One-Stop Solution For Industrial And Commercial Energy Storage Systems

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Smart Microgrid And Energy Storage System

Henan Wanyang Lithium Battery Technology Co., Ltd.

VANYO ENERGY

Company Introduction

Jiyuan Wanyang Group Co., Ltd. was established in 1995 and is located in Henan Province, China. With aregistered capital of 280 millionyuan, total assets of 15 bilion yuan, and covering an area of 1.31 milion square meters, the company currently employs over 6,000 people. lt operates 2 business divisions, 20 wholly-owned subsidiaries, and 6 joint ventures, spanning industries such as non-ferrousmetal smelting, new energy, comprehensive recycling, gold and silver products, jewelry, health industry, chemical engineering, and logistics transportation.

Wanyang Power focuses on the research, development, manufacturing, and sales of traditional and new energy products, including valve-regulated lead-acid batteries and lithium batteries. The company has offices across China and overseas subsidiaries in Africa, Europe. Southeast Asia, and the Middle East, establishing a truly global manufacturing, distribution, marketing, and after-sales service network. Wanyang Power's products are manufactured based on strong technical expertise and advanced automated production equipment. The company boasts a professional management and R&D team and has obtained ISO 9001 Quality Management System,ISO 14001 Environmental Management System, and ISO 45001 Occupational Health and Safety Management System certifications. Wanyang has been recognized as a National High-Tech Enterprise.

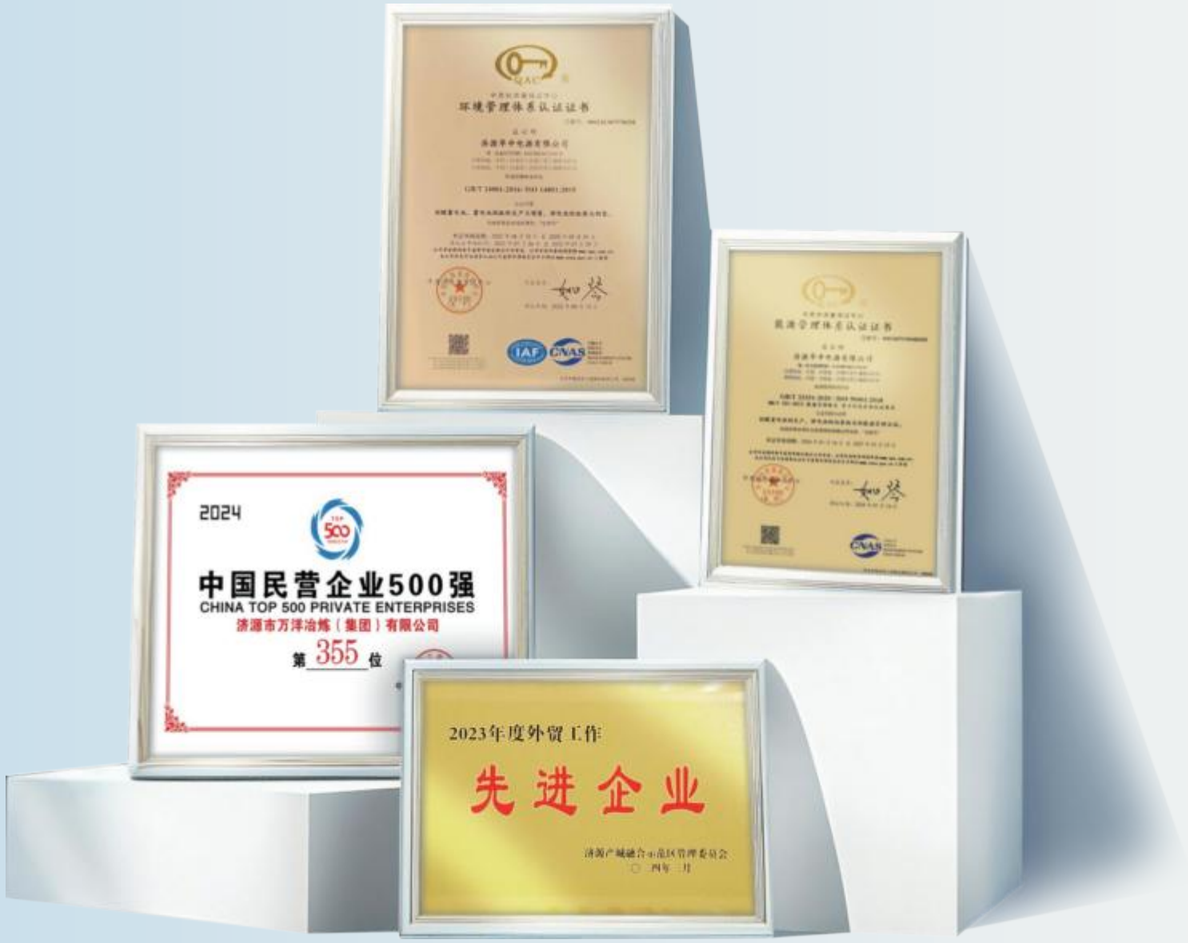
We place great emphasis on product quality. Strict quality control from raw materials to finished products ensures that every battery meets the highest quality standards. Wanyang Power products hold various international certifications and comply with all applicable standards. The company is ranked among the "Top 500 Manufacturing Enterprises in China." In 2023, it achieved sales revenue of 39.6 billion yuan.

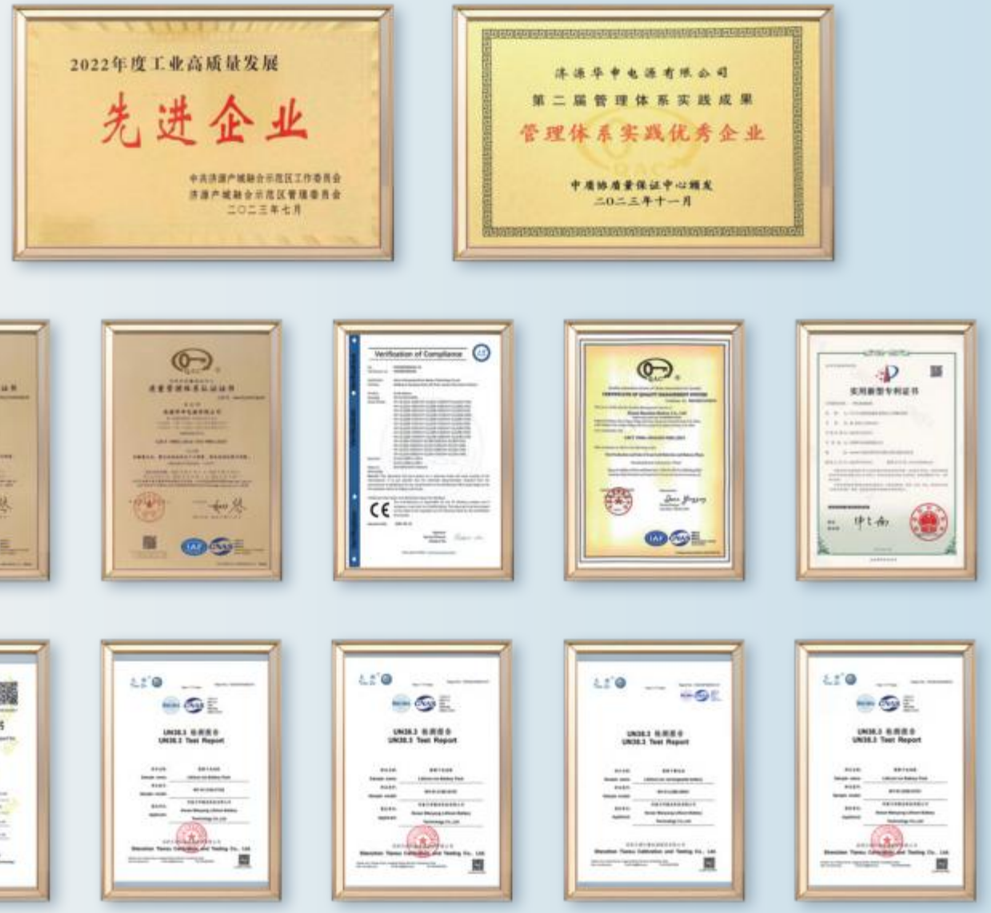
30year
Establishedin 1995

6000+
We currently have over 6000 employees

400+
Achieve sales revenue of over 40 billion yuan by 2024

Honors And Qualifications





IEC RoHS CE UL FC MSDS

UN38.3 ISO CEC PSE KC

Power Station Solutions

1.An integrated system of Grid, renewable energy generation systems (solar, wind, biomass, small hydro, etc.), energy storage system and smart energy management system.
2.Fuctions of regulation of load shifting, peak shaving and voltage, frequency and power factor of the grid.
3.Intelligent management and automatic control of the whole system.

