Interl Li
Lithium Battery System Specialist

Outstanding listed company
in digital energy products
and wind/solar energy storage
and charging solutions

CBC International Limited.
56 /12-15 Soi Prayasuren 45
Samwathawantok, Klongsamwa
Bangkok 10510
Tel : + 66 2902 6106-8
Fax : + 66 2914 3009

cbcinter.co.th
cbcinter.com
E-mail : info@cbcinter.com

FIVE ADVANTAGES OF EAST LITHIUM BATTERY

Wireless Transmission Technology

- User can know the battery operation status at any time, view the detailed information of the battery through the background software: total voltage, total current, SOC, SOH, cell voltage temperature, etc., and provide real-time information and history data to view, effectively lower maintenance costs.

Low Power-consumption Technology

- Battery power consumption is low in the standby mode, self-developed BMS intelligent control technology, standby power consumption lower than 0.5W, thus improving the battery energy utilization and solving the serious power consumption problem during battery product delivery and storage.

Charge Management Technology

- Lead-acid batteries can be float-charged for a long time, but lithium batteries long-term high-voltage float charging will be under saturation charging for a long time, which will lead to serious loss of life, independent research and development of intelligent charging management technology, adopt intelligent intermittent charging strategy technology, to avoid lithium batteries are in the high-voltage float charging, to better ensure that the service life of the battery system power reserve capacity.

High Precision Inspection

- High-precision voltage, current, temperature detection, and multi-point temperature design, ensure that the battery will not be overcharged and high-current damage to the battery cell, as well as to ensure the safe use of the battery within the set temperature range.

Distributed SOC Estimation

- Distributed SOC estimation is used for each battery to carry out in-depth energy management for each battery, effectively improving the battery system life.

High-end Advanced Equipment and Production Line

Full-automatic solder paste printing machine

Online 3D SPI solder paste detection system

Rotary multi-head high-speed high-precision full automatic SMT machine

PRODUCT CORE ADVANTAGES

Excellent Technology Innovation

- Using advanced CAE simulation and analysis platform, complete the whole-life simulation analysis of the battery system on different occasions, to guide the design and optimization of the battery thermal management system, so that the battery system has a high heat transfer efficiency, good reliability, strong temperature control capability, etc., which can improve the battery system overall performance of the battery pack in the working state, and at the same time, foreknowledge in advance of some of the safety risks, and do a good job of the relevant countermeasures during the design to avoid the occurrence of battery system safety accidents.

Strong Technical Team

- The company has a post-doctoral, doctoral, master's and bachelor's degree R&D team specialized in power electronics and batteries, independently developing large-scale energy storage systems and battery PACK systems, home energy storage systems, 5G+ battery backup systems, and UPS battery backup systems for various industries, and all series of battery systems have the advantages of high safety, high reliability, high portability, and long service life.

Focused on Energy Storage Industry

- The company focuses on the research and development, production and service of new energy storage systems, and is committed to becoming a global leader in total solutions for energy storage systems.

High-end Advanced Equipment and Production Line

Multi-temperature zone hot reflow soldering and AOI automated optical inspection system

Online lithium cell multi-grade sorting test system

Fully automatic cell stack assembly and optical positioning welding system

Robot optical positioning laser welding battery core&BMS system

Intelligent automatic production line

International most advanced SMT production line

PRODUCT SERIES

Communication Backup Power Battery

ECB series communication base station lithium-ion products are high-tech products for 5G era, which are developed by a team of experts in structural design, BMS hardware and software development, simulation test, and intelligent manufacturing. This series of products with its integration, lightweight, intelligent centralized monitoring, battery maintenance and management, unattended, energy-saving and environmentally friendly, excellent electrical performance, hardware and software protection, etc., can be adapted to different environments, and can provide safe and reliable uninterruptible power supply for a variety of loads.

ECB4850R15S, ECB48100R15S, ECB48200R15S three systems, can support the same model machine to parallel.

