UNLEASH INNOVATION POTENTIALS
CREATE ENDLESS POSSIBILITIES

HEXON ESS

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Hexon

COMPANY PROFILE

HEXON ENERGY
Your Turnkey Storage-Centric Solution Provider

HEXON ENERGY CO. LTD is a leading provider of energy storage systems and solutions. The company is dedicated to delivering safe, reliable, and high-performance battery energy storage systems (BESS) through technological innovation. Hexon Energy International (HK) Limited is the global investment center of the group.

Hexon Energy specializes in the global development of advanced products, technologies, and integrated services. It has established 3 major service and manufacturing hubs:
Guangzhou : R&D and production base for industrial, commercial, and residential BESS.
Lianyungang : Large-scale manufacturing center for utility-scale energy storage systems.
Bordeaux, France : The European operations headquarters, incorporating an after-sales and technical service center.

Hexon Energy has delivered over **3 GWh** of BESS across more than 60 projects, all of which comply with ISO-certified quality management systems. Looking ahead, Hexon Energy continues to strengthen its core competencies through independent innovation, contributing to the global transition towards a low-carbon future. Leveraging industry-leading user-side BESS solutions, the company aims to support the transformation of global energy infrastructure through technology-driven development.

Guangzhou

Lianyungang

HongKong

Bordeaux, France

SERVICE CAPABILITY

TECHNICAL STRENGTH

PV and BESS Power Plant Design

We have rich experience in the design of PV and BESS power plants and is able to develop optimal design solutions according to customer needs and project characteristics.
We adopt advanced design concepts and technical tools to ensure the efficient operation of PV power plants and long-term stable power generation.

Construction Capacity

With professional construction team and advanced construction equipment, we have strong construction capacity.
During the construction of the project, we strictly control the quality to ensure that the construction progress and project quality meet the requirements.

O&M Capability

It has established a perfect operation and maintenance management system, equipped with professional operation and maintenance personnel and advanced operation and maintenance equipment.
Through the intelligent management system, it realises real-time monitoring and data analysis of PV power stations, finds and solves problems in time, and guarantees stable operation of power stations.




FINANCE AND SUPPLY CHAIN CAPACITY

Financial Strength

The company is well-funded, with a registered capital of RMB 45 million, and is able to provide adequate financial support for the project.

Supply Chain

We have established a perfect supply chain management system, and have established long-term and stable cooperative relationships with many high-quality suppliers.

Cost Control

Focus on cost control and reduce procurement costs, construction costs and operation and maintenance costs through refined management.

ENTERPRISE QUALIFICATION

National High-tech Enterprise

National Science and Technology-based Small and Medium Enterprise

Grade II & III Power Engineering General Contractor

Grade IV Power Installation, Maintenance & Testing License

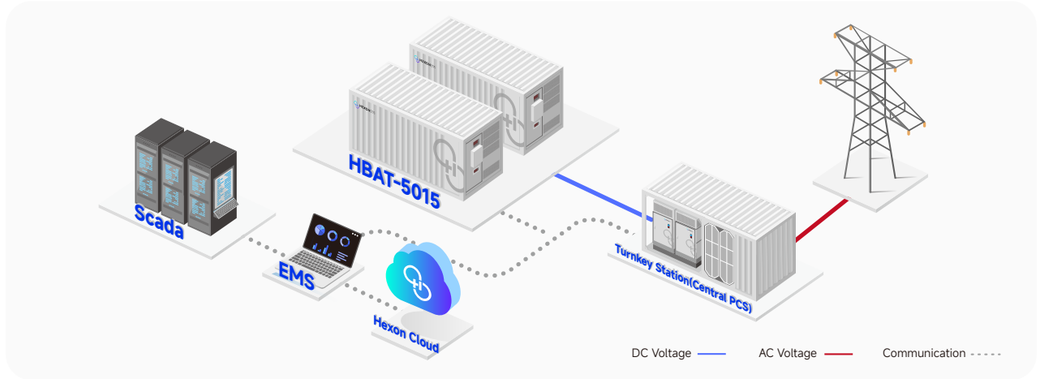
Grade III/Foundation Engineering Specialist Contractor

