



Two or three stage charging profiles

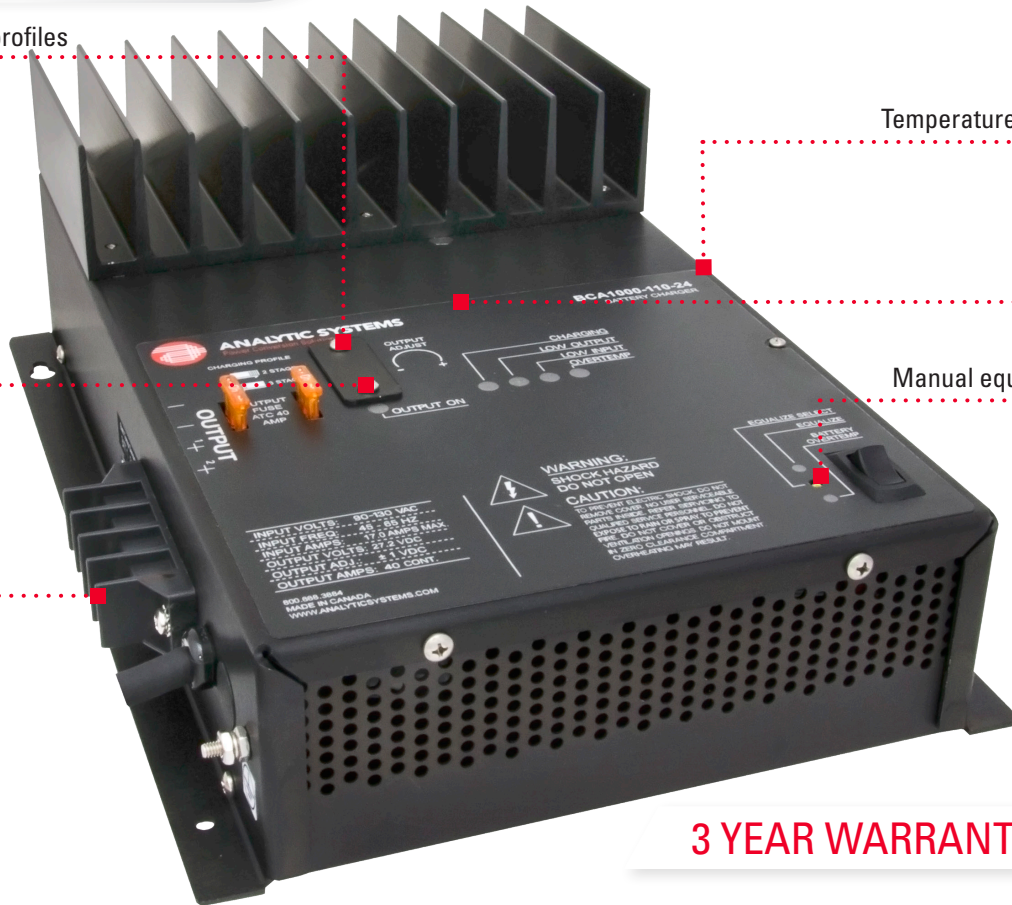
Temperature compensation

Low EMI

Adjustable float voltage

Manual equalization mode

One or two bank charging  
(three bank optional)



**3 YEAR WARRANTY**



**BCA1000 AC SOURCE BATTERY CHARGER**

The traditional BCA1000 series chargers feature 1000 watts of precision charging power for 1 or 2 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.

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)	20	10
Input Fuse (MDA)	20 A (12 V) 25A all others	10A (12 V) 15A all others
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	Built to meet CSA 22.2.107.1 & UL458

## 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

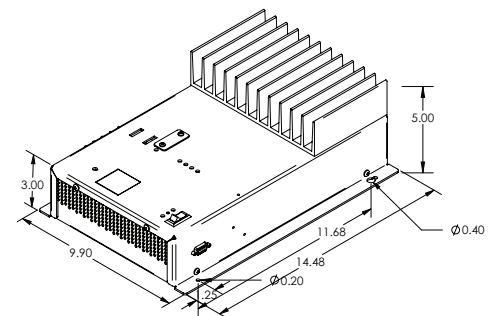
Safety Special Inspection (CSA/UL)

Integrated Digital Volt/Ammeter

Heavy duty ruggedization with wide  
temperature range

Custom input/output available

## DIMENSIONS



**ANALYTIC SYSTEMS**  
Power Conversion Solutions



AnalyticSystems.com



@ sales@analyticsystems.com



604.946.9981 800.668.3884



8128 River Way  
Delta BC V4G 1K5