



FINER STORAGE GREENER ENERGY



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ESSMarketing@fdbatt.com

www.bydenenergy.com

BYD Energy Storage
Build Your Dreams

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01

About Us

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ABOUT BYD



2025 Annual Revenue
\$ **116** Billion



R&D Personnel
120,000+



Research Institutes
11



Patent Applications
71,000+



Authorized Patents
42,000+



TECHNOLOGY INNOVATION FOR A BETTER LIFE

BYD was established on November 18, 1994, headquartered in Shenzhen, Guangdong Province. Its business spans four major industries, i.e., automobile, electronics, renewable energy, and rail transit. It is among the Fortune 500 companies, and listed both on Hong Kong and Shenzhen Stock Exchanges. As of now, BYD has applied for more than 71,000 patents, and obtained more than 42,000 authorized patents worldwide. In 2025, BYD's revenue reached CNY 804 billion, with R&D investment reaching CNY 63.4 billion.

Shouldering its era responsibilities, BYD laid out three new energy strategies in 2008, establishing a layout spanning solar energy, energy storage and electric vehicles. It has connected the entire industry chain from energy acquisition and storage to application, built a zero-emission new energy ecosystem, and pioneered a path of green and innovative development.



ABOUT BYD ENERGY STORAGE

BYD Energy Storage, founded in 2008, stands as a global trailblazer, leader, and expert in battery energy storage systems. BYD Energy Storage has established a complete industrial chain integrating R&D, manufacturing, sales, service and recycling of energy storage products covering Utility-scale Energy Storage Solutions (BESS+PCS+EMS), C&I BESS Solutions, Residential BESS Solutions, AIDC Power Solutions and New Application Business.

Leveraging cutting-edge battery technology and strong innovation capabilities, the company has successfully delivered safe and reliable energy storage solutions for more than 650 utility-scale, C&I, and residential projects worldwide, spanning over 110 countries and regions, including China, the U.S., U.K., Germany, Saudi Arabia, South Africa, Chile, Switzerland, Italy, France, Australia, etc.

BYD Energy Storage has always adhered to the mission of "Finer Storage, Greener Energy", looking forward to collaborating with you in pursuit of a cleaner and more sustainable future.



7%

Annual Revenue for R&D



10,000+

R&D Engineers



10%

PhDs



18,000+

Patent Applications



10,000+

Authorized Patents



1,000+

Blade Battery Patents

BYD ENERGY STORAGE MILESTONES

18+ years
Operating experience

650+
Energy storage projects

110+
Regions

135+GWh
Business operating experience

Pioneer

Endeavors

2008

Pioneered in the field of energy storage, established the EPRI, and conducted in-depth research on BESS power plant technology



2009

The **earliest** use of LFP batteries as energy storage batteries

The world's **first** user-side BESS power plant (1MW/4MWh)



2010

The world's **first** 200kWh walk-in containerized energy storage system



2011

The world's **largest** grid-side, LFP BESS power plant, Baoqing energy storage power station (3MW/12MWh)



2012

The world's **largest** "demonstration power plant combined with wind, PV, BESS, and transmission" Hebei Zhangbei BESS power plant (6MW/36MWh)



2020

The world's **first** liquid-cooling non walk-in energy storage product, Cube Pro



2022

The **largest** PV + BESS power plant in the U.S. in 2022 (1,700MWh)



The world's **first** energy storage product equipped with the Blade Battery, MC Cube



2023

The **largest** BESS power plant for a single project in China (300MW/1,200MWh)



2024

The world's **largest** BESS power plant for a single project (2,600MWh)



2025

The world's **largest** grid-side BESS project Saudi Arabia (12,500MWh)



2025

The world's **largest** 14.5 MWh unit-capacity **BYD Haohan** energy storage system equipped with the world's **largest** Blade Battery for energy storage



2009 2010 2011 2013 2015 2016 2020 2023 2024 2025



02



Advantages

A	R&D Innovation	11
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B	Manufacturing	15
C	Cooperation Partners	17
D	Global Shipments	19

Blade Battery for Energy Storage

24 Years of R&D and Manufacturing Experience in LFP Batteries, Supported by Cell Test Data

Safety And Reliability & Ingenious Design



Ultimate Safety

Intrinsically safe blade battery dedicated to energy storage, no fire passed nail penetration test, no thermal runaway after 4h heating, superior heat dissipation, Intelligent chip control, active and passive protection to deal with various emergencies



Ultra Long Lifecycle

LFP chemistry,



Ultra-high Consistency

Stacking technology, ceramic components, ultra-high length-width ratio, superior cycling consistency.



Ultra High Energy Density

Integrating cells to system directly, higher space utilization to achieve ultra-high energy density



Ultra-wide Temperature Range

Operates efficiently in environments from -30°C to 55°C, maintaining optimal performance at all times