Energy storage system to meet the regulation requirements from the grid

Reduce harmful pollutants, affecting air quality and contributing to climate change

Quiet noise levels, which can disturb surrounding areas

Decrease overall operation and maintenance expenses as regular upkeep cost is low

Higher overall system efficiency than single energy source system

Satisfy strict environmental regulations, which may limit energy use

FM Solutions

1.An integrated system of Grid, energy storage system and smart energy management system.
2.Fuctions of regulation of voltage, frequency and power factor of the grid.
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Energy storage system to meet the regulation requirements from the grid

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Decrease overall operation and maintenance expenses as regular upkeep cost is low

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Satisfy strict environmental regulations, which may limit energy use

Community Solutions

1.An integrated system of existing generator system, renewable energy generation systems (solar, wind, biomass, small hydro, etc.), energy storage system and smart energy management system.
2.Fuctions of load shifting, peak shaving, power backup, and regulation of voltage, frequency and power factor.
3.Intelligent management and automatic control of the whole system.

Minimize the diesel/petrol consumption of generator system by applying optimized working logics

Reduce harmful pollutants, affecting air quality and contributing to climate change

Quiet noise levels, which can disturb surrounding areas

Decrease overall operation and maintenance expenses as regular upkeep cost is low

Higher overall system efficiency than single energy source system

Satisfy strict environmental regulations, which may limit energy use

Off-grid Solutions

1.An integrated system of existing generator system, renewable energy generation systems (solar, wind, biomass, small hydro, etc.), energy storage system and smart energy management system.
2.Fuctions of load shifting, peak shaving, power backup, and regulation of voltage, frequency and power factor.
3.Intelligent management and automatic control of the whole system.

Minimize the diesel/petrol consumption of generator system by applying optimized working logics

Reduce harmful pollutants, affecting air quality and contributing to climate change

Quiet noise levels, which can disturb surrounding areas

Decrease overall operation and maintenance expenses as regular upkeep cost is low

Higher overall system efficiency than single energy source system

Satisfy strict environmental regulations, which may limit energy use

Solar Energy Storage Battery Solution

1.An integrated system of Grid, Diesel Generators, EV Chargers, renewable energy generation systems (solar, wind, biomass, small hydro, etc.), energy storage system and smart energy management system.
2.Fuctions of load shifting, peak shaving, power backup, seamless Switching and regulation of voltage, frequency and power factor.
3.Intelligent management and automatic control of the whole system.

Ensure the technical and economic feasibility of whole integrated system by applying optimized working logics

Energy storage system to meet the balance between renewable energy and load

Maximize the penetration of the renewable energy sources

Enhance the stability of the power supply and optional smart UPS function to switch the power from grid to ESS seamlessly in case of blackout

Decrease overall operation and maintenance expenses as regular upkeep cost is low

Satisfy strict environmental regulations, which may limit energy use

Photovoltaic+Energy Storage Solutions

Industrial And Commercial Photovoltaic Roofs

Photovoltaic Carport

Photovoltaic Self-built Houses

Photovoltaic Rural Housing

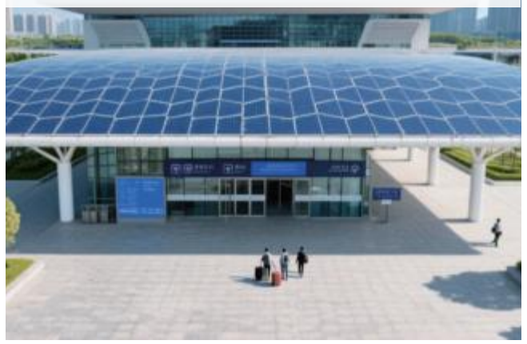
Complementation

Integrated Solution For Optical Storage And Charging

Service

Community

Railway Station



Parking Lot

Passenge Station

Taxi Parking

Consumption Of Green Electricity

Storing solar energy increases the use of green electricity

Fast Start-Up

Modular design, flexible deployment, remote monitoring, and convenient o&m

Emergency Electrioty

Quick access to backup power supply to ensure stable charging

Increase Revenue

Peak shawing and valley filling, peak-to-valley arbitrage

Dynamic Capacity Increase

Increase your business's electricity consumption and reduce the burden on the grid

High Level Of Security

Uthilim iron phosphate cells have hkgh safety and long service life

Smart EMS System

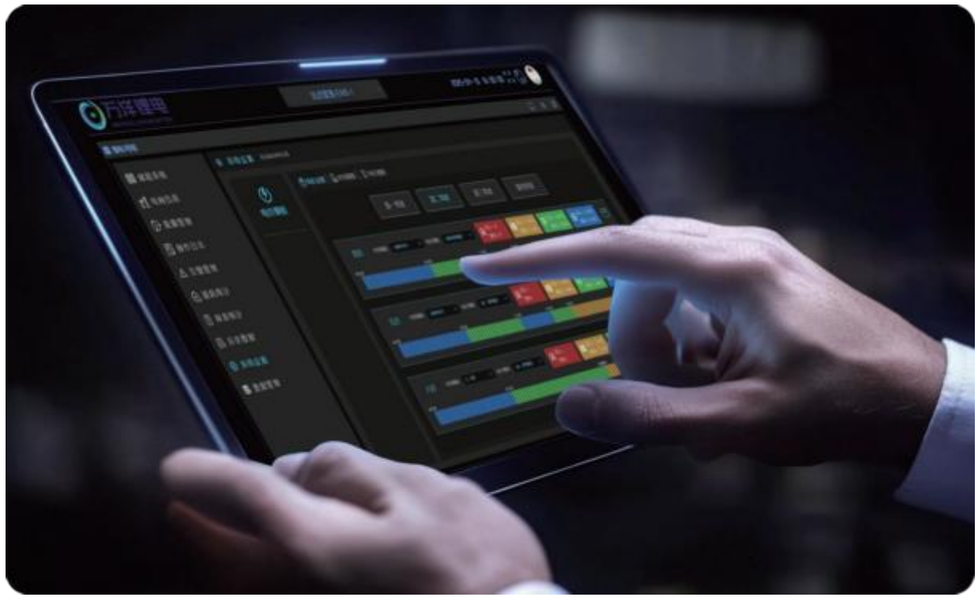
The EMS system improves energy usage efficiency, reduces costs, and ensures system stability and safety through advanced monitoring and control functions.

Key Functions:

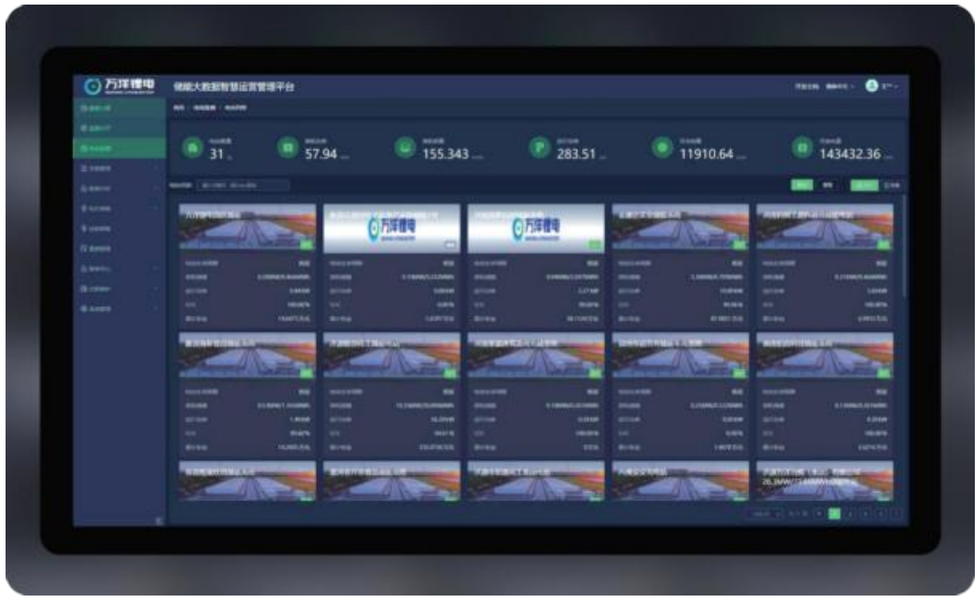
- Real-time monitoring
- Energy efficiency optimization
- Energy storage management
- Safety and alarms
- Remote control

Wanyang lithium batter industrial and commercial energy storage system is mainly used for peak shaving and valley filling, dynamic capacity increase, emergency power supply, etc., and at the sam time realizes peak and valley arbitrage, flat and valley charging, and peak discharge; use the charging and discharging characteristics of energy storage systems to maximize the utilization rate of new energy and adjust the energy structure to improve energy utilization.

It adopts the intelligent energy management system ems and the cloud data management platform, which has functions such as energy storage system operation data collection and analysis, centralized monitoring, real-time control, and intelligent operation and maintenance, and intelligently and automatically manages the charging and discharging parameters of the daily energy storage system to ensure the safe, stable and efficient operation of the system.