Grade III Mechanical & Electrical Installation Specialist Contractor

TOTAL SOLUTION

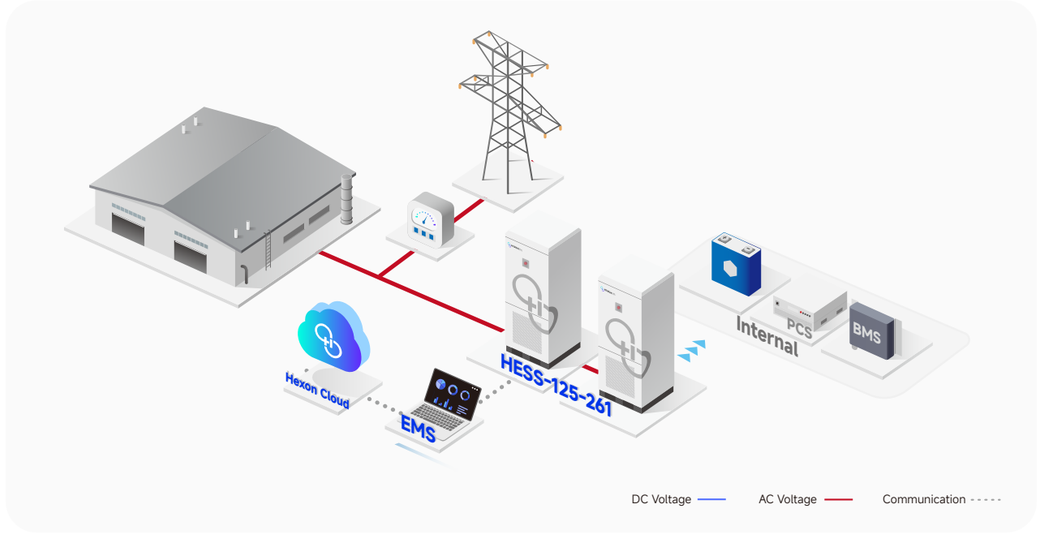
Large-Scale Ground-Mounted ESS Solution (FCR, aFRR)

Our system features fully liquid-cooled thermal management and is directly integrated into the high-voltage AC side. It provides millisecond-level precision response, participating in grid frequency regulation to enhance power quality and improve grid supply stability.



Commercial and Industrial Energy Storage Solution

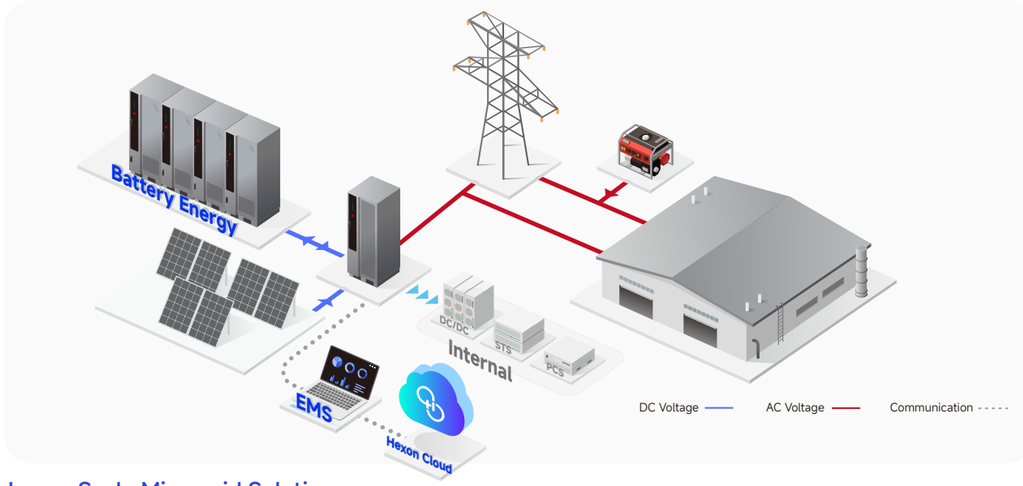
For commercial and industrial facilities with high power demand, our energy storage systems enable optimized energy management, which reduces electricity costs and increases capacity. In the event of a grid failure, the system provides backup power to ensure continuous operation of critical loads.