Multiple Safety Tests



Fire Test



Vibration Test



Impact Test



High Temperature Test



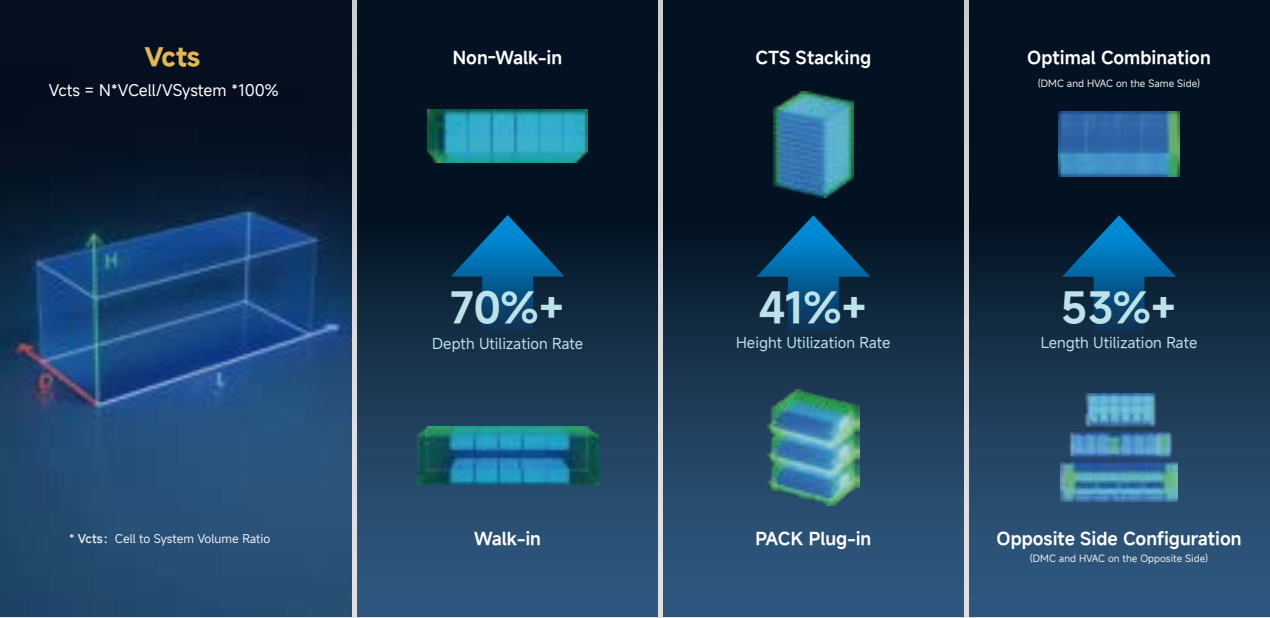
Nail Penetration Test



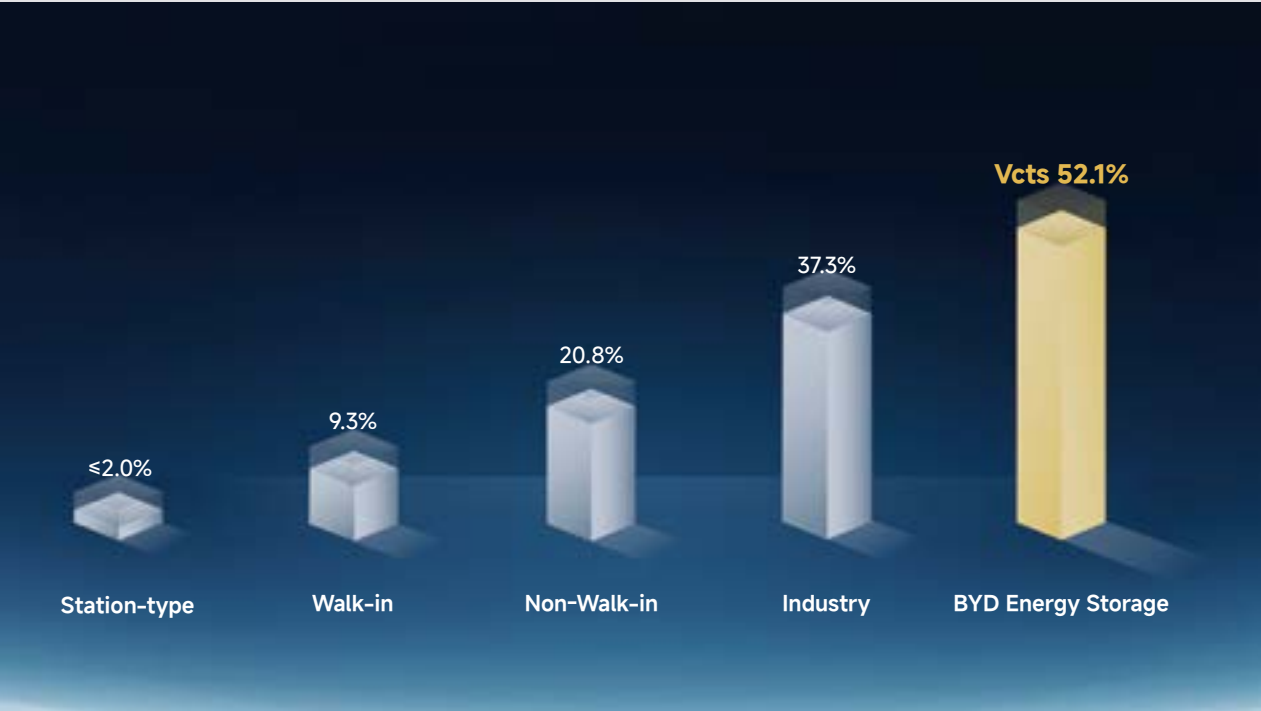
Crush Test

SYSTEM INTEGRATION EVOLUTION ROADMAP

Simplify system integration, elevate integration to new heights



Continuous innovation from cell to system, push Vcts to new heights
Continuously leading industry high-quality development



INTELLIGENTIZATION FACILITATES HIGH-QUALITY DEVELOPMENT OF ENERGY STORAGE



AI Empowerment

AI technology has been applied in the management and O&M widely. Through algorithm optimization and data analysis, it enhances the operational efficiency and safety of BESS



Digital Management

BESS are gradually realizing digital management. By constructing digital platforms such as EMS and VPP, to achieve remote monitoring, intelligent dispatch, and optimization configuration of the BESS



Intelligent O&M

The introduction of intelligent O&M technology has made the operation and maintenance of BESS more efficient and convenient. Through real-time monitoring, fault diagnosis, and predictive maintenance, potential issues can be identified and solved in advance, reducing failure rates and O&M costs



System Integration

BESS are developing towards higher-level system integration, deeply integrating with smart grids, microgrids, and other systems to achieve efficient energy utilization and optimized configuration

The application of intelligent technologies significantly improve the efficiency and safety of BESS, reduce lifecycle O&M costs, and drive high-quality development of the energy storage industry

MANUFACTURING



Energy Storage System Whole Industrial Chain Layout



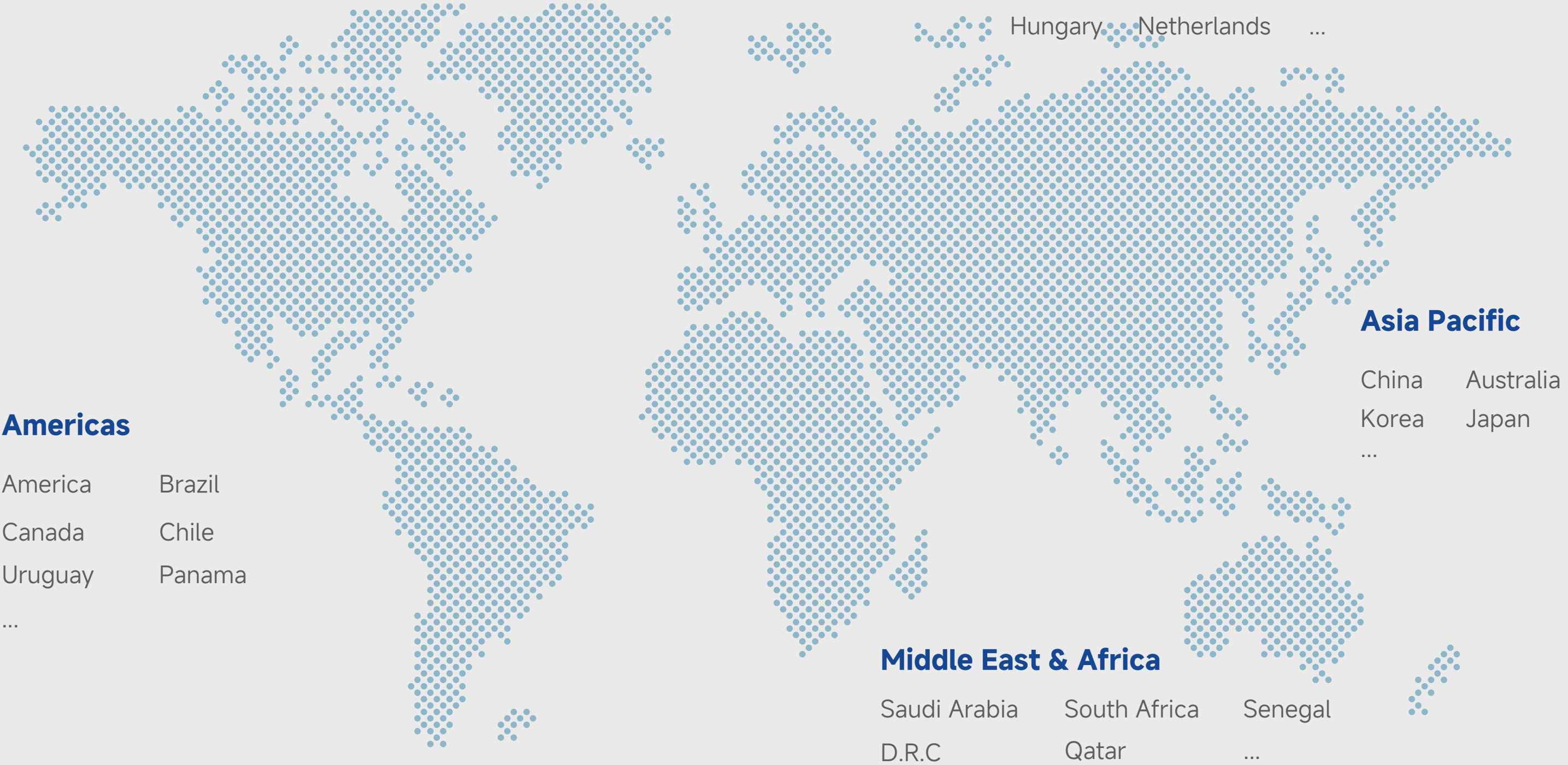
Based on the R&D of basic materials | Centered on battery performance | Guided by innovative technologies
Focus on all-round development of batteries