Energy storage big data platform - electricity price template



Energy storage big data platform - operations management platform

3U LOW VOLTAGE ACCUMULATION

Low-voltage stackable lithium batteries provide safe, modular energy storage. Featuring a compact design and plug-and-play installation, they integrate seamlessly with solar systems and inverters. Built with advanced Li-ion cells and robust Battery Management Systems (BMS), they ensure long cycle life, high effi ciency, and multiple safety protections. Ideal for residential solar storage, backup power, and off -grid applications. Enjoy reliable, passive-safe, and easily expandable power.

Wide temperature range.

Model	WY-51.2V-100Ah(3U)	WY-51.2V-200Ah(3U)
Nominal Voltage	51.2V	51.2V
Nominal Capacity	100Ah	200Ah
Nominal Energy	5.12kWh	10.24kWh
Cell Type	3.2V100Ah	3.2V200Ah
Configuration	16-1P	16-1P
Overvoltage Protection	57.6V	57.6V
Undervoltage Protection	43.2V	43.2V
Recommend Charge Current	50A	100A
Max. Discharge Current	100A	200A
L*W*H(mm)	442*420*133.5	442*745*133.5
Weight(KG)	40kg	82kg
Modules Connection	Maximum 16 in Parallel	
BMS Communication	RS485,CAN	
Design Life	15 Years	
Cycle Life	⩾6000 Cycles	
Charging Efficiency	⩾98%	
Electricity Charged in the Shipped Product	30%-50% SOC	
Charging Temperature	0°C~55°C	
Discharging Temperature	-10°C~55°C	
Storage Temperature	-20~65°C	

3U HIGH-VOLTAGE RACK BATTERY

High-Voltage Stacked Li-ion Energy Storage Battery delivers exceptional power density and scalability for demanding energy storage applications. Utilizing advanced lithium-ion technology in a unique high-voltage stacking architecture, our solution achieves superior efficiency (up to 1000V) and reduced system complexity.
Quick installation, standard 19 inch embedded design module, comfortable installation and maintenance.

Flexible configuration.
The entire module is non-toxic, pollution-free, and environmentally friendly.

Model	WY-102.4V 100Ah(3U)	WY-204.8V 100Ah(3U)	WY-307.2V 100Ah(3U)	WY-409.6V 100Ah(3U)	WY-512V 100Ah(3U)	WY-614.4V 100Ah(3U)	WY-716.8V 100Ah(3U)
Nominal Voltage	102.4V	204.8V	307.2V	409.6V	512V	614.4V	716.8V
Nominal Energy	10.24kWh	20.48kWh	30.72kWh	40.96kWh	51.2kWh	61.44kWh	71.68kWh
Max. Voltage Range	86.4V-114.4V	172.8V-230.4V	259.2V-345.6V	345.6V-460.8V	432V-576V	518.4V-691.2V	604.8V-806.4V
L*W*H(mm)	442*420*587	442*420*934	442*420*1281	442*420*934 442*420*684	442*420*1107.5 442*420*847.5	442*420*1281 442*420*1031	442*420*1454.5 442*420*1204.5
Weight(KG)	100kg	180kg	260kg	340kg	420kg	500kg	540kg
Nominal Capacity	100Ah						
Cycle Life	⩾6000 Cycles						
Design Life	15 Years						
Recommend Charge Current	50A						
Recommend Discharge Current	100A						
Charging Temperature	0~65°C						
Install Altitude	⩽3000m						
Discharging Temperature	-20~65°C						
Relative Humidity	5%~90%, No condensation						

Model	WY-102.4V 200Ah(3U)	WY-204.8V 200Ah(3U)	WY-307.2V 200Ah(3U)	WY-409.6V 200Ah(3U)	WY-512V 200Ah(3U)	WY-614.4V 200Ah(3U)	WY-716.8V 200Ah(3U)
Nominal Voltage	102.4V	204.8V	307.2V	409.6V	512V	614.4V	716.8V
Nominal Energy	20.48kWh	40.96kWh	61.4kWh	81.9kWh	102.4kWh	122.8kWh	143.36kWh
Max. Voltage Range	86.4V-114.4V	172.8V-230.4V	259.2V-345.6V	345.6V-460.8V	432V-576V	518.4V-691.2V	604.8V-806.4V
L*W*H(mm)	442*745*597	442*745*944	442*745*1291	442*745*944 442*745*694	442*745*1117.5 442*745*967.5	442*745*1291 442*745*1041	442*745*1464.5 442*745*1214.5
Weight(KG)	180kg	340kg	500kg	660kg	820kg	980kg	1140kg
Nominal Capacity	200Ah						
Cycle Life	⩾6000 Cycles						
Design Life	15 Years						
Recommend Charge Current	100A						
Recommend Discharge Current	200A						
Charging Temperature	0~65°C						
Install Altitude	⩽3000m						
Discharging Temperature	-20~65°C						
Relative Humidity	5%~90%, No condensation						

5U HIGH VOLTAGE RACK BATTERY

High-Voltage Stacked Li-ion Energy Storage Battery delivers exceptional power density and scalability for demanding energy storage applications. Utilizing advanced lithium-ion techno-logy in a unique high-voltage stacking architecture, our solution achieves superior effi ciency (up to 1000V) and reduced system complexity.
Working temperature range is from -20℃ to 55°C, with excellent discharge performance and cycle life.

Economical and safe mode operation can make the whole machine more efficient than 98%.

★ This shell is compatible with 51.2V280Ah/51.2V314Ah.

Model	WY-96V 280Ah (5U)	WY-192V 280Ah (5U)	WY-288V 280Ah (5U)	WY-384V 280Ah (5U)	WY-480V 280Ah (5U)	WY-576V 280Ah (5U)
Nominal Voltage	96V	192V	288V	384V	480V	576V
Nominal Energy	26.8kWh	53.6kWh	80.4kWh	107.2kWh	134kWh	161kWh
Max. Voltage Range	81V-108V	162V-216V	243V-324V	324V-432V	405V-540V	486V-648V
L*W*H(mm)	442*750*222	442*750*774	442*750*774	442*750*774	442*750*774	442*750*774
Weight(KG)	102.5kg	244kg	456kg	536kg	886kg	1306kg
Nominal Capacity	280Ah					
Cycle Life	⩾6000 cycles					
Design Life	15 Years					
Recommend Charge Current	100A					
Charging Temperature	0~65°C					
Recommend Discharge Current	200A					
Discharging Temperature	-20~65°C					
Relative Humidity	5%~90%, No condensation					
Install Altitude	⩽3000m					
Communication	RS485 /CAN					

AI-VES61(All-In-One BESS)

This all-in-one hybrid distributed energy storage module integrates PV, diesel generators, and storage for power supply and charging. It offers 30kW/61kWh capacity with 307.2V battery voltage, 30kW grid-tied output, and ≥98% system efficiency, switching to BESS in 20ms during outages.

The EMS supports 1–6 parallel units up to 366kWh. It includes 2 × 19.2kW MPPT channels, 200A charge/discharge current, and 95% depth of discharge for scalable, reliable energy solutions.

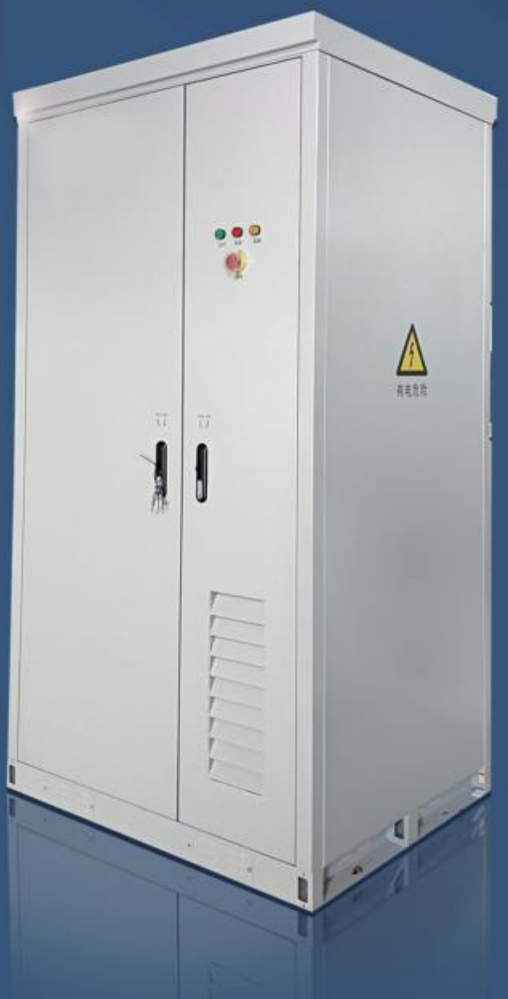
Full scene coverage, multi - scene application, free combination and integrated design, highly integrated, more convenient installation and maintenance.

