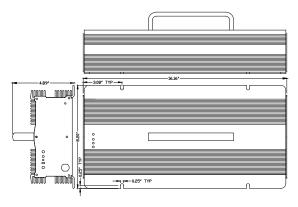


ANALYTIC SYSTEMS

Power Conversion Solutions

DC BATTERY CHARGER MODEL BCD1505 SERIES





Description

The BCD1505 battery charger provides up to 1350 watts to charge 12, 24, 32 or 48 Volt battery systems from a 110, 250, 300 or 360 Volt DC source. The batteries must share a common ground.

This all-new single board design incorporates state of the art switchmode technology for unmatched efficiency and ultra-quiet operation. Multiple stages of filtering reduce radiated or conducted noise to very low levels. Extra features include audible and visual indicators for low input voltage, low output voltage and over-temperature.

Safety features include both charger and battery over-temperature shutdown, current limiting, short circuit protection with automatic recovery, input under voltage shutdown and output over-voltage crowbar.

Optional features include a 3-Bank Load Splitter. 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

- Ideal as a Trade Show Power Supply for Auto Shows
- Military-Grade extrusion ensures a high tolerance for shock and vibration
- Ultra-quiet low EMI operation
- Can be left permanently connected
- Can function as a power supply
- Dry contact output fail relay
- 2 stage charging profile
- Over-temperature shutdown
- 3 Bank Load Splitter Available
- Audible & visual indicators for low output voltage & over-temperature
- Short circuit protection
- Output over-voltage crowbar
- Inrush Current Limiting with solid state bypass
- Thermostatically controlled fan
- 3 year parts and labour warranty

Applications

- Marine & other rugged environments
- Automotive / RV
- Electric Utilities and Substations
- Base Station Power(Radio & Telecommunications)
- OEM Applications
- Field Work / Construction Sites
- Solar Power Systems
- Emergency Power Backup (UPS)
- Security Systems
- Charge any 12, 24, 32 or 48 Volt Battery System

An ISO9001 and AS9100 Registered Company Battery Chargers • Inverters • Power Supplies • Voltage Converters