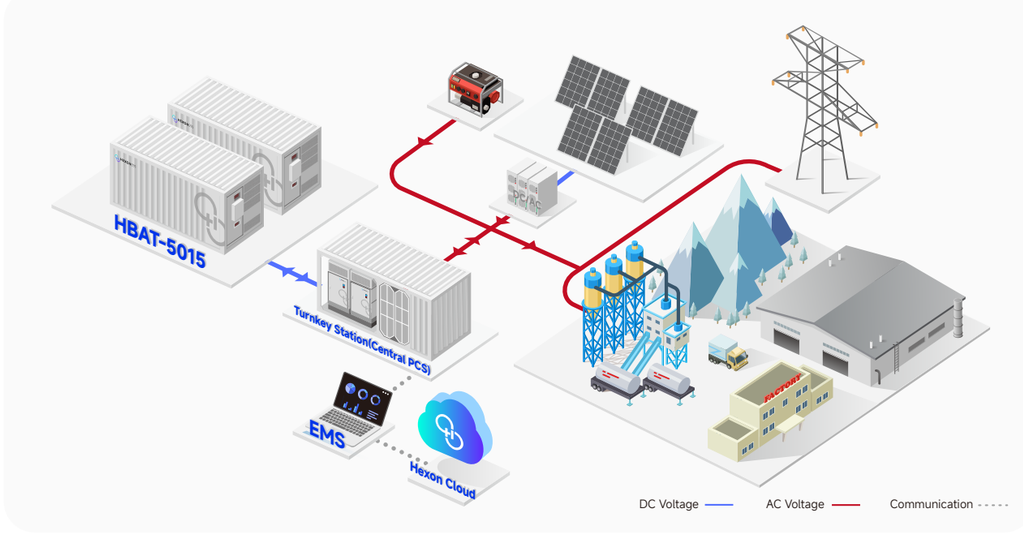
Multi-Energy Integration Solution for Microgrids

In complementary power supply systems that incorporate multiple energy sources—such as solar, diesel generators, and the grid—integrated energy storage serves as the cornerstone of microgrids. It balances power output and ensures stable system operation. These solutions are ideal for remote locations like mines, islands, and mountainous areas, or any region with an unstable power supply. They are equally effective for optimizing energy use in new zero-carbon campuses.

Small-Scale Microgrid Solution



Large-Scale Microgrid Solution



PRODUCT INTRODUCTION

HEMERA

Containerized Liquid Cooling Battery System

HBAT-5015/4180/3762/3344-15 (5015/4180/3762/3344kWh)

- **Turnkey Battery Energy Storage System**
  String PCS Skid +Battery Container+ EMS 1MW/2MWh ~ 5MW/10MWh(Customized)

Comprehensive Safety

- Highly stable LFP battery cells
- Multi-level fire protection and explosion-proof design
- Intelligent monitoring, second-level response

Stable Operation

- Liquid cooling, cell temperature difference < 3°C
- Cluster-level management, eliminating the barrel effect
- Wide voltage adaptation, weak grid support

Ultimate Energy Efficiency

- High energy density, reduced footprint
- DC efficiency ⩾ 94%
- AI strategy for maximizing revenue

Easy Deployment

- Flexible configuration, adaptable to multiple scenarios
- Plug and play, deployment cycle shortened by 40%
- Cloud-based O&M, efficiency improved by 50%

Model	HBAT-5015-15	HBAT-4180-15	HBAT-3762-15	HBAT-3344-15
Container Specs	20ft			
Cell Capacity	314Ah			
Module Model	LFP314-1P104S			
Number of Modules	48 (12 clusters×4)	40 (10 clustersx4)	36(9 clustersx4)	32(8 clustersx4)
Configuration	12P416S	10P416S	9P416S	8P416S
Cooling Method	Liquid Cooling			
Coolant	50 % Water / 50 % Glycol			
Operating Altitude	⩽3000m			
Humidity	⩽95%RH, non-condensing			
Communication	Ethernet&CAN			
Rated Voltage	1,331.2 V			
Operating Voltage	1164.8 -1497.6 V			
Rated Capacity	5.015MWh	4.180MWh	3.762MWh	3.344MWh
Delivery SOC	27 % (25 ±2°C)			
Charge/Discharge Rate	0.5 C			
Charge/Discharge Current	157x12A	157x10A	157x9A	157x8A
Charging Temperature	0~60°C			
Discharging Temperature	-30~60°C			
Storage Temperature	-20~35°C (Recommended)			
Energy Efficiency	⩾ 94 %			
Protection Rating	System IP55 (Pack IP66)			
Corrosion Resistance	C4 (C5 optional)			
Fire Protection Design	Aerosol (Overseas version)			
Dimensions(W*D*H)	6058(W) *2438(D)* 2896 (H) mm (Overseas version)			
Weight	42T	36T	33T	30T