Product Features

- Standard chassis design
- High-safety lithium iron battery system
- Long life design, battery pack cycle life up to 3000 times
- Output short-circuit protection function
- Overload, under-voltage, over-temperature protection function
- Supports charge activation, wake-up activation
- Supports charge equalization and charge current limiting
- Supports 485 communication, supports data upload to cloud system

Model	ECB4850R15S	ECB48100R15S	ECB48200R15S
Rated capacity/Ah	50	104	208
Rated voltage/V	48		
Operating voltage range/V	39-54.75		
Standard charge current/A	25	52	
Max. charge current/A	50	104	
Standard discharge current/A	50	104	
Max. discharge current/A	50	104	
Weight (without cabinet)/Kg	41	48	95
String number of standard box/S	15		
Number of standard box/pc	1		
Standard box dimension (W×D×H)(mm)	440×400×133	440×545×133	440×900×133
Operating temperature/°C (discharge)	-20~60		
Fatigue life/times	≥3000 times, standard charge/discharge &100%DOD		
Communication	RS485		
IP rating	IP20		
Battery type	LFP		

High-voltage Backup Lithium Battery

EUB series is a lithium power backup system designed for EAST high voltage UPS, this series of products with its integration, lightweight, intelligent centralized monitoring, battery maintenance and management, unattended, energy saving and environmental protection, excellent electrical performance, hardware and software protection, can be adapted to different environments, and can provide safe and reliable uninterruptible backup power supply support for a variety of loads.
EUB series batteries are mainly matched with EAST high-voltage lithium products of UPS and modular power supply, the voltage level are 192V, 204V, 358V, 384V, 409V, 512V, 614V, capacity level are 27Ah, 54Ah, 104Ah, 280Ah, etc. Designing different capacities of the battery system can meet the requirements of most UPS's different power backup time.

EUB Battery Box

Rated voltage/V	96	102.4	51.2	
Battery serial/parallel connection mode	2P30S	2P32S	1P16S	
Operating voltage range/V	78.0-109.5	83.2-116.8	41.6-58.4	
Rated capacity/Ah	54		104	280
Standard charge current/A	27		52	140
Max. charge current/A	54		104	280
Standard discharge current/A	54		104	280
Max. discharge current/A	216		208	280
Weight/Kg	54	56	45	110
Dimension(W×D×H) (mm)	440×545×177		440×545×133	440×770×222
Operating temperature /°C(discharge)	-20~60			
Communication	CAN			
IP rating	IP20			
Battery type	LFP			

EUB High-voltage Box

Voltage range	0-800VDC(neutral line compatible)
Current(MAX)/A	250A/300A(optional)
Weight/Kg	25 / 35
Dimension(W×D×H) (mm)	440×545×222
Operating temperature/ °C(discharge)	-20~60
Auxiliary power supply, input voltage range /VAC	85~264
Auxiliary power supply, power/W	100
Storage humidity/%RH	≤95
Storage temperature/°C	-40~60
Altitude/m	≤2000
IP rating	IP20
Communication	RS485/CAN

EUB192/204.8V High-voltage UPS Lithium Battery Series

Model	EUB19225R60S	EUB19250R60S	EUB204104R64S	EUB204280R64S
Rated capacity/Ah	27	50	104	280
Rated voltage/V	192		204.8	
Operating voltage range/V	156-219		166.4-233.6	
Standard charge current/A	13.5	25	52	140
Max. charge current/A	27	50	104	200
Standard discharge current/A	27	50	104	200
Max. discharge current/A	54	90	208	200
String number of standard box/S	60	30	16	
Number of standard box/pc	1	2	4	
Standard box dimension (W×D×H)(mm)	440×730×177	440×770×177	440×545×133	440×770×222
High-voltage box dimension (W×D×H)(mm)	/		440×545×222	
Weight(without cabinet) /Kg	45	90	205	475
Operating temperature/°C (discharge)	-20~60			
Fatigue life/times	27-104AH: ≥3000 times, standard charge/discharge &100%DOD 280AH: ≥6000 times, standard charge/discharge &100%DOD			
Communication	RS485/CAN			
IP rating	IP20			
Battery type	LFP			

EUB358.4V/384V High-voltage UPS Lithium Battery Series

Model	EUB358104R112S	EUB358280R112S	EUB38454R120S
Rated capacity/Ah	104	280	54
Rated voltage/V	358.4		384
Operating voltage range/V	291.2-408.8		312-438
Standard charge current/A	52	140	27
Max. charge current/A	104	280	54
Standard discharge current/A	104	280	54
Max. discharge current/A	208	280	216
String number of standard box/S	16		30
Number of standard box/pc	7		4
Standard box dimension (W×D×H)(mm)	440×545×133	440×770×222	440×545×177
High-voltage box dimension (W×D×H)(mm)	440×545×222		
Weight(without cabinet) /Kg	340	805	240
Operating temperature/°C (discharge)	-20~60		
Fatigue life/times	104AH: ≥3000 times, standard charge/discharge &100%DOD 280AH: ≥6000 times, standard charge/discharge &100%DOD 54AH: ≥3000 times, standard charge/discharge &100%DOD		
Communication	RS485/CAN		
IP rating	IP20		
Battery type	LFP		