*Accessories (Optional)		Technical Parameters 30kW/61kWh
AC Side (Grid Tied Scenario)	AC Output Power	30kW
	Max. AC Current	136A
	Nominal AC Voltage / Range	400V/230V
	Nominal Grid Frequency/Range	50Hz/60Hz
	Harmonic(THD)	<3%
	Power Factor at Nominal Power/Adjustable	·-1~1
	Cooling Concept of PCS Chamber	Intelligent forced Air Cooling
	Seamless Switching from Grid to BESS In Case of Power Outage	20ms
AC Side (Microgrid Scenairo)	Nominal AC Voltage	400V/230V
	Harmonic (THD)	<3%(resistive load)
	Nominal Frequency/Range	50Hz (47Hz~52Hz) or 60Hz (57Hz~62Hz)
	Max. AC Power	33kVA
Solar PV Charge (Optional) 850V	Solar PV MPPT (Optional)	19.2kW+19.2kW
	Solar PV DC Regulator (Optional)	200V-800V
Batteries	Nominal Battery Voltage	307.2V
	Battery Type	LiFePO4
	Battery Pack Configuration	51.2V200Ah
	Battery System Configuration	30kW/61kWh
	Capacity	307.2V200Ah
	Battery Voltage Range	268.8V~350.4V
	Max Charging/Discharging Current	200A
	Battery Disconnect	Circuit Breaker
	Cooling concept of battery chamber	Ari Cool
Normal Parameters	Dimension W*D*H	1000*800*2200-subject to actual conditions
	Charge/Discharge Rate	0.5C/1C
	Depth of Discharge	95%
	Life Cycle	3000+
	Degree of Protection	IP54
	System Efficiency	⩾98%
	Fire Protection System	Manual and Automatic Integrated
	Allowed Ambient Temperature	-30°C~55°C
	Allowed Relative Humidity	0%~95%
	Enclosure Corrosion Resistance Level	C5
	Weight	1.14t
	SPD	In⩾20kA(8/20μs)
	Lifting Options	Forklift at the bottom and hoisting at the top
	Scalability	1~6units/SET
Dynamic Intelligent Monitoring System	Display	PC/control interface
	Communication	RS485
	Communication Protocols	Modbus TCP/IP
	Remote Control System	EMS cloud platform

AI-VES107(All-In-One BESS)

This is an AC-coupled distributed energy storage system with a rated battery capacity of 107kWh and a grid-tied output power of 50kW. The system adopts a 1P120S module configuration and features air-cooled heat dissipation with forced air cooling for the converter, ensuring stable operation and high efficiency. With a cycle life of over 6000 times and a protection level of IP20, the system delivers long-term reliability and safety. It supports indoor and outdoor installations (with canopy protection) and operates within a wide ambient temperature range of -20°C to 55°C, providing flexible deployment optins for various application scenarios.

Intelligent charging and discharging management, intelligent early warning, improve system operation, remote maintenance and data strategy upgrade.



Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/280Ah,LFP
	Rated Voltage	384V
	Voltage Range	324~432V
	Rated Power	50kW
	System Capacity	107kWh
	Composition	1P120S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.5C
System Parameters	Ac Side Voltage Rating	400VAC
	Ac Side Wiring Mode	3P+N+PE
	Heat Dissipation Method	Air-Cooled
	Converter Cooling Method	Forced Air Cooling
	ProtectionLevel	IP20
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈1.3T
	Product Dimensions	1200x900x1650mm
Environmental Conditions	Installation Method	Indoor/Outdoor Installation (must be covered by canopies)
	Ambient Temperature	-20°C~55°C
	Humidity Range	0~95%(Non-Condensing)
	Altitude	4000M(⩾2000M Need to be Reduced)

AI-VES129(All-In-One BESS)

- An all-in-one hybrid distributed energy storage module that can connect to both photovoltaics (PV) and diesel generators simultaneously, providing a one-stop solution for photovoltaic energy storage and charging.
- Adopts safe and reliable lithium iron phosphate batteries.

Automatic start-stop and silent mode of diesel engines, easy to install and maintain, and space-saving.

*Accessories (Optional)		Technical Parameters
		50kW/129kWh
AC Side (Grid Tied Scenario)	AC Output Power	50kW
	Max. AC Current	150A
	Nominal AC Voltage / Range	400V/230V
	Nominal Grid Frequency/Range	50Hz/60Hz
	Harmonic(THD)	<3%
	Power Factor at Nominal Power/Adjustable	·-1~1
	Cooling Concept of PCS Chamber	Intelligent forced Air Cooling
	Seamless Switching from Grid to BESS In Case of Power Outage	20ms
AC Side (Microgrid Scenairo)	Nominal AC Voltage	400V/230V
	Harmonic (THD)	<3%(resistive load)
	Nominal Frequency/Range	50Hz (47Hz~52Hz) or 60Hz (57Hz~62Hz)
	Max. AC Power	55kVA
Solar PV Charge (Optional) 850V	Solar PV MPPT (Optional)	38.4kW+38.4kW
	Solar PV DC Regulator (Optional)	200V-800V
Batteries	Nominal Battery Voltage	409.6V
	Battery Type	$LiFePO_4$
	Battery Pack Configuration	51.2V314Ah
	Battery System Configuration	50kW/129kWh
	Capacity	409.6V314Ah
	Battery Voltage Range	358.4V~467.2V
	Max Charging/Discharging Current	200A
	Battery Disconnect	Circuit Breaker
	Cooling concept of battery chamber	Ari Cool
Normal Parameters	Dimension W*D*H	1000*1200*2360-subject to actual conditions
	Charge/Discharge Rate	0.5C/1C
	Depth of Discharge	95%
	Life Cycle	6000+
	Degree of Protection	IP54
	System Efficiency	⩾98%
	Fire Protection System	Manual and Automatic Integrated
	Allowed Ambient Temperature	-30°C~55°C
	Allowed Relative Humidity	0%~95%
	Enclosure Corrosion Resistance Level	C5
	Weight	1.6t
	SPD	In⩾20kA(8/20μs)
	Lifting Options	Forklift at the bottom and hoisting at the top
	Scalability	1~6units/SET
Dynamic Intelligent Monitoring System	Display	PC/control interface
	Communication	RS485
	Communication Protocols	Modbus TCP/IP
	Remote Control System	EMS cloud platform

VES233

- Flexible and Expandable.
- The system adopts an industry-leading liquid cooling solution, thereby maximizing the consistency and reliability of the battery, while enabling convenient installation and flexible distribution of the product.

Real - time monitoring by the big data platform, early warning/co - control for internal short circuit, and early warning/co - control for thermal runaway in advance.

Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/280Ah,LFP
	Rated Voltage	832V
	Voltage Range	650~949V
	Rated Power	105kW
	System Capacity	233kWh
	Composition	1P260S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.5C
System Parameters	Ac Side Voltage Rating	400VAC
	Ac Side Wiring Mode	3P+N+PE
	Heat Dissipation Method	Intelligent Liquid Cooling
	Converter Cooling Method	Forced Air Cooling
	Fire Protection Scheme	Composite Detectors (smoke, temperature, flammable gases); Sound and Light alarms; Package Spraying, Cluster Spraying; Perfluorohexanone Extinguishing Agent; Water Frefighting
	ProtectionLevel	IP54
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈2.7T
	Product Dimensions	1000x1400x2415mm
Environmental Conditions	Installation Method	Indoor/Outdoor Installation
		(tent shelter recommended)
	Ambient Temperature	-20℃~55℃
	Humidity Range	0~95%(Non-Condensing)
	Altitude	3000M(＞3000M Need to be Reduced)

VES241

- Automotive - grade quality research and development, full life cycle operation optimization, efficient operation and maintenance technology, stable and reliable operation of the system.
- It supports dynamic switching of energy control strategies, and can realize functions such as valley filling, dynamic capacity increase, demand control, etc.

Real - time monitoring of combustible gas and circulation, suppression of inter-cluster circulation, and outdoor emergency power outage.

		Technical Parameters
		241kWh
Batteries	Nominal Battery Voltage	768V
	Battery Type	$LiFePO_4$
	Battery Pack Configuration	76.8V314Ah
	Battery System Configuration	125kW/241kWh
	Capacity	314Ah
	Battery Voltage Range	672V~876V
	Max Charging / Discharging Current	200A
	Battery Disconnect	Circuit Breaker
	Cooling Concept of Battery Chamber	Air Cool
Normal Parameters	Dimension (WDH)	1300*1200*2400
	Charge/Discharge Rate	0.5C/0.5C
	Depth of Discharge	⩾95%
	Life Cycle	8000+
	Degree of Protection	IP54
	System Efficiency	98%
	Cooling Liquid	Air Cool
	Fire Protection System	Manual and Automatic Integrated
	Allowed Ambient Temperature	-30°C~55°C
	Allowed Relative Humidity	0%~95%
	Enclosure Corrosion Resistance Level	C5
	Weight	2.5T
	SPD	In⩾20kA(8/20μs)
	Lifting Options	Forklift at the bottom and hoisting at the top
	Scalability	1~5units/SET
	Accessories (Optional)	100kW MPPT
		200kVA STS
		125kVA transformer
Dynamic Intelligent Monitoring System	Communication	RS485
	Communication Protocols	Modbus TCP/IP
	Remote Control System	EMS cloud platform

VES261

- Multi - Scenario applications, such as: shopping malls, entertainment, etc., 0.5C free combination of integrated design is highly integrated, and installation and maintenance are more convenient.
- By extending the service life of the energy storage system, the system improves the return on investment (ROI).