EOS-261

All-in-One C&I Energy Storage System

HESS-125-261 (125kW/261kWh)

Color options available

White Space Gray

Comprehensive Safety

- **Proactive Alert** Cell-level monitoring, early warning
- **Multi-Level Protection** Pack, cluster, cabin isolation
- **Fire & Explosion Prevention** Triple fire protection, vent design

High Efficiency

- **High Conversion** System efficiency ≥87%
- **AI-Powered Scheduling** Optimized energy dispatch
- **Maximized ROI** Peak shaving & other revenue streams

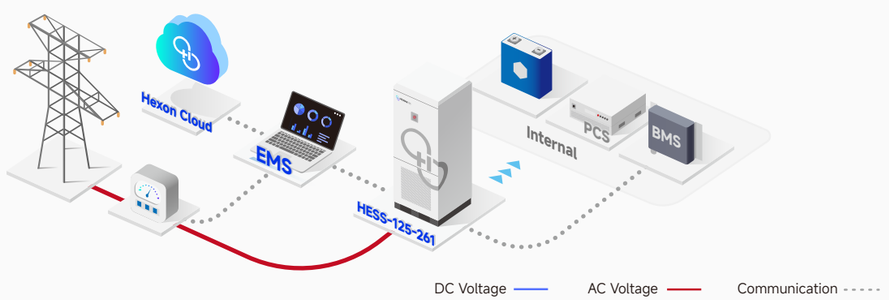
Simple O&M

- **Cloud Diagnosis** Fault identification in seconds
- **Remote Management** Cloud-based monitoring & control
- **24/7 Guardian** Expert team always on watch

Easy Deployment

- **Plug & Play** Pre-installed, powered on arrival
- **Time Saving** Drastically reduces installation time
- **Scalable Design** Modular expansion as needed

System schematic diagram



Model	HESS-125-261
DC side parameters	
Battery capacity	261kWh
System Configuration	1P52S
Battery Pack Configuration	52.25kWh
Cell type	LFP 314Ah
Battery voltage range	728~936V
PACK protection level	IP66
AC side parameters	
AC rated power	125kW
Total current waveform distortion rate	⩽3% (at rated power)
DC component of current	⩽0.5% (at rated power)
Rated grid voltage	400V
Grid voltage deviation	-15%~+15%
AC overload capacity	1.1times long-term
AC wiring method	3P+N+PE
Rated grid frequency	50Hz/60Hz±2.5Hz
Power Factor	0.99/-1～1
AC protection	Circuit breaker + AC lightning protection
System parameters	
Maximum system efficiency	87%
Battery cell cooling method	Liquid Cooling
Remote Monitoring	Cloud Platform
Noise	⩽75dB@1m
Communication interface	Ethernet、RS485
Communication Protocol	MODBUS-TCP/MODBUS-RTU
Maintenance method	Double-sided maintenance
Installation location	Outdoor
Outlet method	Down in and out
Operating temperature range	-25°C~55°C
Maximum operating altitude	3000m
Operating humidity range	5%~95%RH，no condensation
Corrosion resistance level	C3-M(standard)/C4/C5
Protection level	Battery compartment IP55 + electrical compartment IP54
Fire protection system	PACK -level aerosol + cabin-level aerosol + water firefighting (optional)
Product dimensions (W*D*H)	1100(W)*1320(D)*2560(H)mm
Equipment weight	2600kg
Certifications	GB/T 36276，UN38.3，IEC62619，IEC62477，IEC61000

EOS-418

All-in-One C&I Energy Storage System

HESS-215-418 （215kW/418kWh）

Supports AC800V direct coupled photovoltaics without the need for transformers

This product is specifically optimized for photovoltaic-storage integrated applications, enabling direct parallel coupling with AC800V-compatible photovoltaic inverters to achieve transformer-free integration, significantly reducing system costs and losses.