DC BATTERY CHARGER

MODEL BCD1505 SERIES

Nominal OC (µ) 110 230 200 380 Actual (Vac) 100 2 280 280 330 415 Input Aruse (max) 2 15 10 8 7.5 6 5 Input Fase (MDA) 25 15 10 8 7.5 6 5 Input Fase (MDA) 25 15 10 8 7.5 6 5 Datpat Mole (DD) 12 24 32 45 5	Electrical (Input)					
Input Amps (max) 21 9 7.5 6.5 Input Ray (MDA) 25 15 10 8 Noise on Input <50mV	Nominal DC (ip)	110	250	300	360	
Input Fuse (NDA) 25 15 10 8 Noise on Input < 50mV	Actual (Vac)	100-140	230-280	280-360	330-415	
Noise on Input < 80m/	Input Amps (max)	21	9	7.5	6.5	
Efectrical (Output) 12 24 32 48 Output Nominal (op) 13.6 ± 0.05 57.4 ± 0.05 56.5 ± 0.05 56.5 ± 0.05	Input Fuse (MDA)	25	15	10	8	
Druput Nominal (ep) 12 24 32 48 Dutput Volts (DC) 13.6 ± 0.05 56.4 ± 0.05 56.4 ± 0.05 Charging Amps 100.A 50.A 35.5 Å 25.A Output Fusses (ATC) 40.X 3 40.X 2 40.X 1 40.X 1 Battery Banks 1 (3 Bank Load Splitter Available) 0.04.1 40.X 1 40.X 1 Battery Banks 1 (3 Bank Load Splitter Available) 0.04.1 40.X 1 40.X 1 Battery Banks 1 (3 Bank Load Splitter Available) 0.04.1 40.X 1 40.X 1 Battery Banks 1 (3 Bank Load Splitter Available) 0.04.1 40.X 1 40.X 1 Battery Size (Amp Hr.s.) 40.0 - 600 20.0 - 300 0.04.1 40.X 1 Battery Banks 4.00 - 600 20.0 - 300 0.04.1 40.X 1 Battery Size (Amp Hr.s.) 40.0 - 600 20.0 - 300 0.04.1 Dutp Ciple Koise Continuous 100% for 24 hours per day 1.05.1 1.05.1 Explore Command Conternal Conter	Noise on Input	< 50mV				
Dutput Volts (DC) 13.8 ± 0.05 27.2 ± 0.05 36.6 ± 0.05 54.4 ± 0.05 Dragning Amps 100A 50A 35.5A 25A Dutput Viots (DC) 40.x3 40.x2 40.x1 40.x1 40.x1 Batrary Banks 1 (3 Bank Load Splitter Available) 0.10 ± x1.5V 63.9 ± 2.0V 63.9 ± 2.0V Batrary Size (Amp Hrs.) 400 - 600 200 - 300 0.00 0.00 0.01 ± x1.5V 63.9 ± 2.0V Begulation (Line & Load) < ×10-05%	Electrical (Output)					
Charging Amps 100A 50A 35.5A 25A Output Fuses (ATC) 40 x 1 40 x 1 40 x 1 40 x 1 Battery Size (ATC) 40 x 2 40 x 1 40 x 1 40 x 1 Battery Size (Amp His.) 16 0 ± 0.5V 32.0 ± 1.0V 43.7 ± 1.3V 63.9 ± 2.0V Battery Size (Amp His.) 400 - 500 200 - 300 200 - 300 200 - 300 Output Ripple & Noise < 50 mV	Output Nominal (op)	12	24	32	48	
Output Fusions (ATC) 40 x 3 40 x 2 40 x 1 40 x 1 Battery Banks 1 (3 Bank Load Splitter Available) 040 x 1 40 x 3 x 2 x 1.0V 43.7 ± 1.3V 63.9 ± 2.0V Battery Size (Amp Hrs.) 400 - 600 200 - 300 0 0 Output Filiple & Noise < 50 mV	Output Volts (DC)	13.6 ± 0.05	27.2 ± 0.05	36.6 ± 0.05	54.4 ± 0.05	
Battery Banks 1 (3 Bank Load Splitter Available) Output Cowbar 16.0 ± 0.5V 32.0 ± 1.0V 43.7 ± 1.3V 63.9 ± 2.0V Battery Size (Amp Hrs.) 400 - 600 200 - 300 0 Output Ripple & Noise < 50 mV	Charging Amps	100A	50A	35.5A	25A	
Output Crowbar 16.0 ± 0.5V 32.0 ± 1.0V 43.7 ± 1.3V 63.9 ± 2.0V Battery Size (Amp Hrs.) 400 – 600 200 – 300 Output Ripple & Noise <50 mV	Output Fuses (ATC)	40 x 3	40 x 2	40 x 1	40 x 1	
Battery Size (Amp Hrs.) 400 - 600 200 - 300 Output Ripple & Noise < 50 mV	Battery Banks	1 (3 Bank Loa	1 (3 Bank Load Splitter Available)			
Output Ripple & Noise < 50 mV	Output Crowbar	16.0 ± 0.5V	$32.0 \pm 1.0 V$	43.7 ± 1.3V	63.9 ± 2.0V	
Regulation (Line & Load) <+/- 0.5%	Battery Size (Amp Hrs.)	400 - 600	200 - 300			
Duty Cycle Continuous 100% for 24 hours per day Efficiency > 80% @ Maximum Output Stages 2 stage - Constant Current / Constant Voltage Environment Specification -25° to +40°C @ maximum output Operating Temp. Range -25° to +40°C @ maximum output Humidity Or 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 Mechanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Methanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Methanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Methanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Metrial 17.0 in / 43.2 cm Width 8.2 in / 20.8 cm Height 3.5 in / 8.9 cm (without carrying handle) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize Fastenings All 18-8 Stainless Steel	Output Ripple & Noise	< 50 mV				
Efficiency > 80% @ Maximum Output Stages 2 stage - Constant Current / Constant Voltage Environment Specification -25° to +40°C @ maximum output Operating Temp. Range -25° to +40°C @ maximum output Humidity Detate 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 Mechanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Methy 17.0 in / 43.2 cm Width 8.2 in / 20.8 cm Height 3.5 in / 8.9 cm (without carrying handle) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize Fastenings All 18-8 Stainless Steel Weight 14.4 lb / 6.6 kg Connections 4ft #6awg input, blk/red #6awg output wires	Regulation (Line & Load)	<+/- 0.5%	< +/- 0.5%			