It can operate normally in extreme climates, with an operating temperature range of -20 to 55°C, stable input and output power, and intelligent early warning function.

		Technical Parameters
		261kWh
Batteries	Nominal Battery Voltage	832V
	Battery Type	$LiFePO_4$
	Battery Pack Configuration	166.4V314Ah
	Battery System Configuration	125kW/261kWh
	Capacity	314Ah
	Battery Voltage Range	728V~949V
	Max Charging / Discharging Current	200A
	Battery Disconnect	Circuit Breaker
	Cooling Concept of Battery Chamber	Liquid Cool
Normal Parameters	Dimension (WDH)	1300*1200*2400
	Charge/Discharge Rate	0.5C/0.5C
	Depth of Discharge	⩾95%
	Life Cycle	8000C
	Degree of Protection	IP54
	System Efficiency	98%
	Cooling Liquid	Propylene Glycol Water-based Coolant
	Fire Protection System	Manual and Automatic Integrated
	Allowed Ambient Temperature	-30°C~55°C
	Allowed Relative Humidity	0%~95%
	Enclosure Corrosion Resistance Level	C5
	Weight	2.7T
	SPD	In⩾20kA(8/20μs)
	Lifting Options	Forklift at the bottom and hoisting at the top
	Scalability	1~5units/SET
	Accessories (Optional)	100kW MPPT
		200kVA STS
		125kVA transformer
Dynamic Intelligent Monitoring System	Communication	RS485
	Communication Protocols	Modbus TCP/IP
	Remote Control System	PC/control interface

VES418

- Multiple module cabinets are connected in parallel with cluster control, and the capacity can be flexibly adjusted.
- Precise gas and submerged water fire extinguishing system, with one cabinet corresponding to one battery rack to enhance system availability.

Minimum operation and maintenance (O&M) costs, multi-scenario intelligent strategies, integrated cloud-edge design, mobile monitoring, and unattended operation.

Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/314Ah,LFP
	Rated Voltage	1331.2V
	Voltage Range	1040~1518.4V
	Rated Power	210kW
	System Capacity	418kWh
	Composition	1P416S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.5C
System Parameters	Ac Side Voltage Rating	400VAC
	Ac Side Wiring Mode	3P+N+PE
	Heat Dissipation Method	Intelligent Liquid Cooling
	Converter Cooling Method	Forced Air Cooling
	Fire Protection Scheme	Composite Detectors (smoke, temperature, flammable gases); Sound and Light alarms; Package Spraying, Cluster Spraying; Perfluorohexanone Extinguishing Agent; Water Frefighting
	ProtectionLevel	IP54
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈4.2T
	Product Dimensions	1350x1400x2400mm
Environmental Conditions	Installation Method	Indoor/Outdoor Installation
		(tent shelter recommended)
	Ambient Temperature	-20℃~55℃
	Humidity Range	0~95%(Non-Condensing)
	Altitude	3000M(＞3000M Need to be Reduced)

VES522

- It provides a sustainable and efficient solution suitable for off-grid or remote areas. Its long-life FP batteries, battery management system (BMS), high-performance power conversion system (PCS), fire protection system, power distribution system, solar DC regulator, solar photovoltaic (PV) MPPT, and thermal management system are integrated into a standard outdoor cabinet.

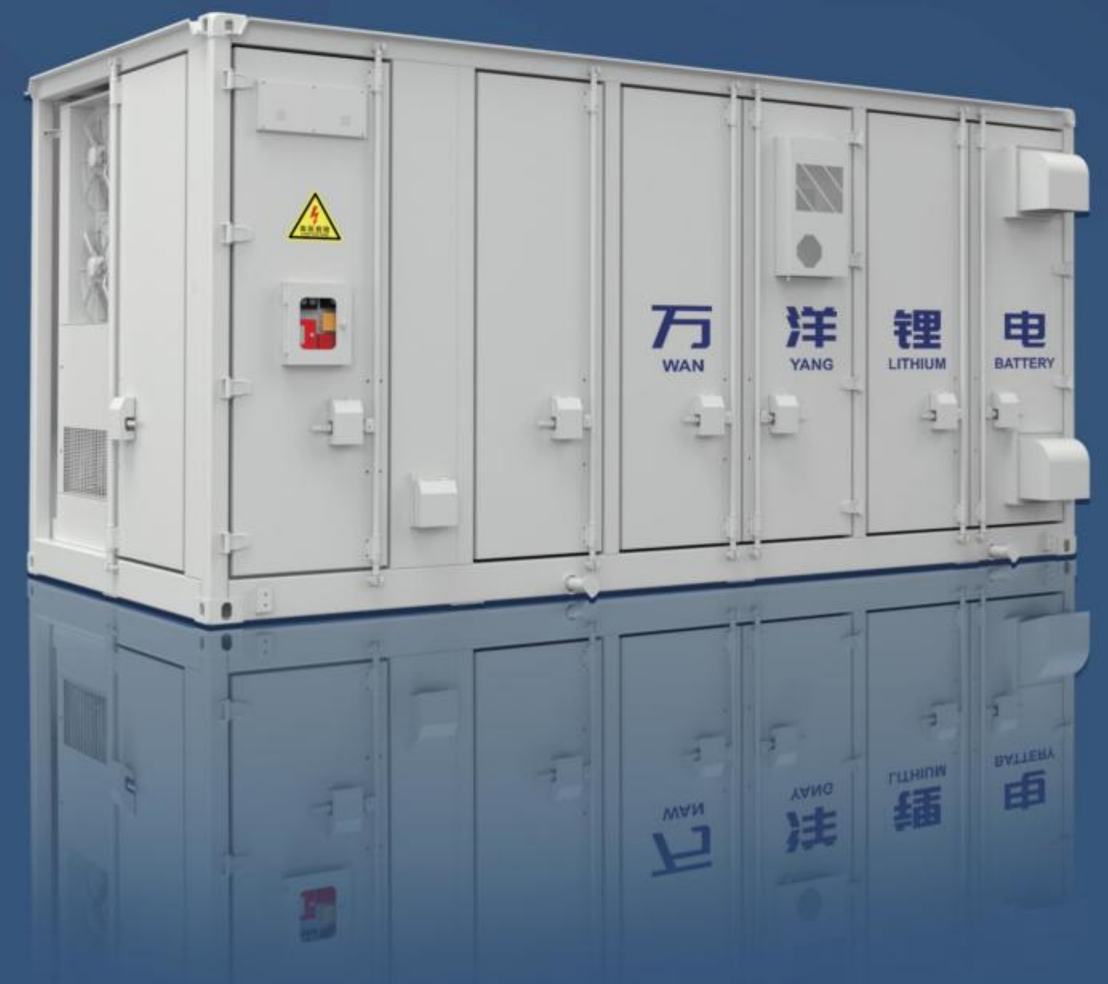
System overview and remote control, battery state of charge (SOC)/current power consumption, etc.; real-time monitoring of the hybrid system anytime and anywhere; it also has a remote control function.

Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/314Ah,LFP
	Rated Voltage	832V
	Voltage Range	650~949V
	Rated Power	250kW
	System Capacity	522kWh
	Composition	2P260S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.5C
System Parameters	Ac Side Voltage Rating	400VAC
	Ac Side Wiring Mode	3P+N+PE
	Heat Dissipation Method	Intelligent Liquid Cooling
	Converter Cooling Method	Forced Air Cooling
	Fire Protection Scheme	Composite Detectors (smoke, temperature, flammable gases); Sound and Light alarms; Package Spraying, Cluster Spraying; Perfluorohexanone Extinguishing Agent; Water Frefighting
	ProtectionLevel	IP54
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈5.4T
	Product Dimensions	1940x1504x2555mm
Environmental Conditions	Installation Method	Indoor/Outdoor Installation (tent shelter recommended)
	Ambient Temperature	-20°C~55°C
	Humidity Range	0~95%(Non-Condensing)
	Altitude	3000M(＞3000M Need to be Reduced)

VES1000

- Using the charging and discharging characteristics of the energy storage system, the utilization rate of new energy can be maximized, the energy structure can be adjusted, and the dependence on traditional energy can be reduced.
- Multi-layer protection,fire and explosion protection.

Large factories ensure safety and stability.
All-day management with intelligent cooling.