Comprehensive Safety

- **Proactive Alert** Cell-level monitoring, early warning
- **Multi-Level Protection** Pack, cluster, cabin isolation
- **Fire & Explosion Prevention** Triple fire protection, vent design

High Efficiency

- **High Conversion** System efficiency ⩾87%
- **AI-Powered Scheduling** Optimized energy dispatch
- **Maximized ROI** Peak shaving & other revenue streams

Simple O&M

- **Cloud Diagnosis** Fault identification in seconds
- **Remote Management** Cloud-based monitoring & control
- **24/7 Guardian** Expert team always on watch

Easy Deployment

- **Plug & Play** Pre-installed, powered on arrival
- **Time Saving** Drastically reduces installation time
- **Scalable Design** Modular expansion as needed

Peak Shaving

Arbitrage

Backup Power

Grid Services

Model	HESS-215-418
Basic Parameters	
Rated Power	215 kW
Battery Capacity	418 kWh
Product dimensions (W*D* H)	1420 (W)*1350 (D)*2350(H)mm
Weight	3.8 t
DC Side Parameters	
Cell Type	Lithium iron phosphate 3.2 V / 314 Ah
System Pack Configuration	1P52S * 8
Battery Voltage Range	1040 VDC ~ 1518.4 VDC
AC Side Parameters	
Rated output voltage	690/800 (-15% ~ 15%) Vac
Rated mains frequency	50 ~ 60 Hz
Charge-discharge conversion time	<50 ms
System Parameters	
Cycle count	8000 ~ 10000 cycle
Full cabinet energy conversion efficiency	Annual average exceeds 88%, with maximum exceeding 89%
Protection rating	IP66 (battery Pack)/IP54 (equipment compartment)/PCS(IP66)
Operating temperature	-40°C ~ +60°C
Corrosion resistance rating	C4(C5Customisable)
Fire suppression system	PACK-level precision fire suppression + compartment-level fire suppression (aerosol) + water fire suppression
Overload capacity	1.1 times (grid-connected)
Permissible ambient humidity	0~100% RH
Cooling method	Intelligent liquid cooling

EOS+

Modular Solar Energy Storage System

SOLAESS-125-261/522/783/1044（125kW 261/522/783/1044kWh)

SOLAESS-250-522/783/1044（250kW 522/783/1044kWh)

Highly Modular, Scalable Design

·DC/AC, DC/DC, STS modules freely combinable for various applications
·Standard rack design enables fast deployment and easy maintenance
·Scalable from 261kWh to 1044kWh with parallel expansion

Intelligent Efficiency, Reliable Performance

·Cell-level monitoring and balancing with advanced BMS for longer lifespan
·High-efficiency 3-level PCS topology, compatible with 3P3W/3P4W grids
·Multiple modes: PQ/VF/CV/MPPT for on/off-grid applications

Multi-Layer Safety & Protection

·Physical isolation between electrical and battery compartments improves safety
·IP54 rating, wide operating temperature from -30°C to 55°C
·Active fire protection, thermal management, and remote emergency stop

Multi-Scenario Application Value

·C&I peak shaving & demand management for reduced electricity costs
·Solar integration supporting PV and EV charging synergy
·Reliable backup power for off-grid and remote installations
·Grid services: frequency regulation, black start, and microgrid operation

