

BC-2500 High Efficiency Modular Stationary Charger

Common Applications: Stationary, substation, utility, switchgear, process control, & industrial applications



BC-2500 4 & 8-Slot Chassis

Product Description

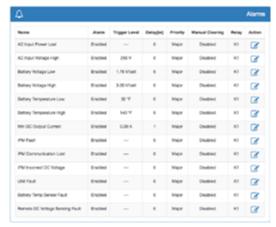
The **BC-2500** is a stationary float Battery Charger based on a high efficiency modular, redundant platform design. It utilizes high availability with uptime architecture. Available in 480W or 400W with hot-swappable Intelligent Power Modules (iPMs) which are available at the following ratings:

- 24V with ranges 10 40 VDC, 0-80 ADC
- 48V with ranges 30 61 VDC, 0-80 ADC
- 130V with ranges 75 150 VDC, 0-64 ADC

Multiple iPMs in a single chassis provide redundancy (N+1, N+2, etc.) and will continue to operate independently if the user interface module (UIM) fails. This ensures maximum reliability for critical uptime applications. Our chargers are compatible with a range of battery types including VLA, VRLA, Ni-Cd with user defined alarms to suite each battery type.

Product Features

- · Low DC output ripple battery eliminator option standard
- AC/DC powered UIM for continued operation without AC
- Heavy-duty steel chassis with High quality conformal coated circuit boards for moisture protection
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- Convection cooled with wide -40 70°C (-40 158°F) operating range and no fan failure points
- High energy efficiency of > 93% at 240 VAC and > 91% at 120 VAC and full load
- · Battery temperature compensation with controlled limits
- · Alarms can be individually enabled/disabled, assigned a delay
- · SNMP alarming and NTP date/time sync via Ethernet
- UL 1012 and cUL/CSA equivalents (pending)
- CE certified (pending)
- · Optional digital amp/volt meter for 4-Bay models



Software View on PC or Mobile Browser

Web-Based Software

- Internal web server uses a modern, responsive framework for attractive display on smart phones and tablets
- Access on any desktop PC or laptop via web browser
- View all measured parameters in real-time
- Log up to 10,000 history records, downloadable to a CSV file
- Ethernet communication standard for field or remote monitoring

iPM (Intelligent Power Module)

- Modular & convection cooled
- Multiple iPMs in a single charger offer redundancy
- · Hot swappable



	AC Input
Voltage range, rated	100 – 240 VAC
Voltage range, operating	90 – 264 VAC; < 100 VAC: reduced power
Frequency, rated	50 – 200 Hz
Frequency, operating	45 – 205 Hz
Phase	Single-phase
Efficiency	> 91%, 120 VAC, full load; > 93%, 240 VAC, full load;
Power Factor	> 0.98, 120 VAC, full load; > 0.96, 240 VAC, full load
Protection	Current limit, surge, transient, under voltage, over voltage

DC Output		
Voltage range		
24 VDC	10 – 40 VDC	
48 VDC	30 – 61 VDC	
130 VDC	75 – 150 VDC	
Power, maximum, per iPM		
24 VDC	400 W	
48 VDC	480 W	
130 VDC	480 W	
Current, maximum, per iPM		
24 VDC	10 A	
48 VDC	10 A	
130 VDC	4 A	
Currer	nt, rated, per iPM	
24 VDC	10 A	
48 VCD	8.1 A	
130 VDC	3.3 A	
Protection	Current limit, short circuit, reverse polarity, surge, transient	

Environmental	
24 VDC	-40 – 70°C (-40 – 158°F)
48 VDC, 130 VDC	-40 – 70°C (-40 – 158°F) > 50°C: reduced power mode
Storage Temperature	-55 – 85°C (-67 – 185°F)
Humidity Range	0 – 95%, non-condensing

User Interface		
Communication	Ethernet; 10/100BASE-TX; auto crossover, auto MDI-X; RJ45 connector; support for TCP/IP, NTP, and SNMP Traps; internal web server; ability to be used for networked comm or direct comm (direct connection to a laptop)	
DC voltage switches	2 switches for Number of Cells 3 switches for Volts per Cell	
Button	Confirm Local Presense	
Battery temp comp	Yes (sensor optional)	
Remote voltage sensing	Yes (sensor optional)	
LEDs		
UIM	4 single-color; AC Present, Alarm UIM Status, Confirm Local Presense	
Front Panel	3 single-color; AC Present, Alarm & UIM Status	
iPM	1 tri-color; DC Output, Fault	

Alarming		
Alarms	Individually enabled/disabled assigned a delay, assigned a priority, assigned to the summary alarm relay	
Summary alarm relay	Form C, dry contact	
Ethernet alarming	SNMP Traps	
Logging	Up to 10,000 events (alarms, faults, AC on/off)	
Mechanical		
Cooling	Natural convection (no fans)	
Protection	Conformal coated circuit boards	
AC/DC terminals	Screw terminal block	
Dimensions (WxHxD)	Including standard brackets	
4-slot chassis	18.93 x 17.71 x 12.79 in.	
8-slot chassis	8.93 x 30.5 x 14.31 in.	
4-slot chassis weight	65 lbs. (30 kg)	
8-slot chassis weight	125 lbs. (57 kg)	
Mounting	Wall, shelf, floor, EIA 19-inch and 23-inch rack (front or rear)	

Certifications (Pending)

UL 1236 and cUL/CSA equivalents; FCC Part 15, Class A; CEC Appliance Efficiency Regulations, Title 20; EN emissions, immunity, safety; CE certified

Ordering Information

Model No.	Description
BC-2500	Modular Float Battery Charger & Power Supply: 24, 48, or 130 VDC. Includes Standard: 10 ft temperature cable, 10 ft voltage sense cable, breakers, mounting assembly for 19 or 23 inch racks. Optional: Ground fault detection, Modbus communication, External alarm board, High Interrupt Breakers