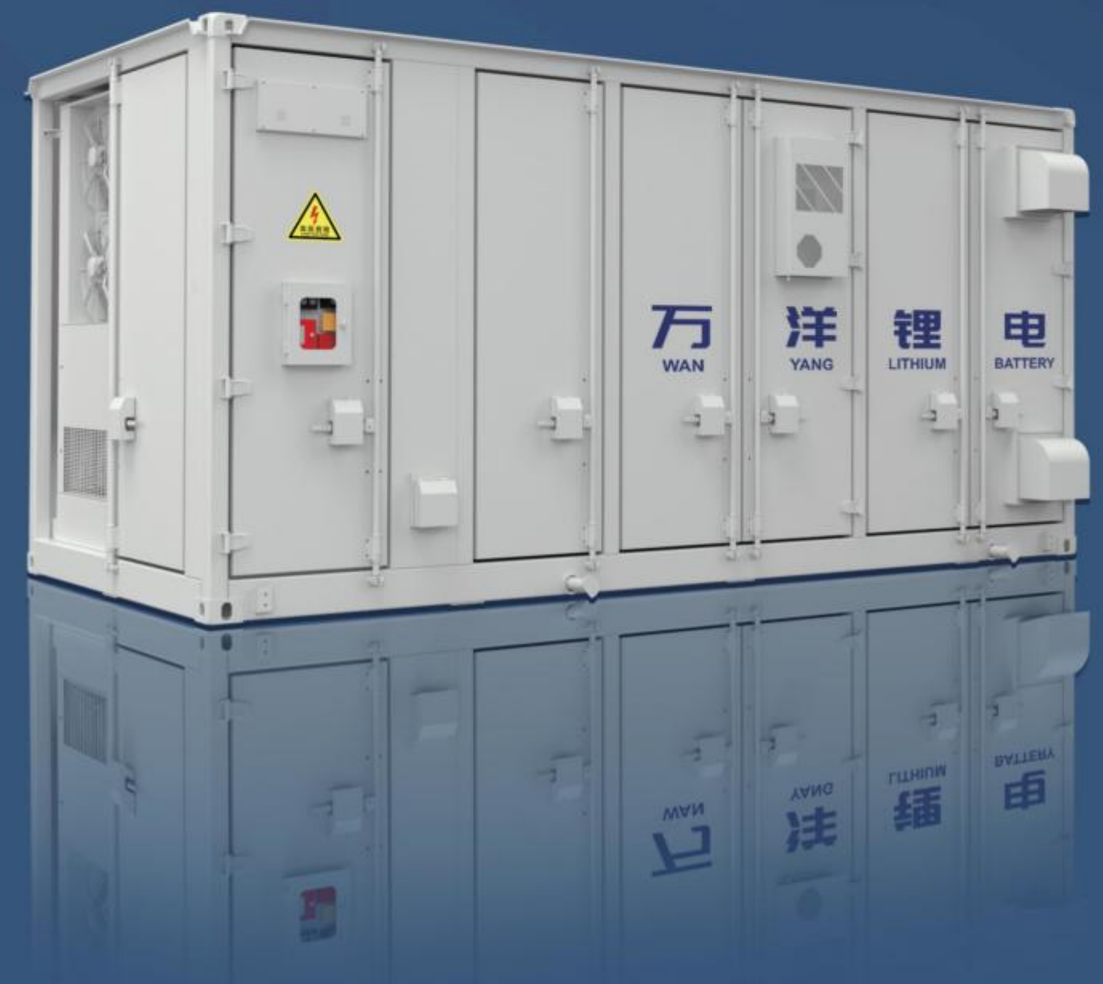


*Accessories (Optional)		Technical Parameters
		HY-H-500kW/1MWh
AC Side (Grid Tied Scenario)	AC Output Power	500kW
	Max. AC Current	1400A
	Nominal AC Voltage / Range	400V
	Nominal Grid Frequency/Range	50Hz/60Hz
	Harmonic(THD)	<3%
	Power Factor at Nominal Power/Adjustable	·-1~1
	Cooling Concept of PCS Chamber	Air Cooling/Liquid Cooling
	Seamless Switching from Grid to BESS In Case of Power Outage	20ms
AC Side (Microgrid Scenairo)	Nominal AC Voltage	400V
	Harmonic (THD)	<3%(resistive load)
	Nominal Frequency/Range	50Hz/60Hz
	Max. AC Power	550kW
Batteries	Nominal Battery Voltage	768V
	Battery Type	$LiFePO_4$
	Battery Pack Configuration	76.8V314Ah
	Battery System Configuration	768V1256Ah
	Capacity	1256Ah
	Battery Voltage Range	672V~876V
	Max Charging/Discharging Current	650A/650A
	Battery Disconnect	Circuit Breaker
	Cooling concept of battery chamber	Air Cool
Normal Parameters	Dimension W*D*H	6058*2438*2896mm
	Charge/Discharge Rate	0.5C/0.5C
	Depth of Discharge	⩾95%
	Life Cycle	8000+
	Degree of Protection	IP54
	System Efficiency	98%
	Fire Protection System	Manual and Automatic Integrated
	Allowed Ambient Temperature	-30°C~55°C
	Allowed Relative Humidity	0%~95%
	Enclosure Corrosion Resistance Level	C5
	Weight	11.8T
	SPD	In⩾20kA(8/20μs)
	Lifting Options	Bottom Lifting
	Scalability	1~4units/SET
	Accessories (Optional)	500kW MPPT 800kVA STS 500kVA transformer
Dynamic Intelligent Monitoring System	Display	PC/control interface
	Communication	RS485
	Communication Protocols	Modbus TCP/IP
	Remote Control System	EMS cloud platform

VES2000

- It is mainly used for peak shaving and valley filling, dynamic capacity increase, emergency power supply, etc.
- Ancillary materials,triple protection respond quickly.
- BMS， real-time monitoring and intelligent O&M.

PCS,charging and discharging in one flexible and fast.
EMS,intelligent management and early warning.

