



ANALYTIC SYSTEMS

Power Conversion Solutions

#207 12448 82nd Ave.
Surrey, BC V3W 3E9 CANADA

+1 (604) 543-7378 • phone
1-800-668-3884 • toll free
+1 (604) 543-7354 • fax

www.analyticsystems.com

DC Battery Chargers

BCD615R Isolated Battery Charger



Benefits

- Ultra-Quiet
- Power sensitive electronics without interference
- Rugged & Reliable
- Ensure years of safe and trouble free operation
- Fast & Accurate Charging

Applications

- Telecom Power Plants
- Electric Utilities and Substations
- Marine & other Rugged Environments
- Manufacturing Plants
- Steel Mills
- Military Applications (COTS)
- Industrial Controls
- OEM Applications
- Solar / Alternative Power Systems
- Fuel Cells
- Charge any DC/DC System

Description

The model BCD615R Rackmount DC Battery Charger charges either 12V, 24V or 48V batteries from a 24V or 48V power source. Other battery voltages up to 56 volts are also available by special order.

The all-new Current Mode switching design offers increased power and reliability in a compact package. The low ripple charging profile and standard equalize cycle greatly increases the lifetime of expensive battery systems. Extra input and output filtering reduce EMI to extremely low levels. Reliability features include an input fuse, thermal shutdown, current limiting, reverse battery hookup protection and output short circuit shutdown with automatic recovery.

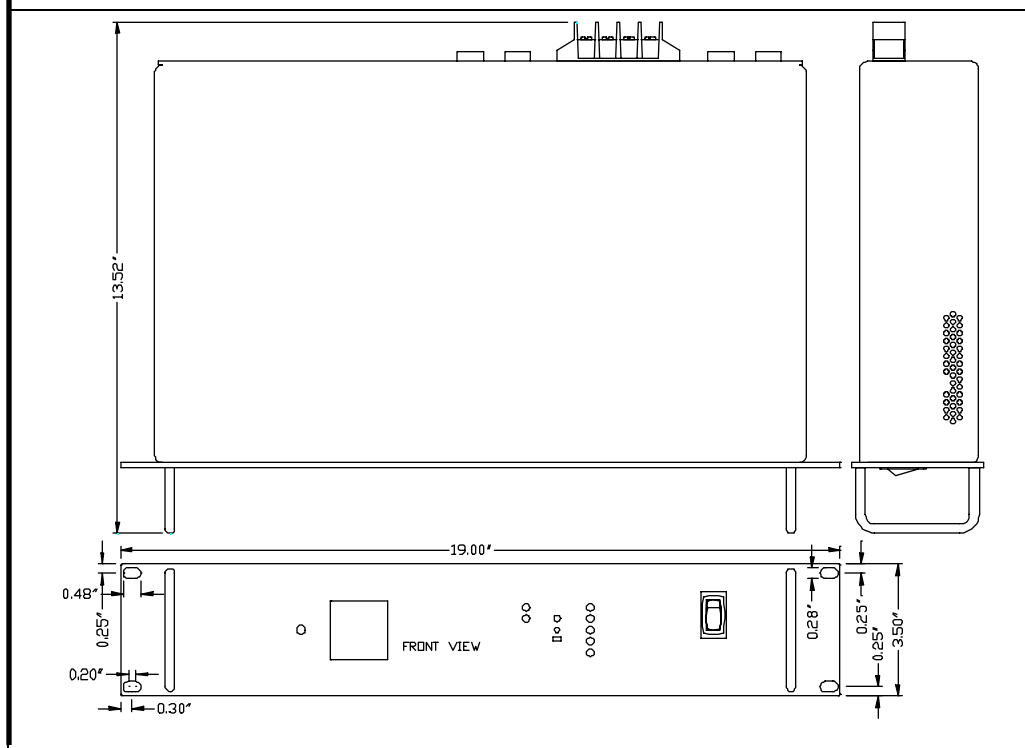
The output voltage is easily adjusted 0.5 volts above or below the standard output voltage to accommodate special charging requirements. A high quality Digital Volt/Ammeter allows the monitoring of charging current and charging voltage. We are confident that you will get many years of reliable service from this DC Battery Charger.

Features

- Fully Isolated Design
- Adjustable output voltage for charging standard or deep cycle lead-acid, VRLA or Gel cell type battery
- Transient Voltage Suppressor
- Extremely rugged and well suited for marine and other demanding environments
- High tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Can be left permanently connected
- Spark free connection
- User selectable 2 or 3 stage charging profile
- Audible & visual indicators for output overload, low input voltage, low output voltage & over-temperature
- Over-temperature shutdown
- Short circuit protection
- Output over-voltage crowbar
- Inrush Current Limiting with solid state bypass
- Dry contact output fail relay
- 3 year parts and labour warranty

BCD615R Series DC Battery Charger

Mechanical Diagram



Specifications

Electrical (Input)

Nominal (ip)	24	48
Actual (Vac)	20-35	40-60
Input Amps (max)	36	18
Input Fuse (ATC)	20 x 2	20
Noise on Input	< 50 mV	

Environmental Specifications

Operating Temp. Range	-25° to +40°C @ maximum output Derate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide-temp. operation avail.)
Humidity	0 - 95°C Relative Humidity (non-condensing) with optional conformal coating
Audible Noise	NONE Ødb @ 3 ft (34.5 dB when fan operating)
Typical Service Life	> 10 yrs. (87,600 hrs)
Isolation	Input-Case & Input-Output 1500VDC Output-Case 500VDC

Electrical (Output)

Output Nominal (op)	12	24	48
Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	54.4 ± 0.05
Absorption Voltage (Vdc)	14.4	28.8	57.6
Charging Amps	40	20	10
Absorption to Float	6	3	1.5
Output Adjustment (Vdc)	± 0.5V		
Output Fuses (ATC)	40 x 2	25 x 2	15 x 2
Battery Banks	1 or 2 (3 Bank Option Available)		
Battery Size (Amp Hrs.)	160 - 240	80 - 120	40 - 60
Output Crowbar	16.0 ± 0.5V	32.0 ± 1.0V	63.9 ± 2.0V
Output Ripple & Noise	< 50 mV		
Regulation (Line & Load)	< +/- 0.5%		
Temperature Comp.	-30 mV/°C	-60 mV/°C	-120 mV/°C
Duty Cycle	Continuous 100% for 24 hours per day		
Efficiency	> 80% @ Maximum Output		
Stages	2 or 3 (user selectable)		

Mechanical Specifications

Depth	13.5 in
Width	19"
Height	2u (3.5 in.)
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Black Anodize / Powder Epoxy Coat
Fastenings	All 18-8 Stainless Steel
Weight	7.6 lb / 3.3 kg
Connections	Four contact output terminals
Warranty	3 years
Safety	UL458 & CSA 22.2.107.1 Pending

Available From:



ANALYTIC SYSTEMS
Quality since 1976

#207 12448 82nd Ave.
Surrey, BC V3W 3E9 CANADA
+1 (604) 543-7378 • phone
1-800-668-3884 • toll free
+1-604-543-7354 • fax
www.analyticsystems.com

© 2002 Analytic Systems Ware Ltd. (1993)
Specifications Subject to Change Without Notice