COOPERATION
PARTNERS



GLOBAL
SHIPMENTS



Covering **110+** countries, over **135+ GWh** of project operation experience.
The longest-running project has been in operation for **15** years



PRODUCTS



Products

A	All-Scenario	23
B	All-Ecology	24

C	Utility-Scale Energy Storage Products	25
D	C&I Energy Storage Products	33
E	Energy Management System	37

ALL-SCENARIO



Wind and solar BESS



Grid Following Grid Forming



Frequency Regulation



Standalone BESS



C & I BESS



Residential BESS



Generation Side



Grid Side



User Side

ALL-ECOLOGY

All Products

- Utility-scale BESS
- C&I BESS
- Residential BESS
- PCS
- BMS
- EMS

All Terrains

- Plateau
- Desert
- Plain
- Mountain
- Gobi
- Seafront

All Climates

- Extreme Cold
- Severe Sand & Wind
- Heavy Snowfall
- Extreme Heat
- High Humidity
- Heavy Rainfall
- Extreme Drought
- Frequent Thunderstorm





BYD Haohan



Large-capacity



High Energy Density



High IP Rating



High Vcts (Cell to System Volume Ratio)



SYSTEM PARAMETERS

System Type	XN2C-B7284-E/U-R4	XN4C-B14568-E/U-R4	XN4C-B14568-E/U-R8
DC Data			
Cell type	LFP		
Nominal energy (BOL)	7,284kWh	14,568kWh	14,568kWh
Nominal power	1,821kW	3,642kW	1,820kW
General Data			
Weight	55.5t	108.5t	108.0t
IP rating	IP66		
Ambient operating temperature range	-30°C ~ +55°C (>45°C derating)		
Relative humidity	5% ~ 100%		
Max. working altitude	3,000m (>2,000m derating)		
Cooling concept	Liquid cooling		
Noise@1m	≤75dBA		
Fire suppression system	With fire detection system		
Auxiliary power interface	400/480V AC, 50/60Hz, 3P4W		
Auxiliary system peak power requirement @45°C, PF0.9	32.6kW	57.2kW	25.8kW
Communication interface	Ethernet		
Communication protocol	Modbus TCP/IP		
Standard color	RAL 9003		
Compliance	IEC 62619, IEC 62620, IEC 63056, UL 9540, UL 9540A, UL 1973, UN 38.3, UN 3480, CE Marking		

GC Flux PCS

 Self-developed PCS Module

 Superior Power Quality

 Industry-leading Power Density of 801kw/m³

 IP65 + C5M Protection
No Derating at 50°C Ambient Temperature

 Strong Grid-forming Support

 Excellent Grid-following Adaptability



SYSTEM PARAMETERS

System Type	BEG3500KTL	BEG5000KTL	BEG7000KTL	BEG10000KTL
AC Side (Grid-connected)				
Rated Output Power	3,500kW	5,000kW	7,000kW	10,000kW
Maximum Output Power	3,850kVA@30°C	5,500kVA@30°C	7,700kVA @30°C	11,000kVA (<30°C)
Rated AC Voltage	690Vac			
Rated Frequency	50/60Hz			
Power Factor Adjustable Range	-1~+1			
THDi	< 3%			
Transformer Parameters				
Isolation Method	Oil-immersed transformers			
Rated Power	3,675kVA	5,250kVA	7,350kVA	10,500kVA
Voltage Ratio	33kV+2x2.5%/0.69kV			
Connection Group	Dy11/Dy11y11			
Basic Parameters				
Dimensions	6,058*2,438*2,896mm	6,058*2,438*2,896mm	12,192*2,438*2,896mm	12,192*2,438*2,896mm
Weight	23t	25t	36t	40t
Maximum Efficiency	Transformer: 99%, PCS: 99%, MV Skid: 98%			
IP Rating	PCS: IP65, Other: IP54			
Corrosion Protection Rating	C3M, C4H (PCS: C5M)			
Operating Temperature Range	-40°C~60°C (> 50°C Derating)			
Operating Humidity Range	0~100% (Non-condensing)			
Maximum Operating Altitude	5,000m (> 3,000m Derating)			
Cooling Method	Liquid Cooling (PCS)/Forced Air Cooling (MV Skid)			
Communication Protocol	Ethernet/Optical Fiber, IEC61850 (Optional)			

MC Cube-T

MC-B501-E/U-R2 & MC-B536-E/U-R4

Standard outdoor battery cabinet, MC Cube-T uses the new-generation LFP battery for energy storage, and adopts the world's first CTS (Cell To System) integration technology, small changes, large capacity.



