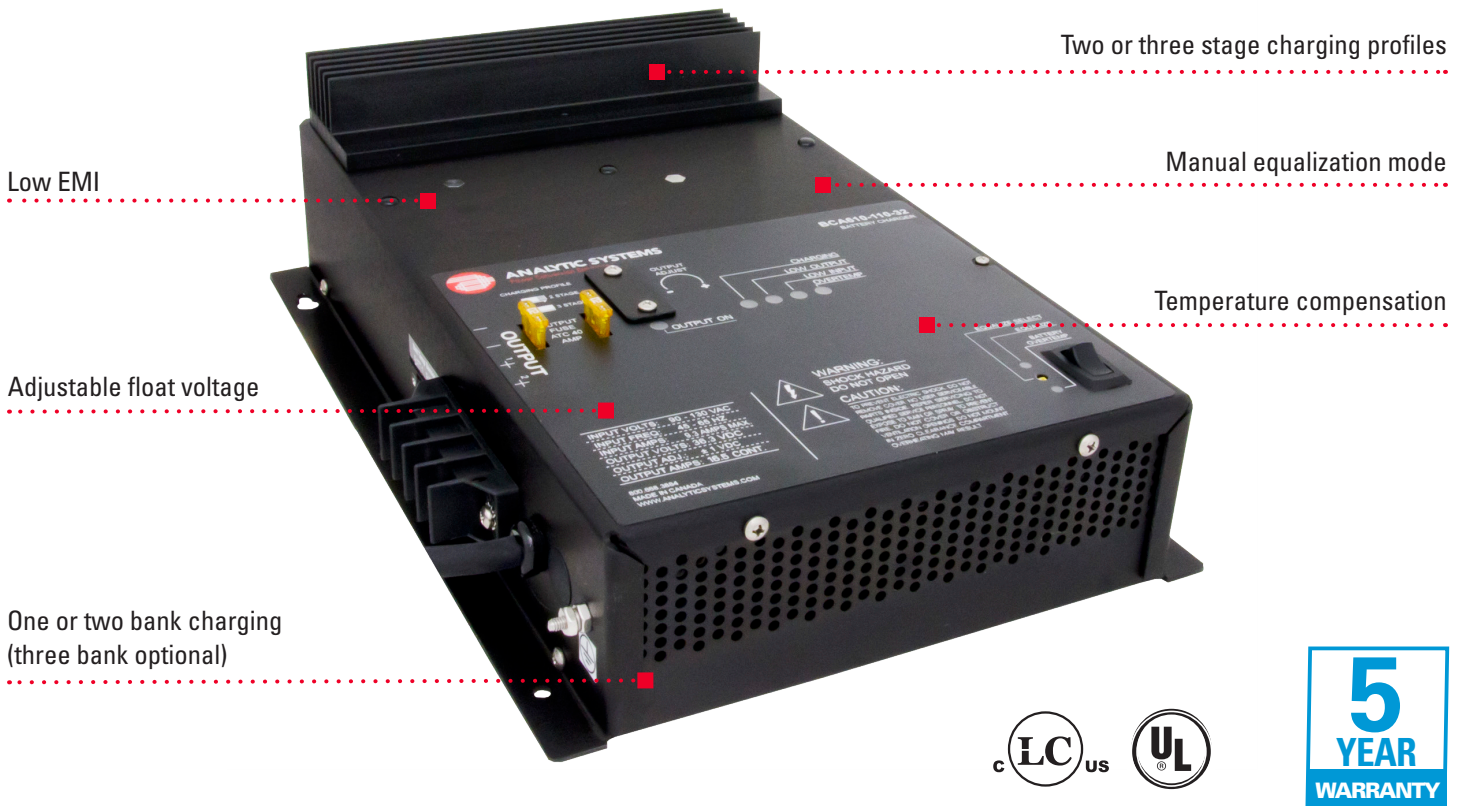


## PRODUCT OVERVIEW



Low EMI

Two or three stage charging profiles

Manual equalization mode

Adjustable float voltage

Temperature compensation

One or two bank charging  
(three bank optional)



## BCA610 AC SOURCE BATTERY CHARGER

The BCA610 provides up to 600 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

110 VAC

220 VAC

Output

12V

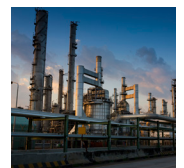
24V

32V

48V

72V (rail)

### Applications



## INPUT

Input Volts Nominal	110	220
Input Volts Actual	90-130	180-260
Input Amps (max)	10.0	5.0
Input Fuse (MDA)	12A	6A
Input Frequency	45-65 Hz	
Noise on Input	< 50 mV	

## OUTPUT

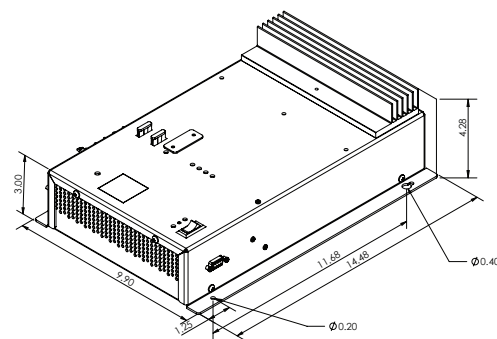
Output Volts Nominal	12	24	32	48	72(rail)
Output Volts Actual (DC)	13.6 ± 0.05	27.2 ± 0.05	36.3 ± 0.05	54.4 ± 0.05	72.6 ± 0.05
Absorption Voltage (Vdc)	14.4	28.8	38.4	57.6	76.8
Charging Amps	40	20	15	10	7.5
Absorption to Float (15%)	6.0 Amps	3.0 Amps	2.3 Amps	1.5 Amps	1.1 Amps
Output Adjustment	± 1.0 V	± 2.0 V	± 3.0 V	± 4.0 V	± 6.0 V
Output Fuses (ATC)	40 Amp x2	30 Amp x2	20 Amp x2	15 Amp x2	15 Amp x2
Battery Banks	1 or 2				
Battery Size (Amp Hrs)	160 - 240	80 - 120	60 - 90	40 - 60	30 - 45
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	42.7 ± 1.3V	63.9 ± 2.0V	85.4 ± 2.0V
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)				

## OPTIONS

Heavy duty ruggedization with wide temperature range

Integrated Digital Volt/Ammeter

## DIMENSIONS



## MECHANICAL

Dimensions	14.5 in / 36.8 cm Long x 9.9 in / 25.1 cm Wide x 4.4 in / 11 cm High
Clearance	1.0 in / 2.5 cm all around
Weight	7.2 lb / 3.3 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	Five Years
Safety	Certified to CSA C22.2 No.107.1 and UL 1012