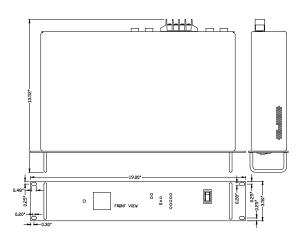


ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER MODEL BCD1000R ISOLATED BATTERY CHARGER





Description

The model BCD1000R Rackmount DC Battery Charger charges either 12V, 24V or 48V batteries from a 110, 220 or 300VDC power source. Other battery voltages up to 72 volts are also available by special order.

The all-new Current Mode switching design offers increased power and reliability in a compact package. 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, output short circuit shutdown with automatic recovery and an equalize charge mode. The output voltage is easily adjusted 1.0 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.

Benefits

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

Design 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

Applications

- Telecom Power Plants
- Electric Utilities and Substations
- Marine & other rugged environments
- Base Station Power
- Industrial Controls(OEM Applications)
- Solar / Alternative Power Systems
- Emergency Power Backup (UPS)
- Security Systems
- Charge any 12, 24, 32, or 48 Volt System

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DC **MODEL BCD1000R ISOLATED BATTERY CHARGER BATTERY CHARGER**

Electrical (Input)	
Nominal (ip)	110 250 300
Actual (Vac)	100-140 230-280 280-360
Input Amps (max)	14.8 6.5 5.3
Input Fuse (MDA)	15 7 6
Noise on Input	< 50mV
Electrical (Output)	
Output Nominal (op)	12 24 32 48
Output Volts (DC)	13.6 \pm 0.05 27.2 \pm 0.05 36.3 \pm 0.05 54.4 \pm 0.05
Absorption Voltage (Vdc)	14.4 28.8 38.4 57.6
Charging Amps	60 40 30 20
Absorption to Float	9 Amps 6 Amps 4.5 Amps 3 Amps
Output Adjustment (Vdc)	± 1.0V
Output Fuses (AGC)	4 x AGC-30 4 x AGC-20 4 x AGC-20 4 x AGC-25
Battery Banks	1 or 2
Battery Size (Amp Hrs.)	240-360 160-240 120-180 80-120
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 Compensation Coefficient.	-30 mV/°C -60 mV/°C -80 mV/°C -120 mV/°C
Duty Cycle	Continuous 100% for 24 hours per day
Efficiency	> 75% @ Maximum Output
Stages	2 or 3 (user selectable)
Environment Specification	
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% 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 (1500V @ 48V Output)
Mechanical Specification	
Depth	14 in/ 35.6 cm
Width	19.0 in/ 48.3 cm
Height	3.5 in/ 8.9 cm
Clearance	1 inch (2.5 cm) all around
Material	Marine Grade Aluminium
Finish	Black Anodized
Fastenings	All 18-8 Stainless Steel
Weight	12.2 lb / 5.5 kg
Connections	Four contact output terminals
Warranty	3 years
Safety	Designed to meet CSA 22.2.107.1 & UL458

Note: Specifications are subject to change without notice.



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