EUB409.6(±204.8)V High-voltage UPS Lithium Battery Series

Model	EUB40954R128S	EUB409104R128S	EUB409280R128S
Rated capacity/Ah	54	104	280
Rated voltage/V	409.6(±204.8)		
Operating voltage range/V	332.8-467.2		
Standard charge current/A	27	52	140
Max. charge current/A	54	104	280
Standard discharge current/A	54	104	280
Max. discharge current/A	216	208	280
String number of standard box/S	32	16	
Number of standard box/pc	4	8	
Standard box dimension (W×D×H)(mm)	440×545×177	440×545×133	440×770×222
High-voltage box dimension (W×D×H)(mm)	440×545×222		
Weight(without cabinet) /Kg	249	385	915
Operating temperature/°C (discharge)	-20~60		
Fatigue life/times	54-104AH: ≥3000 times, standard charge/discharge &100%DOD 280AH: ≥6000 times, standard charge/discharge &100%DOD		
Communication	RS485/CAN		
IP rating	IP20		
Battery type	LFP		

EUB512(±256)V High-voltage UPS Lithium Battery Series

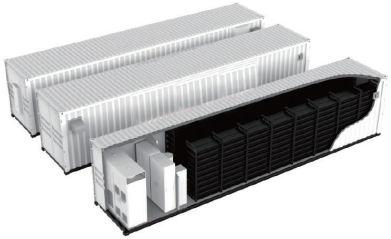
Model	EUB51254R160S	EUB512104R160S	EUB512280R160S
Rated capacity/Ah	54	104	280
Rated voltage/V	512(±256)		
Operating voltage range/V	416-584		
Standard charge current/A	27	52	140
Max. charge current/A	54	104	280
Standard discharge current/A	54	104	280
Max. discharge current/A	216	208	280
String number of standard box/S	32	16	
Number of standard box/pc	5	10	
Standard box dimension (W×D×H)(mm)	440×545×177	440×545×133	440×770×222
High-voltage box dimension (W×D×H)(mm)	440×545×222		
Weight(without cabinet) /Kg	305	475	1135
Operating temperature/°C (discharge)	-20~60		
Fatigue life/times	54-104AH: ≥3000 times, standard charge/discharge &100%DOD 280AH: ≥6000 times, standard charge/discharge &100%DOD		
Communication	RS485/CAN		
IP rating	IP20		
Battery type	LFP		

EUB614.4V High-voltage UPS Lithium Battery Series

Model	EUB61454R192S	EUB614104R192S	EUB614280R192S
Rated capacity/Ah	54	104	280
Rated voltage/V	614.4		
Operating voltage range/V	499.2-700.8		
Standard charge current/A	27	52	140
Max. charge current/A	54	104	280
Standard discharge current/A	54	104	140
Max. discharge current/A	216	208	280
String number of standard box/S	32	16	
Number of standard box/pc	6	12	
Standard box dimension (W×D×H)(mm)	440×545×177	440×545×133	440×770×222
High-voltage box dimension (W×D×H)(mm)	440×545×222		
Weight(without cabinet) /Kg	361	565	1350
Operating temperature/°C (discharge)	-20~60		
Fatigue life/times	54-104AH: ≥3000 times, standard charge/discharge &100%DOD 280AH: ≥6000 times, standard charge/discharge &100%DOD		
Communication	RS485/CAN		
IP rating	IP20		
Battery type	LFP		

Container-type Energy Storage Battery

EEB series energy storage lithium-ion battery system adopts high-performance lithium iron phosphate cells, assembled into a lithium battery system with different electric quantity, single box of 20 cells/1P20S, totaling 64V280Ah, the maximum voltage of a single cluster battery pack is two voltage levels of 1000V and 1500V. Up to 10 clusters can be connected in parallel.



Main operating modes

- When the mains is normal, the battery pack passes through the control cabinet and through the converter to supply power to the loads in the plant at the same time, and the system operates in parallel with the grid.
- When the mains is abnormal, the battery packs and the loads in the plant constitute an off-grid system, which operates off-grid.
- The battery pack utilizes the night time valley power hours to charge itself through the PCS and the battery combiner cabinet.