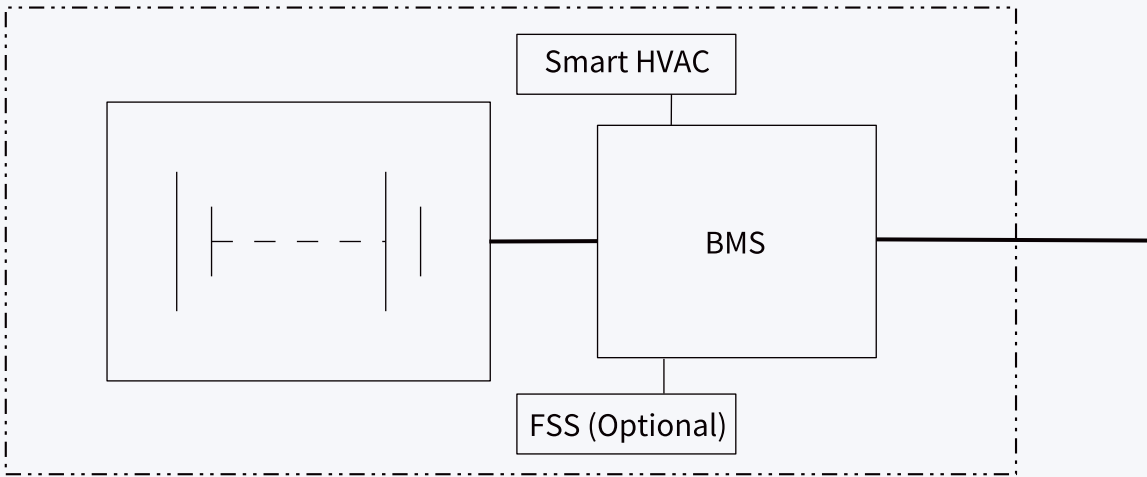
SYSTEM FEATURES

Safe & Reliable
Passed 10+ destructive tests, six-dimension high-precision detection, four-level active and passive protection.

Flexible Configuration and Management
Intelligent liquid cooling comprehensively improves system efficiency; 1500V system voltage; Easy Transportation, Easy Layout, Easy Installation, Easy Maintenance, Easy Augmentation.

Cost-efficient Ultra High Energy
It's equipped with new-gen safe and long-life LFP battery for energy storage, more energy, less footprint.

CIRCUIT DIAGRAM



SYSTEM PARAMETERS

System Type	MC-B501-E/U-R2	MC-B536-E/U-R4
DC Data		
Cell type	LFP	LFP
System configuration	1P416S	1P416S
DC usable energy @FAT	501kWh	536kWh
DC usable energy @1 month SAT	495kWh	530kWh
DC usable energy @3 months SAT	490kWh	525kWh
Nominal voltage	1,331.2V DC	1,331.2V DC
Battery voltage range	1,081.6~1,489.3V DC	1,081.6~1,497.6V DC
Nominal power	250.5kW	134kW
General Data		
Dimensions (WxDxH)	1,130×1,208×2,523mm	1,130×1,233×2,523mm
Weight	3,960kg	4,000kg
IP rating	IP55	IP55
Ambient operating temperature range	-30°C~+55°C [1]	-30°C~+55°C [1]
Relative humidity	5%~100%	5%~100%
Max. working altitude	<2,000m [2]	<2,000m [2]
Cooling concept	Liquid cooling	Liquid cooling
Noise@1m	≤75dBA	≤75dBA
Fire suppression system	With fire detection and alarm system	
Auxiliary power interface	AC 400V/50Hz, 3P4W; AC 480V/60Hz, 3P4W	
Auxiliary system peak power requirement@45°C, PF0.9	6.6kVA	4kVA
Communication protocols	CAN	CAN
Standard color	RAL 9003	RAL 9003
Compliance	IEC 62619, UL 9540, UL 9540A, UL 1973, UN 38.3, UN 3536, CE Marking	

Note:
[1] Power derating is performed when the ambient temperature is below -15°C or above +45°C.
[2] Power derating is performed when the altitude is between 2000-3000m.

MC Cube-T BESS

MC10C-B5010-E/U-R2 & MC12C-B6012-E/U-R2
MC10C-B5365-E/U-R4 & MC12C-B6437-E/U-R4

The new-generation MC Cube-T BESS practices the concept of MC Cube, inheriting from "Five Easy" strength, which enables flexible combination of any cube, to achieve any system capacity.



SYSTEM FEATURE

- Ultra-high Density

Compact design, larger capacity, smaller footprint.
- Independent Cluster Design

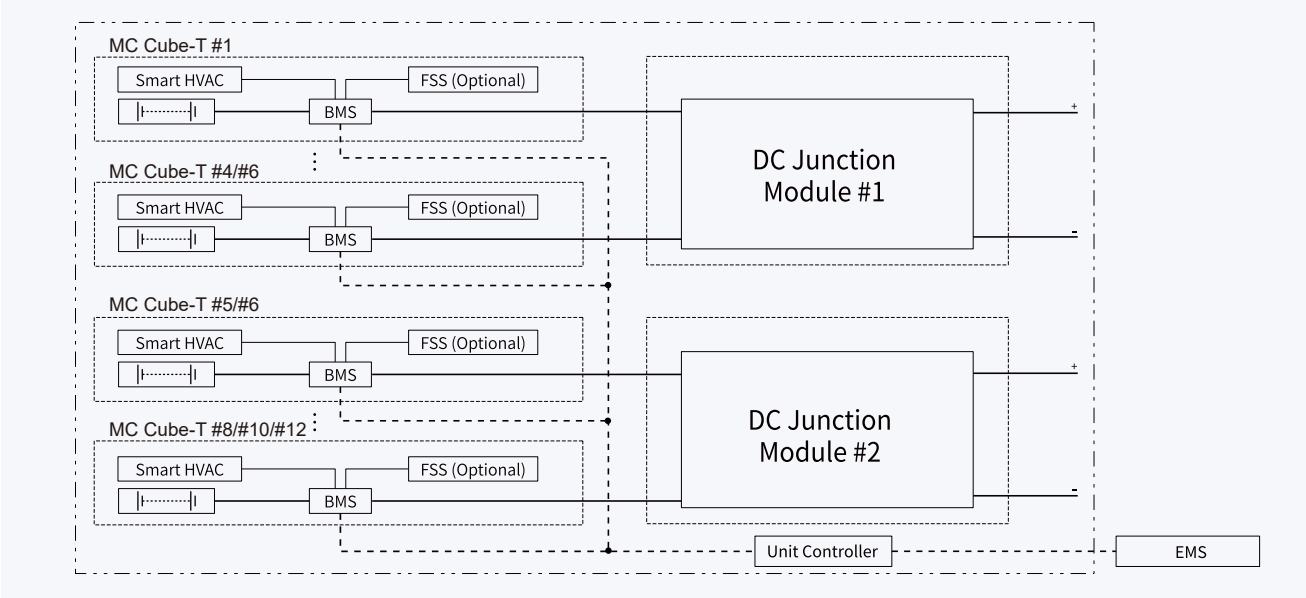
1500V system voltage, reliable liquid-cooling at cluster level.
- Ultra-high Flexibility

Flexible combination of any cube, to achieve any system capacity; can match mainstream string/central PCS.
- Highly Integrated

Professional integration of local controller, HVAC and FSS.
- Safe & Long lifetime

Ultimate protection, intelligent temperature control, temperature difference < 3°C, with new-gen safe and long-life LFP battery for energy storage.