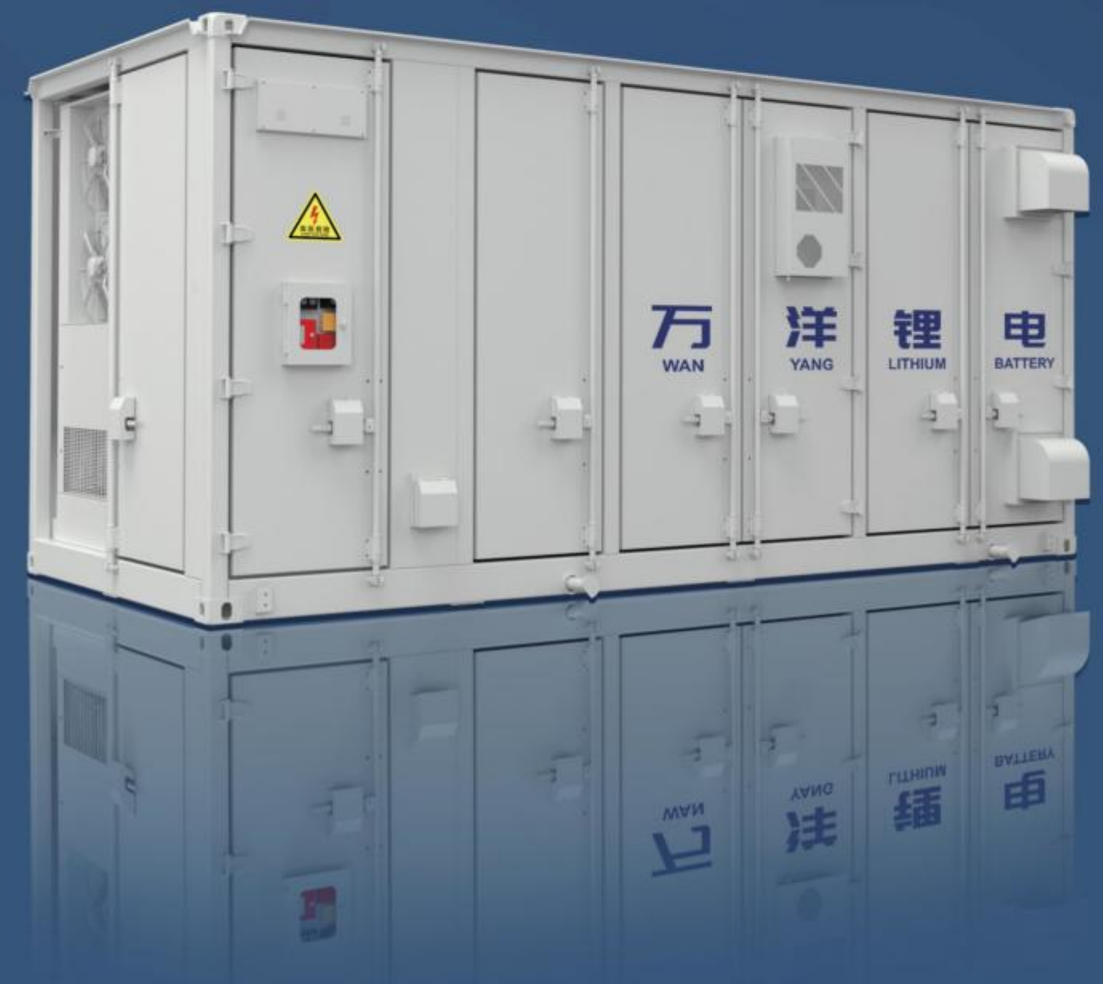


*Accessories (Optional)		Technical Parameters
		HY-H-875kW/2MWh
AC Side (Grid Tied Scenario)	AC Output Power	875kW
	Max. AC Current	2600A
	Nominal AC Voltage / Range	400V
	Nominal Grid Frequency/Range	50Hz/60Hz
	Harmonic(THD)	<3%
	Power Factor at Nominal Power/Adjustable	·-1~1
	Cooling Concept of PCS Chamber	Air Cooling/Liquid Cooling
	Seamless Switching from Grid to BESS In Case of Power Outage	3min
AC Side (Microgrid Scenairo)	Nominal AC Voltage	400V
	Harmonic (THD)	<3%(resistive load)
	Nominal Frequency/Range	50Hz/60Hz
	Max. AC Power	960kW
Batteries	Nominal Battery Voltage	768V
	Battery Type	$LiFePO_4$
	Battery Pack Configuration	76.8V314Ah
	Battery System Configuration	768V2512Ah
	Capacity	2512Ah
	Battery Voltage Range	672V~876V
	Max Charging/Discharging Current	1300A/1300A
	Battery Disconnect	Circuit Breaker
	Cooling concept of battery chamber	Air Cool
Normal Parameters	Dimension W*D*H	6058*2438*2896mm
	Charge/Discharge Rate	0.5C/0.5C
	Depth of Discharge	⩾95%
	Life Cycle	8000+
	Degree of Protection	IP54
	System Efficiency	98%
	Fire Protection System	Manual and Automatic Integrated
	Allowed Ambient Temperature	-30°C~55°C
	Allowed Relative Humidity	0%~95%
	Enclosure Corrosion Resistance Level	C5
	Weight	11.8T
	SPD	In⩾20kA(8/20μs)
	Lifting Options	Bottom Lifting
	Scalability	1~4units/SET
	Accessories (Optional)	1MW on-grid inverter
		1.5MW ATS
		1000kVA transformer
Dynamic Intelligent Monitoring System	Display	PC/control interface
	Communication	RS485
	Communication Protocols	Modbus TCP/IP
	Remote Control System	EMS cloud platform

VES3354

- This is a modular, distributed, and integrated device, housed in a container, specifically designed for medium - scale industrial and commercial energy storage needs.
- Primary - level batteries, with system management for each unit; modular solutions ensure the safety and reliability of the BESS.

Reliable and flexible: Supports parallel connection of multiple units; Features flexible on - site layout and is easy to expand over the lifecycle.

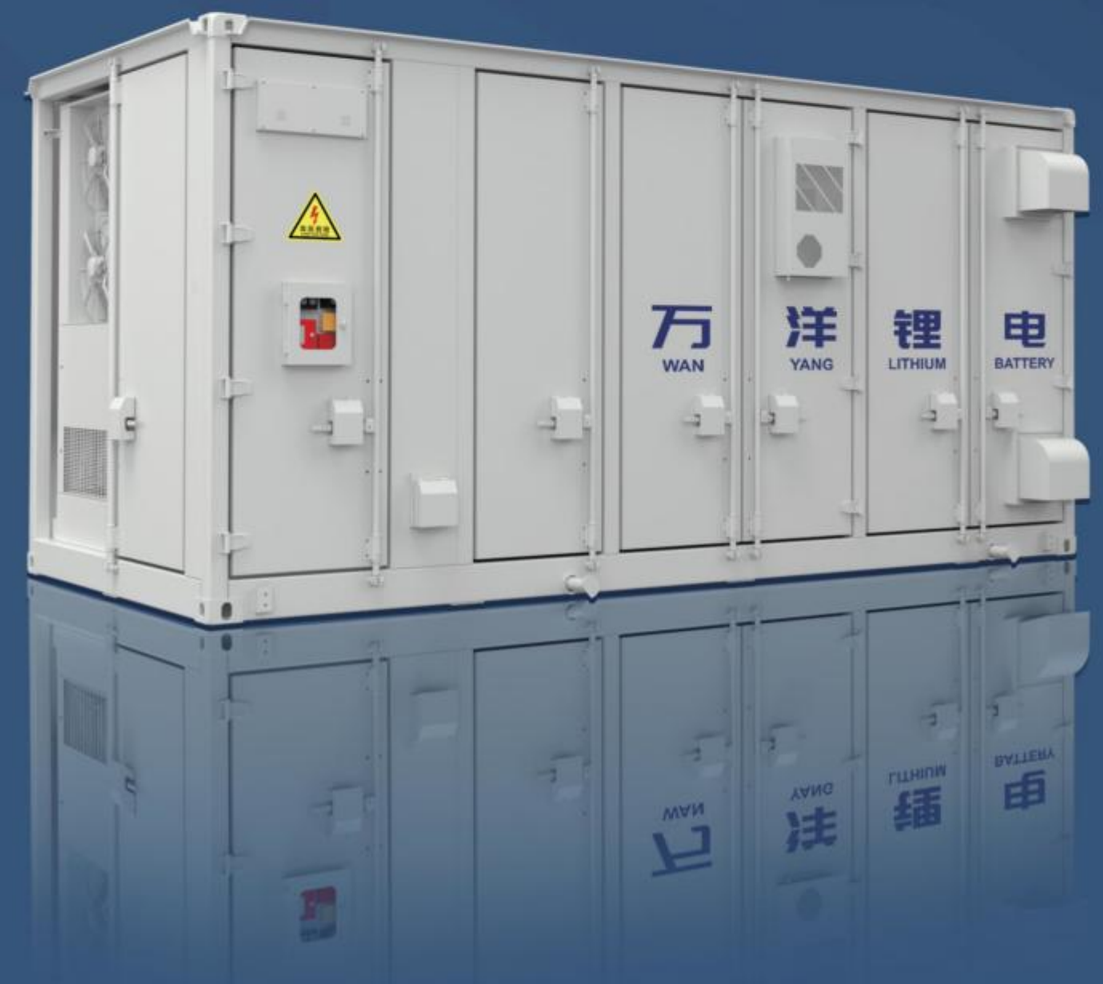


Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/280Ah,LFP
	Rated Voltage	1331.2V
	Voltage Range	1040~1518.4V
	Rated Power	1250kW
	System Capacity	3354kWh
	Composition	9P416S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.33C
System Parameters	Ac Side Voltage Rating	10kVAC
	Ac Side Wiring Mode	Three Phases and Three Lines
	Heat Dissipation Method	Intelligent Liquid Cooling
	Converter Cooling Method	Forced Air Cooling
	Fire Protection Scheme	Composite detector in the package (smoke, temperature, combustible gas); cabin - level combustible gas detectors; smoke sensors, temperature sensors, sound and light alarms; package spraying, cluster spraying; perfluorohexanone extinguishing agent; water firefighting
	ProtectionLevel	IP54
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈35T
	Product Dimensions	6058x2600x2896mm
Environmental Conditions	Installation Method	Outdoor Installation
	Ambient Temperature	-20℃~55℃
	Humidity Range	0~95%(Non-Condensing)
	Altitude	2000M

VES3762

- It integrates a variety of new technologies such as automation, internet of things, and new energy, to achieve multi - scenario adaptability, optimizes the power supply structure, saves electricity costs for users, and improves power supply reliability and power supply quality.

Battery state of charge (SOC)/current power consumption, etc.; enables real-time monitoring of the hybrid system anytime and anywhere; it also features a remote control function.

