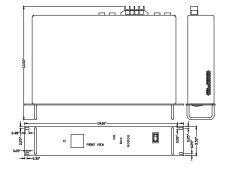


# DC ISOLATED BATTERY CHARGER MODEL BCD615R





### **Description**

The model BCD615R Rackmount DC Battery Charger charges either 12V, 24V or 48V batteries from a 24V, 48V or 72 VDC 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 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 leadacid, 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
- Dry contact output fail relay
- Inrush Current Limiting with solid state bypass
- 3 year parts and labour warranty

## **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

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# DC ISOLATED BATTERY CHARGER

### MODEL BCD615R

| ATTEM ONANGEM DODOTOM     |   |
|---------------------------|---|
| Electrical (Input)        |   |
| Nominal (ip)              | 24 48 72  |
| Actual (Vdc)              | 20-35 40-60 65-90   |
| Input Amps (max)          | 37.9 19.4 12.1  |
| Input Fuse (ATC)          | 15 x 3 25 x 1 25 x 1  |
| Noise on Input            | < 50mV  |
| Electrical (Output)       |   |
| Output Nominal (op)       | 12 24 48  |
| Output Volts (DC)         | $13.6 \pm 0.05$ $27.2 \pm 0.05$ $54.4 \pm 0.05$   |
| Absorption Voltage (Vdc)  | 14.4 28.8 57.6  |
| Charging Amps             | 40 20 10  |
| Absorption to Float       | 6 3 1.5   |
| Output Adjustment (Vdc)   | ± 1.0V  |
| Output Fuses (ATC)        | 40 x 2 30 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                | > 75% @ Maximum Output  |
| Stages                    | 2 or 3 (user selectable)  |
| Environment Specification |   |
| Operating Temp. Range     | -25° to +40°C @ maximum output<br>Derate Linearly 2.5% per °C from 40°C<br>(Optional -40°C extra wide temp. operation avail.) |
| Humidity                  | 0 - 95% Relative Humidity<br>(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 (500V @ 24V I/P) Output-Case 500VDC (1500VDC @ 48V O/P)                                     |
| Mechanical Specification  |   |
| Depth                     | 13.5 in/ 34.3 cm  |
| Width                     | 19.0 in/ 48.3 cm  |
| Height                    | 2u(3.5 in)/ 8.9 cm  |
| Clearance                 | 1 inch (2.5 cm) all around  |
| Material                  | Marine Grade Aluminium  |
| Finish                    | Black Anodize / Powder Epoxy Coat   |
| Fastenings                | All 18-8 Stainless Steel  |
| i asteriniys              |   |
| Weight                    | 7.6 lb / 3.3 kg   |
| -                         | 7.6 lb / 3.3 kg Four contact output terminals   |
| Weight                    |   |

Note: Specifications are subject to change without notice.



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