CIRCUIT DIAGRAM



SYSTEM PARAMETERS

System Type	MC10C-B5010-E/U-R2	MC12C-B6012-E/U-R2	MC10C-B5365-E/U-R4	MC12C-B6437-E/U-R4
DC Data				
Cell type	LFP	LFP	LFP	LFP
System configuration	2×5×1P416S	2×6×1P416S	2×5×1P416S	2×6×1P416S
DC usable energy @FAT	5,010kWh	6,012kWh	5,360kWh	6,431kWh
DC usable energy @1 month SAT	4,950kWh	5,940kWh	5,306kWh	6,366kWh
DC usable energy @3 months SAT	4,900kWh	5,880kWh	5,252kWh	6,302kWh
Nominal voltage	1,331.2V DC	1,331.2V DC	1,331.2V DC	1,331.2V DC
Battery voltage range	1,081.6~1,489.3V DC	1,081.6~1,489.3V DC	1,081.6~1,497.6V DC	1,081.6~1,497.6V DC
Nominal power	2×1,253kW	2×1,503kW	2×670kW	2×804kW
General Data				
Dimensions (WxDxH)	6,058×2,438×2,896mm ^[1]	7,550×2,438×2,896mm ^[1]	6,058×2,438×2,896mm ^[1]	7,550×2,438×2,896mm ^[1]
Weight	43,550kg	52,720kg	43,750kg	53,010kg
IP rating	IP55	IP55	IP55	IP55
Ambient operating temperature range	-30°C~+55°C ^[2]	-30°C~+55°C ^[2]	-30°C~+55°C ^[2]	-30°C~+55°C ^[2]
Relative humidity	5%-100%	5%-100%	5%-100%	5%-100%
Max. working altitude	<2,000m ^[3]	<2,000m ^[3]	<2,000m ^[3]	<2,000m ^[3]
Cooling concept	Liquid cooling	Liquid cooling	Liquid cooling	Liquid cooling
Noise@1m	≤75dBA	≤75dBA	≤75dBA	≤75dBA
Fire suppression system	With fire detection and alarm system			
Auxiliary power interface	AC 400V/50Hz, 3P4W; AC 480V/60Hz, 3P4W			
Auxiliary system peak power requirement@45°C, PF0.9	70kVA	83kVA	50kVA	58kVA
Communication protocols	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP	Modbus TCP/IP
Standard color	RAL 9003	RAL 9003	RAL 9003	RAL 9003
Compliance	IEC 62619, UL 9540, UL 9540A, UL 1973, UN 38.3, UN 3536, CE Marking			

Note:
[1] The size does not include the size of the DMC HVAC.The HVAC of DMC needs to be installed on site, and the size after installing the HVAC is shown in the installation drawing.
[2] Power derating is performed when the ambient temperature is below -15°C or above +45°C.
[3] Power derating is performed when the altitude is between 2000-3000m.
[4] The energy storage system support flexible combination and capacity.

Chess Plus

IC07-B233AP125-E-R2

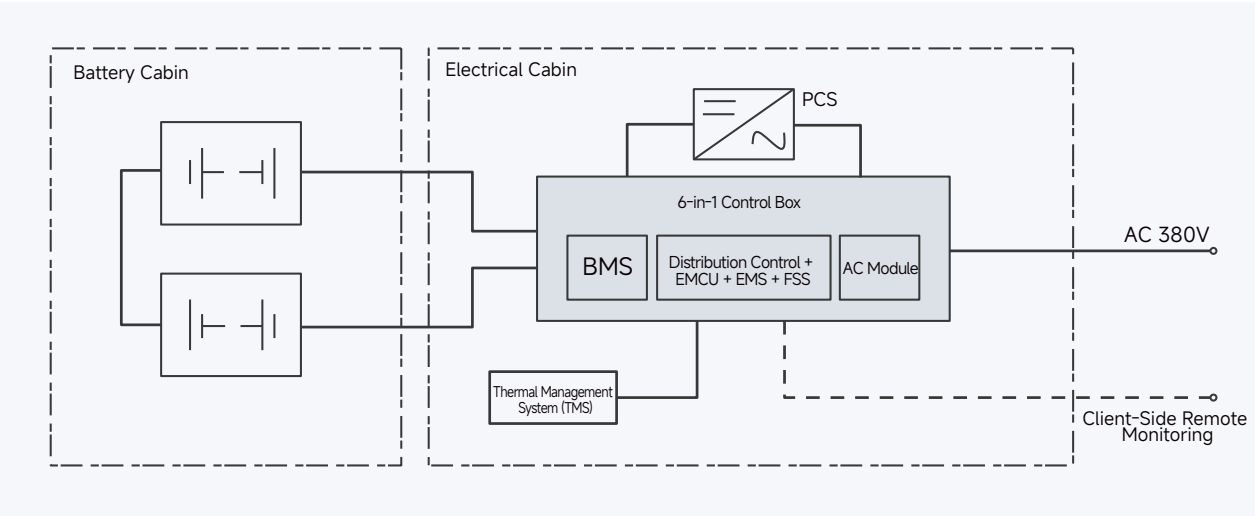
New-Generation safe, user-friendly and cost-effective C&I ESS; multi-stage safety protection from cell to Pack to system to O&M; modular design for all-scenario adaptability, intelligent O&M; highly integrated solutions for improved performance to achieve higher returns with lower costs



SYSTEM FEATURES

- Safe & Long Lifecycle**
High-safety, long-life cells for energy storage applications, cycle life > 10,000 cycles; comprehensive destructive testing and validation for industry-leading safety and reliability
- Intelligent & Stable Operation and Maintenance**
Black start capability, off-grid/microgrid supported; remote monitoring and early warning on AI-empowered cloud platform, no need for on-site expert maintenance, site O&M work reduced by 43%
- Simple Aesthetic & High Integration**
Designed for all-scenario C&I energy storage applications, all-in-one system, modular installation with a wide power range from 125kW to 1MW; BMS, Distribution Management Cabinet, EMS, fire panel and AC module highly integrated to reduce the system components by 55.6%
- Ultimate Cost-Effectiveness**
Cell temperature difference within 2.5°C with intelligent liquid cooling, lifecycle increased by 30%, energy consumption reduced by 20%; factory-prefabricated, whole-unit transportation to reduce costs for transportation, installation and commissioning work on site

CIRCUIT DIAGRAM



SYSTEM PARAMETERS

System Type	IC07-B233AP125-E-R2
DC Side Parameters	
Cell Chemistry System	LFP
System Configuration	1P228S
Battery Capacity (BOL)	233kWh
Rated Voltage	729.6V DC
Battery Voltage Range	604.2~832.2V DC
Rated Charge and Discharge Power	125kW
C-rate	0.5C
AC Side Parameters	
Nominal Grid Voltage	380V
Rated Grid Frequency	50Hz
Max. THDU @Rated Power	< 3%
Power Factor	>0.99(1 leading~1 lagging)
General Parameters	
Dimensions (WxDxH)	1258×1680×2240mm
Weight	3500kg
System Efficiency	RTE≥90%
Cooling Concept	BESS: Liquid Cooling PCS: Forced Air Cooling
Fire Suppression System	PACK-level Fire Suppression + Aerosol
IP Rating	Battery Pack (IP65)/Complete System (IP55)
Anti-corrosion Grade	C4
Operating Temperature Range	-20°C~+55°C [1]
Relative Humidity	5%~95% (Non-condensing)
Seismic Resistance	Level 8
Fire Retardant Requirements	Fire Resistance Rating ≥1 hour
Auxiliary Power Interface	AC 380V ±5%/50Hz; 3-phase 4-wire
Auxiliary System Peak Power Requirement @45°C, PF0.8	~5kVA
Noise	≤75dBA
Communication Protocols	Modbus TCP/IP
Wiring Method	Bottom In and Bottom Out

Note:
[1] Power derating is performed when the ambient temperature is below -15°C or above +45°C.