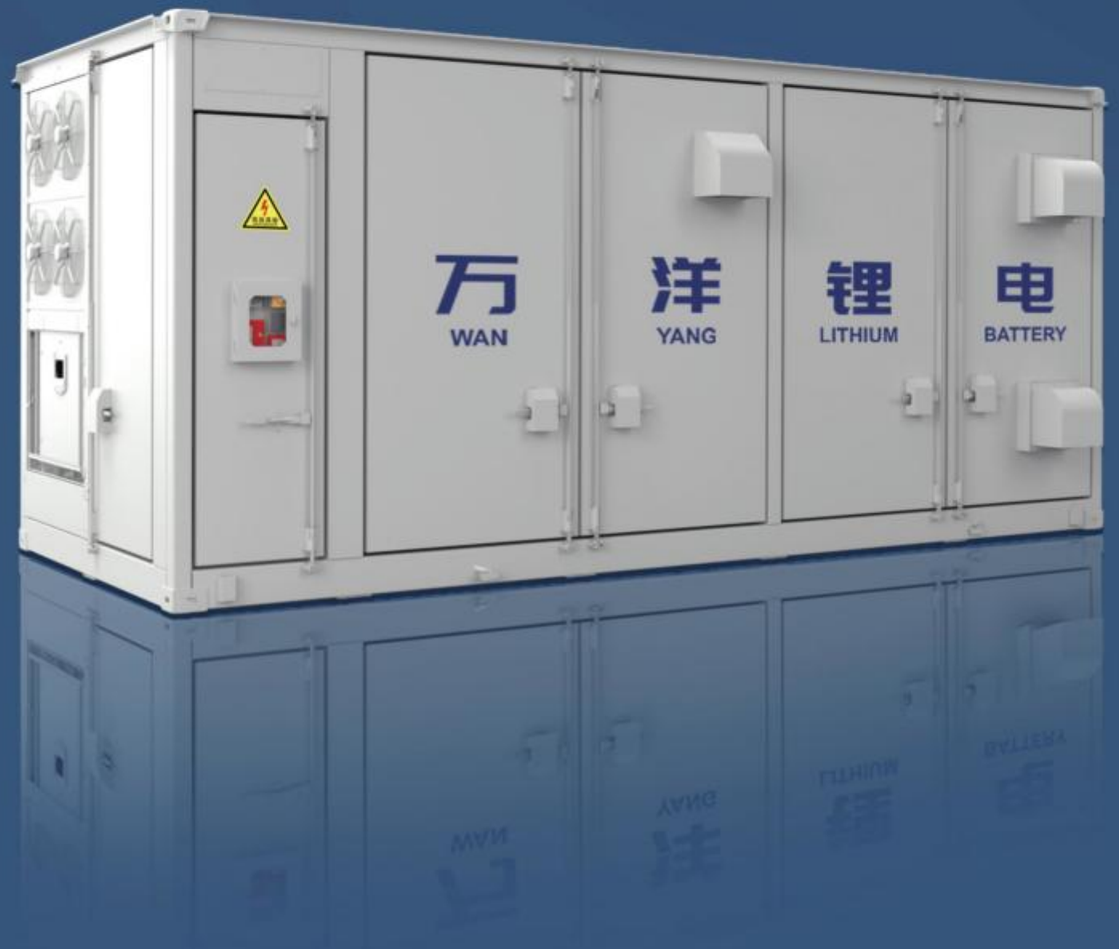


Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/314Ah,LFP
	Rated Voltage	1331.2V
	Voltage Range	1040~1518.4V
	Rated Power	1250kW
	System Capacity	3762kWh
	Composition	9P416S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.33C
System Parameters	Ac Side Voltage Rating	10kVAC
	Ac Side Wiring Mode	Three Phases and Three Lines
	Heat Dissipation Method	Intelligent Liquid Cooling
	Converter Cooling Method	Forced Air Cooling
	Fire Protection Scheme	Composite detector in the package (smoke, temperature, combustible gas); cabin - level combustible gas detectors; smoke sensors, temperature sensors, sound and light alarms; package spraying, cluster spraying; perfluorohexanone extinguishing agent; water firefighting
	ProtectionLevel	IP54
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈34T
	Product Dimensions	6058x2600x2896mm
Environmental Conditions	Installation Method	Outdoor Installation
	Ambient Temperature	-20℃~55℃
	Humidity Range	0~95%(Non-Condensing)
	Altitude	2000M

VES5016

- Long-life LFP batteries, battery management system (BMS), high-performance power conversion system (PCS), fire protection system, power distribution system, and thermal management system are integrated into a standard outdoor container.
- Fire protection system,fast and efficient early warning.

It is mainly used for peak shaving and valley filling, dynamic capacity increase, emergency power supply, etc.



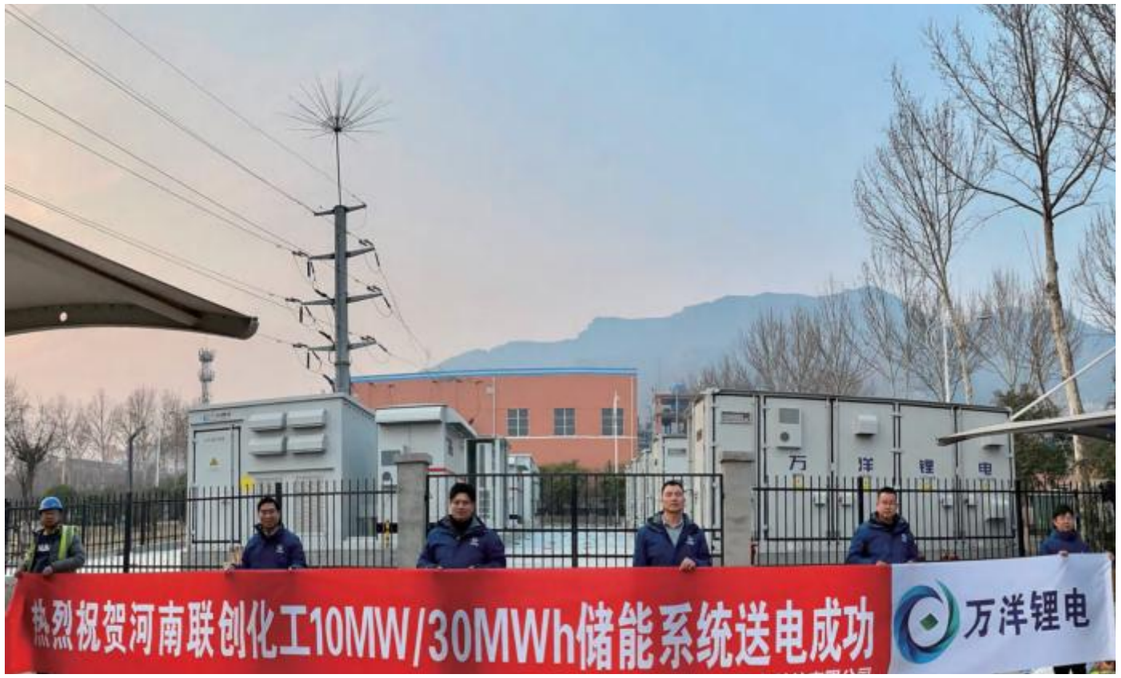
Project	Features	Parameter
Battery Parameters	Cell Type	3.2V/314Ah,LFP
	Rated Voltage	1331.2V
	Voltage Range	1040~1518.4V
	Rated Power	2500kW
	System Capacity	5016kWh
	Composition	12P416S
	Rated Frequency	50Hz
	Charge-Discharge Rate	0.5C
System Parameters	Ac Side Voltage Rating	10kVAC
	Ac Side Wiring Mode	Three Phases and Three Lines
	Heat Dissipation Method	Intelligent Liquid Cooling
	Converter Cooling Method	Forced Air Cooling
	Fire Protection Scheme	Composite detector in the package (smoke, temperature, combustible gas); cabin - level combustible gas detectors; smoke sensors, temperature sensors, sound and light alarms; package spraying, cluster spraying; perfluorohexanone extinguishing agent; water firefighting
	ProtectionLevel	IP54
	System Communication Mode	CAN，RS485，ETHERNET，4G
	Cycle Life	⩾6000 Times
	Product Weight	≈44T
	Product Dimensions	6500x2700x2950mm
Environmental Conditions	Installation Method	Outdoor Installation
	Ambient Temperature	-20℃~55℃
	Humidity Range	0~95%(Non-Condensing)
	Altitude	2000M

Project Case

Henan Jiyuan 30MEH Energy Storage Project

Owner: Lianchuang Chemical
Country: Jiyuan, Henan
Project attributes: Energy storage, energy management system
BESS Capacity: 30MWh
Product features: New liquid cooling solution
Intelligent fire pressure relief system, multi-level design of strategic linkage;A single cluster is equipped with an independent intelligent temperature controlarchitecture, which controls the temperature difference between clusters by < 5 degrees.



Project Case

Henan Gongyi 19MWH Energy Storage Project

Owner: Foshan Aluminum
Country: Gongyi, Henan
Project attributes: Energy storage, energy management system
BESS Capacity: 19MWh
Product features: New liquid cooling solution
Intelligent fire pressure relief system, multi-level design of strategic linkage;A single cluster is equippe with an independent intelligent temperature controlarchitecture, which controls the temperature difference between clusters by < 3 degrees.



Henan Jiyuan 6.7MWH energy storage project

Owner: Jinkangda Industrial
Country: Jiyuan, Henan
Project attributes: Energy storage, energy management system
BESS Capacity: 6.7MWh
Product features: New liquid cooling solution
Intelligent fire pressure relief system, multi-level design of strategic linkage;A single cluster is equippe with an independent intelligent temperature controlarchitecture, which controls the temperature difference between clusters by < 5 degrees.


Project Case

Henan Jiyuan 2MWH Energy Storage Project

Owner: Cathay Pacific Platinum
Country: Jiyuan, Henan
Project attributes: Energy storage, energy management system
BESS Capacity: 2MWh
Product features: New liquid cooling solution
Intelligent fire pressure relief system, multi-level design of strategic linkage;A single cluster is equipped with an independent intelligent temperature controlarchitecture, which controls the temperature difference between clusters by < 3 degrees.

Project Case

6.4MWh Energy Storage Project In Chad, Africa

Owner: African business owners
Country: Africa
Project attributes: Energy storage, energy management system
BESS Capacity: 6.4MWh
Product features: New liquid cooling solution
Intelligent fire pressure relief system, multi-level design of strategic linkage;A single cluster is equippe with an independent intelligent temperature controlarchitecture, which controls the temperature difference between clusters by < 5 degrees.