Application areas

- Mainly used in the field of large-scale energy storage and long power backup, such as peak-valley power generation, UPS power backup, photovoltaic energy storage and other different energy storage and power backup market.

Container-type Energy Storage Battery

Product Features

- The system can be operated both on and off the grid, and can realize the function of power storage and power generation.
- Modular design, strong compatibility, flexible configuration of system capacity, high rate charging and discharging characteristics
- Comprehensive and reliable thermal management design and fault protection mechanism to ensure reliable operation of the system.
- Intelligent management system, which can realize energy self-management, remote control, and intelligent management, can convert, and adjust active and reactive power.
- Monitoring system: real-time monitoring of grid status, PCS status and energy storage device status, the system fast responds to the grid, realizing energy management and peak load shaving.

EEB Battery Box

Rated voltage/V	64
Operating voltage range/V	52-73
Rated capacity/Ah	280
Standard charge current/A	140
Max. charge current/A	280
Standard discharge current/A	280
Max. discharge current/A	280
Dimension(W×D×H)(mm)	451×905×232
Weight/Kg	130
Operating temperature/°C (discharge)	-20~60
Communication	CAN
IP rating	IP20
Battery type	LFP

EEB High-voltage Box

Voltage range	≤1000VDC		≤1500VDC	
Current(MAX)/A	100	200	200	320
Weight/Kg	30			
Dimension(W×D×H)(mm)	454×670×230			
Operating temperature/℃ (discharge)	-20~60			
Auxiliary power supply, input voltage range/VAC	100~240			
Auxiliary power supply, power/W	150			
Storage humidity/%RH	≤95%(non-condensing)			
Storage temperature/°C	-40~60			
Altitude/m	≤2000			
IP rating	IP20			
Communication	RS485/CAN			

EEB Energy Storage Battery Series

Model	EEB768280R240S1P	EEB1152280R360S1P
Rated capacity/Ah	280	
Rated voltage/V	768	1152
Operating voltage range/V	624-876	936-1314
Standard box voltage/V	64	
Standard box number/pc	12	18
Standard charge current/C	0.25/0.5(optional)	0.25
Max. charge current/C	0.5/1.0(optional)	0.5
Standard discharge current/C	0.25/0.5(optional)	0.25
Max. discharge current/C	0.5/1.0(optional)	0.5
Cabinet dimension(W×D×H) (mm)	1400×1560(contain air conditioner) ×2300	2100×1300×2315
Weight/Kg	1600	2370
Fatigue life/times	≥6000 times, standard charge/discharge &100%DOD	
Communication	RS485/CAN	
IP rating	IP20	
Battery type	LFP	

Energy Storage Application Areas

Source-power generation side

Renewable energy power plant
Thermal power frequency regulation ancillary service

Wind power generation

Solar power generation

Thermal power generation

Grid-power transmission and distribution side

Power transmission, power transformation, power distribution peak and frequency regulation

Power transmission side

Power transformation side

Power distribution peak and frequency regulation

Load-user side

Distributed energy storage and micro-grid
Solar-energy storage-charge battery swapping station

Solar-energy storage-charge station

Solar-energy storage battery swapping station

Distributed power generation

Home Energy Storage Battery

Applicable to home energy storage system, applicable to photovoltaic, wind power and other micro-small power stations, used for families, villas, islands, backup power supply; industrial and commercial energy storage system, applicable to photovoltaic, wind power station peak and frequency regulation, mains week peak-valley regulation, commercial energy storage and micro-grid power station power supply system.

EHB Home Energy Storage Series

Model	EHB48104R16S	EHB48208R16S
Rated capacity/Ah	104	208
Rated voltage/V	51.2	
Operating voltage range/V	41.6-58.4	
Standard charge current/A	52	
Max. charge current/A	104	
Standard discharge current/A	104	
Max. discharge current/A	104	
String number of standard box/S	16	
Number of standard box/pc	1	
Standard box dimension (W×D×H)(mm)	630×470×212	900×570×212
Weight(without cabinet)/Kg	52	90
Operating temperature/°C (discharge)	-20~60	
Fatigue life/times	≥6000 times	
Communication	RS485	
IP rating	IP20	
Battery type	LFP	

Smart Energy Field