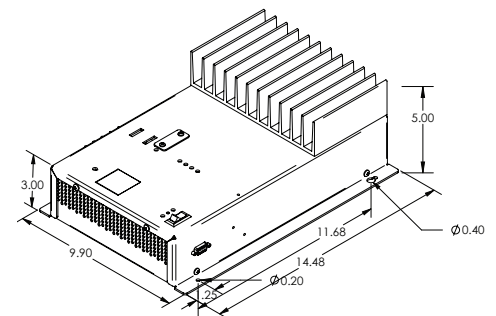
Safety Special Inspection (CSA/UL)

Integrated Digital Volt/Ammeter

Heavy duty ruggedization with wide  
temperature range

Custom input/output available

## DIMENSIONS



**ANALYTIC SYSTEMS**  
Power Conversion Solutions