Extremely safe, highly integrated, convenient, flexible, and cost-effective.



SYSTEM FEATURES

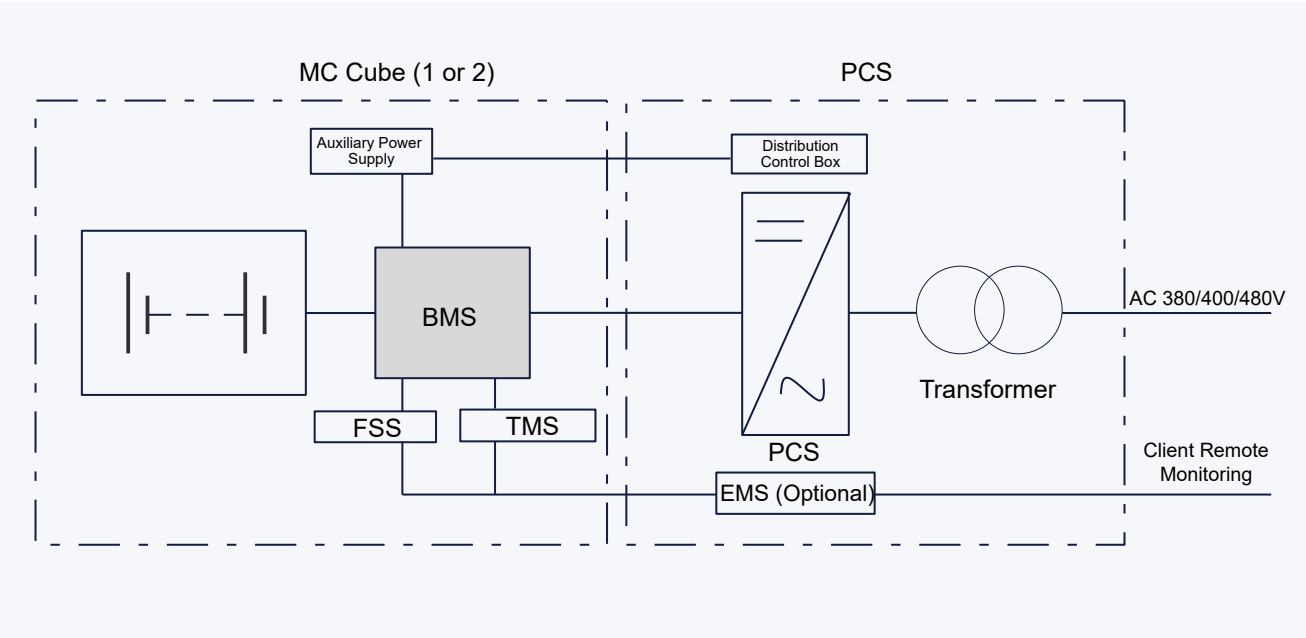
- High Energy Density**

Compact mechanical design, minimized footprint.
- Highly Integrated**

Highly integrated system to allow flexible transportation and on-site installation. All-In-one design, integrated with PCS, local controller, HVAC and FSS to ensure system safety.
- Safe & Long Lifecycle**

Highly efficient system with safe and long lifecycle LFP battery.

CIRCUIT DIAGRAM



SYSTEM PARAMETERS

System Type	IC01-B466AP200-E-R2	IC01-B932AP200-E-R4
DC Data		
Cell Type	LFP 350Ah	LFP 350Ah
System Configuration	1P416S	2x1P416S
Battery Capacity(BOL)	466kWh	932kWh
DC Usable Energy (BOL)@FAT	447kWh	894kWh
Nominal Voltage	1,331.2V	1,331.2V
Battery Voltage Range	1,081.6~1,497.6V	1,081.6~1,497.6V
Cooling Concept	Liquid cooling	Liquid cooling
AC Data		
Nominal Power	200kW	200kW
AC Usable Energy (BOL)@FAT	431kwh	862kwh
Max. THD of Current (@Nominal Power)	<3%	<3%
Power Factor	-0.95~0.95	-0.95~0.95
Nominal Grid Voltage	400V	400V
Nominal Grid Frequency	50Hz	50Hz
Isolation Method	Isolation Transformer	Isolation Transformer
System Data		
Dimensions (WxDxH)	2,250x1,170x2,675mm	3,380x1,170x2,675mm
Weight	~6T	~10T
Ambient Operating Temperature Range	-30°C~+55°C ^[1]	-30°C~+55°C ^[1]
Relative Humidity	5%~95%	5%~95%
Max. Working Altitude	<2,000m ^[2]	<2,000m ^[2]
Noise	≤75dB(A)	≤75dB(A)
Fire Suppression System	Aerosol	Aerosol
Auxiliary Power Interface	AC400V/50Hz, 3-phase 4-wire	AC400V/50Hz, 3-phase 4-wire
Auxiliary System Peak Power Requirement @45°C,PF0.8	~9kVA	~15kVA
IP Rating	IP55(Battery Parts); IP54(Electrical Parts)	IP55((Battery Parts); IP54((Electrical Parts)
Anti-Corrosion Grade	C4	C4
Communication Interfaces	Ethernet	Ethernet
Communication Protocols	Modbus TCP/IP	Modbus TCP/IP
Compliance	IEC 62477, IEC 62619, UL 1973, UL 9540 UL 9540A	IEC 62477, IEC 62619, UL 1973, UL 9540 UL 9540A

Note:
[1] Power derating is performed when the ambient temperature is below -15°C or above +45°C
[2] Power derating is performed when the altitude is between 2000-3000m.

GC Master EMS60

BYD has independently developed EMS60 as the “central intelligence” for the new power system. There are 4 innovations in EMS60: Modular architecture, Mega-scale data engine, AI strategy & Full lifecycle management. The innovation establishes an full-chain intelligent energy management system which is all-scenario adaptable, covering data processing, strategic optimization, and asset value enhancement.