Stages 2 stage - Constant Current / Constant Voltage Environment Specification Operating Temp. Range -25° to 440°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 Øb@ @ 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 Mechanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Width 8.2 in / 20.8 cm Height 17.0 in / 43.2 cm Width 8.2 in / 20.8 cm Height 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize Fastenings All 18-8 Stainless Steel Weight 14.4 lb / 6.6 kg Connections 4ft #6awg input, blk/red #6awg output wires Warranty 3 years	Duty Cycle	Continuous 1	Continuous 100% for 24 hours per day			
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. (Ø7.600 hrs) Isolation Input-Case & Input-Output 1500VDC / Output-Case 500VDC Mechanical Specification Input-Case & Input-Output 1500VDC / Output-Case 500VDC Width 8.2 in / 20.8 cm Height 3.5 in / 8.3 cm (without carrying handle) Clearance 1 inch (2.5 cm) all around Material Marine Grade Aluminium Finish Black Anodize Fastenings All 18-8 Stainless Steel Weight 14.4 lb / 6.6 kg Connections 4ft #6awg input, blk/red #8awg output wires Warranty 3 years	Efficiency	> 80% @ Ma	> 80% @ Maximum Output			
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.)Humidity0 - 95% Relative Humidity (non-condensing) with optional conformal coatingAudible NoiseNONE Ødb @ 3 ft (34.5 dB when fan operating)Typical Service Life> 10 yrs. (87,600 hrs)IsolationInput-Case & Input-Output 1500VDC / Output-Case 500VDCMechanical Specification17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Stages	2 stage – Cor	2 stage – Constant Current / Constant Voltage			
Operating Temp. RangeDerate Linearly 2.5% per °C from 40°C (Optional -40°C extra wide temp. operation avail.)Humidity0 - 95% Relative Humidity (non-condensing) with optional conformal coatingAudible NoiseNONE Ødb @ 3 ft (34.5 dB when fan operating)Typical Service Life> 10 yrs. (87.600 hrs)IsolationInput-Case & Input-Output 1500VDC / Output-Case 500VDCMechanical Specification17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg output wiresWarranty3 years	Environment Specification					
Huminity(non-condensing) with optional conformal coatingAudible NoiseNONE Ødb @ 3 ft (34.5 dB when fan operating)Typical Service Life> 10 yrs. (87,600 hrs)IsolationInput-Case & Input-Output 1500VDC / Output-Case 500VDCMechanical SpecificationInput-Case & Input-Output 1500VDC / Output-Case 500VDCLength17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Operating Temp. Range	Derate Linear	Derate Linearly 2.5% per °C from 40°C			
Typical Service Life> 10 yrs. (87,600 hrs)IsolationInput-Case & Input-Output 1500VDC / Output-Case 500VDCMechanical SpecificationLength17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Humidity					
IsolationInput-Case & Input-Output 1500VDC / Output-Case 500VDCMechanical SpecificationLength17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Audible Noise	NONE Ødb @	NONE Ødb @ 3 ft (34.5 dB when fan operating)			
Mechanical SpecificationLength17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Typical Service Life	> 10 yrs. (87,6	> 10 yrs. (87,600 hrs)			
Length17.0 in / 43.2 cmWidth8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Isolation	Input-Case &	Input-Case & Input-Output 1500VDC / Output-Case 500VDC			
Width8.2 in / 20.8 cmHeight3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Mechanical Specification					
Height3.5 in / 8.9 cm (without carrying handle)Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Length	17.0 in / 43.2	17.0 in / 43.2 cm			
Clearance1 inch (2.5 cm) all aroundMaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Width	8.2 in / 20.8 c	8.2 in / 20.8 cm			
MaterialMarine Grade AluminiumFinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Height	3.5 in / 8.9 cr	3.5 in / 8.9 cm (without carrying handle)			
FinishBlack AnodizeFasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Clearance	1 inch (2.5 cm	1 inch (2.5 cm) all around			
FasteningsAll 18-8 Stainless SteelWeight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Material	Marine Grade	Marine Grade Aluminium			
Weight14.4 lb / 6.6 kgConnections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Finish	Black Anodize	Black Anodize			
Connections4ft #6awg input, blk/red #6awg output wiresWarranty3 years	Fastenings	All 18-8 Stair	All 18-8 Stainless Steel			
Warranty 3 years	Weight	14.4 lb / 6.6 k	14.4 lb / 6.6 kg			
	Connections	4ft #6awg inp	4ft #6awg input, blk/red #6awg output wires			
Safety Designed to meet CSA 22.2.107.1 & UL458	Warranty	3 years				
	Safety	Designed to r	meet CSA 22.2.10	07.1 & UL458		

Note: Specifications are subject to change without notice.



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8128 River Way, Delta B.C. V4G 1K5 Canada T. 604.946.9981 F. 604.946.9983 TF. 800.668.3884 (US/CANADA)

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