GC Master EMS60 Functions and Specifications

Functional Summary:

- **Real-time Monitoring:**Batteries, Power Conversion Systems (PCS), Loads, Wind Power, Solar PV, and Auxiliary Systems.
- **Operations & Maintenance Management:**Collects energy storage operation data, integrates station-wide data information.
- **Advanced Control:**AGC/AVC, Primary Frequency Regulation, Scheduling Curves, Smoothing Fluctuations, System Peak Shaving, Automatic SOC Maintenance.
- **Zoned Control:**System safety zoning, control safety grading.
- **Real-time Control:**Internal energy control for energy storage and microgrids, maintaining grid power balance.
- **Advanced Applications:**Diagnostics and early warning, panoramic analysis (power plant efficiency, cost, and energy conversion analysis).
- **Intelligent Optimization Scheduling Strategies:**Anti-Reverse Current Protection, Demand Control, Load Tracking.

6 Advantages

- Cross-platform Compatibility**

Supports cross-platform operation, compatible with domestic databases (MYSQL, DB GoldenSQL, etc.) and operating systems (Windows, Linux, Kylin, NISUS, etc.).
- Modular Configuration**

Modular design philosophy, compatible with the protocols, agreements, and strategies required for photovoltaic storage and micro-grid operations.
- Million-Level Data Simulation**

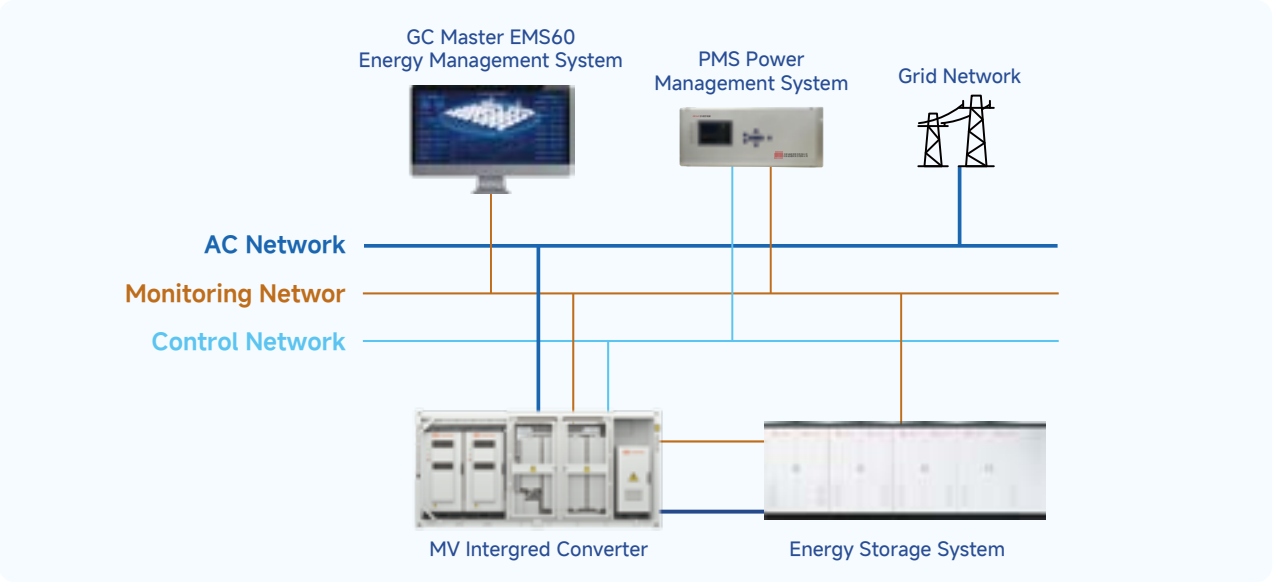
Simulates complex scenarios using big data technology, including graphical real-world scenario models and related processes.
- Advanced Data Analytics**

Features a high-capacity data collection system, efficient processing of massive data volumes, and a stable data preservation mechanism.
- Energy Optimization**

Implements full life cycle management and advanced energy optimization algorithms.
- Customized Smart Strategies**

Enables the development of customized functionalities and strategies, including smoothing fluctuations, inertia support, primary frequency regulation, scheduling curves, anti-reverse current protection, and demand control.

Circuit Diagram



Configuration		Performance Indicators
Software Capacity	Number of Stations Connected	≥1,024
	Volume of Real-time Data Access	≥4, 000,000
	Volume of Control Access	≥200,000
	Volume of Computational Access	≥80,000
Real-time Performance	Real-time Image Response Time	< 2S
	Automatic Image Refresh Time	1-10s(Adjustable)
	Teleindication Status Change Transmission Time	< 1s
	Telemetry Value Change Transmission Time	< 2s
	Remote Control/Adjustment Response Time	< 1s
CPU Load Rate	Average CPU Load Rate of Each Computational Node (for any 30-minute period)	< 3%
Network Load Rate	Local Area Network Operation Load Rate (for any 30-minute period)	< 5%
Reliability	Dual-Machine Switching Time	Hot standby: < 10 s
	Annual System Availability	> 99.99%
Information Processing Metrics	SOE (Sequence of Events) Resolution	< 20ms
	Accuracy of Analog Telemetry	> 99.99%
	Accuracy of Teleindication Actions	100%
	Accuracy of Remote Control Actions	100%
	Accuracy of Remote Regulation Actions	> 99.99%



Service

Professional Efficient Responsible

A	After-Sales Service	41
B	Battery Recycling	42

AFTER-SALES SERVICE

Service Concept



Excelsior

Preliminary technical analysis
Root cause analysis by QC+R&D



Vigorous + Resolute

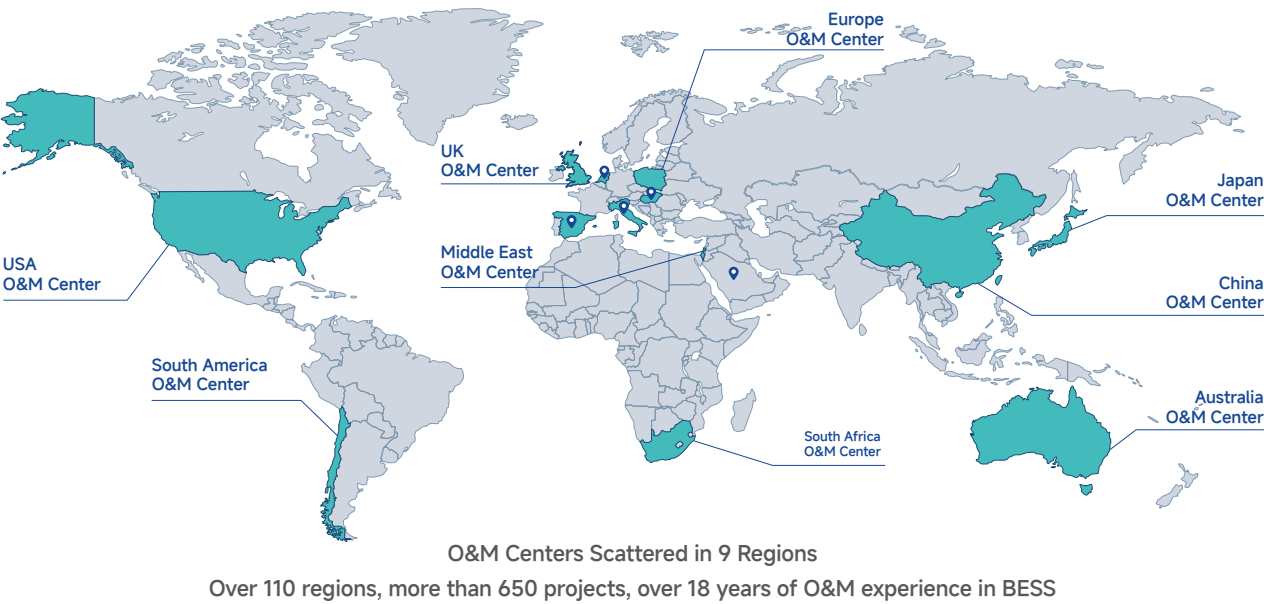
After-sale service response time
<1 h



Meticulous

Customer satisfaction **98%**

Global Service Center



24-Hour Service

Online support services

- 24/7 hotline reception
- 5 days/8 hours remote problem handling
- Fault email alerts

Spare parts management services

- Sufficient spare parts to meet on-site needs
- Coverage by nearby warehouses

Station support services

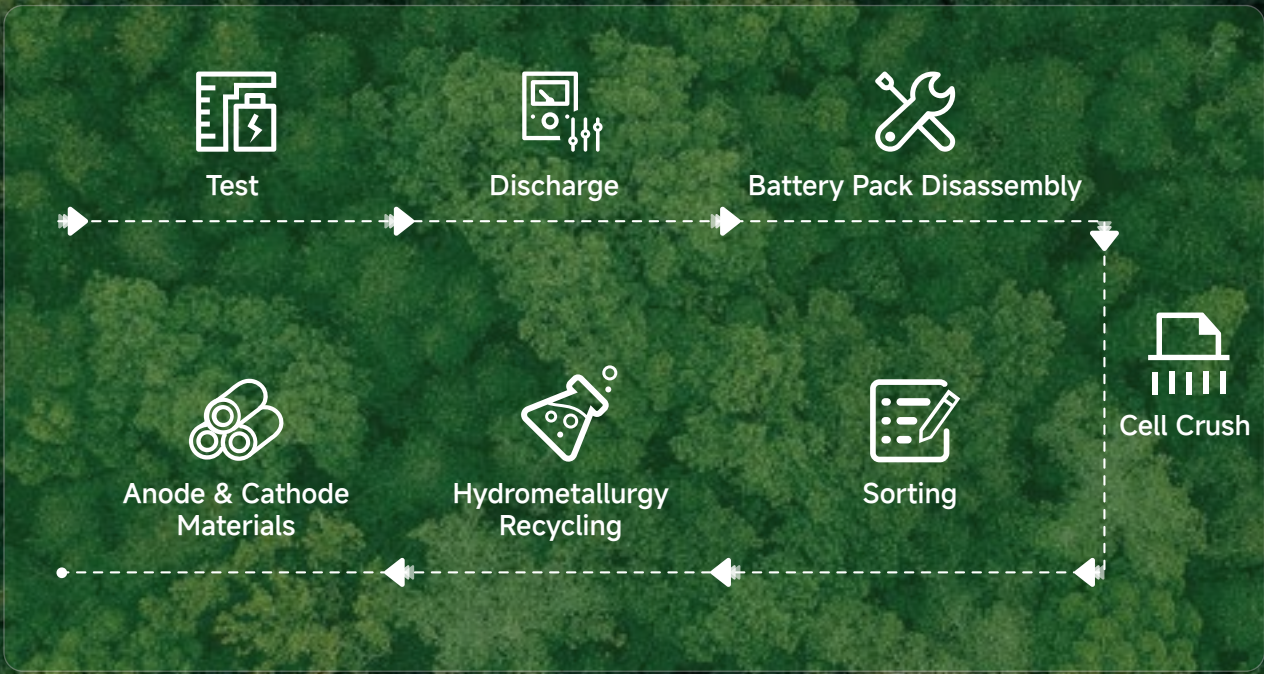
- Resolving common faults within 48 hours
- Regular on-site training by local teams
- BYD engineers on-site support

Health check services

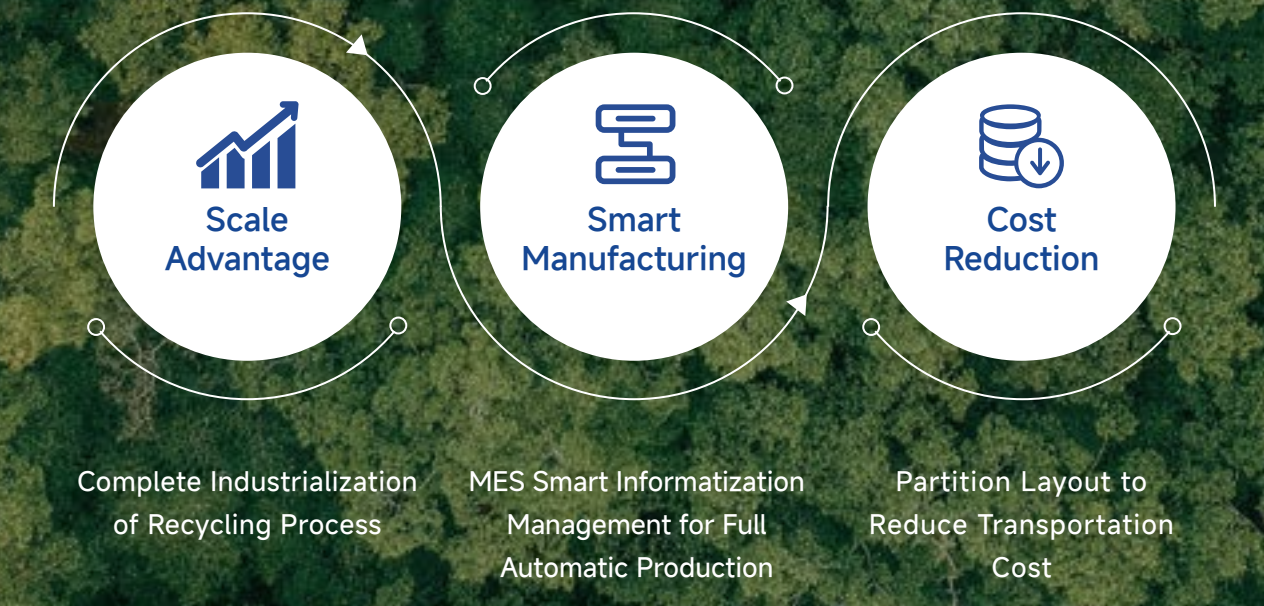
- On-site reports and prevention plans
- Annual inspection and maintenance services
- Regular component replacement

BATTERY RECYCLING

Recycling Process



Industrialization





05



Cases

A

Overseas Cases

45

OVERSEAS CASES