Peak Shaving

Arbitrage

Solar Hybrid

Backup Power

Model	SOLAESS-125-261 SOLAESS-125-522 SOLAESS-125-783 SOLAESS-125-1044	SOLAESS-250-522 SOLAESS-250-783 SOLAESS-250-1044
AC (Grid-tied)		
Max. Power	137kW	275kW
Rated Power	125kW	250kW
Rated Voltage	400Vac	
Rated Current	180A	
Voltage Range	-10%~+10%	
Rated Frequency	50/60Hz	
THDI	＜3% (at rated power)	
Power Factor	-1 leading ~ +1 lagging	
AC System	400Vac, 3W+PE/3W+N+PE	
AC Input	3W+PE/3W+N+PE	
AC (Off-grid)		
Max. Power	137kW	275kW
Rated Power	125kW	250kW
Rated Voltage	400Vac	
Rated Current	180A	
THDU	＜3%(at rated power)	
Rated Frequency	50/60Hz	
Overload Capability	110% long term, 120% for 1min	
DC (Battery & PV)		
Max. PV Open Circuit Voltage	630VDC	
Max. PV Power	250kW	
PV MPPT Voltage Range	200V~900V	
Battery Voltage Range	728V~936V	
Optional Battery Configuration	1 rack / 2 racks / 3 racks / 4 racks	
Max. Charging Power	250kW	
Max. Discharging Power	250kW	
Max. Charging Current	160A	
Max. Discharging Current	160A	
Basic System Information		
Noise	<75dB (A) @1m	
Operating Temperature	-25°C~+55°C (Derating >45°C)	
Cooling Method	Liquid Cooling	
Relative Humidity	0~95% non-condensing	
Max. Altitude	3000m (Derating >3000m)	
Built-in Transformer	Not Included	
Grid-Off Grid Switch Time	Auto <10ms	
Standby Consumption	<30W	
Display	Touch Screen	
Communication Interface	Rs485/Ethernet	
Dimensions (W*D*H)	Battery Rack: 1100(W)*1345(D)*2254(H)mm Electrical Cabinet: 900(W)*1345(D)*2254(H)mm	
Weight	Battery Rack: 2500kg Electrical Cabinet (excluding DC/DC and STS): 650kg	
Certifications	PCS cert：EN50549-1/-2/-10、VDE4110、G99/G100、C10/C11、IEC61727/62116、PSE-2018、Green Power Denmark 2022、2016/631 EU-(NC RFG)、PPDS、NRS097、PEA-2016.MEA:2015(Bangkok)、TOR25、ANRE 228:2018、IEC 62477、ROHS、Reach ESS cert:UN38.3、IEC 60730-1、IEC62619、IEC62477-1、IEC 61000-6-2/-4、IEC62109-1/-2、Regulation (EU) 2023/1542 Cell cert:UN38.3、IEC62619、IEC62620、UL1973、UL9540A、BIS、ROHS、Reach	

EnerGo 1+

Portable Home Energy Storage

(1kWh x 5)

Color options available

Sky White Flowing Silver Dawn Gold Space Gray

All-in-One 3S Integration Tech, Super Hybrid Charging

Features an industry-first integrated BMS/EMS/PCS system, enabling solar+grid hybrid charging. Delivers up to 1500W input, 50% faster efficiency—ending power anxiety.

5-Min DIY Setup, Plug-and-Play, Zero Drilling

Revolutionary all-in-one design. No electrician needed. Just connect 3 cables in 5 minutes. No wall drilling. True appliance-style installation.

Smart Off-Grid Management, Precise & Efficient

Built-in AI and IoT tech optimizes energy use even without the Internet, ensuring 24/7 stable and efficient performance.

Flexible Scalability, Adapts to Every Home

Expand capacity smoothly from 1–5kWh. Steady AC output powers everything from small devices to high-power appliances.

Balcony PV

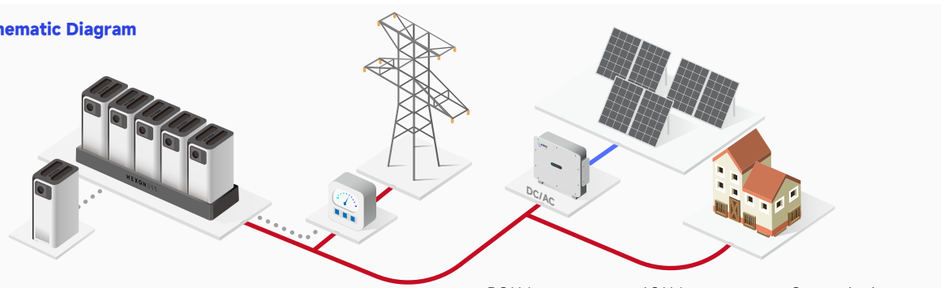
Courtyard

Garage

Temporary Buildings

Outdoor Activities

System Schematic Diagram



Model	EnerGo 1+	EnerGo 1+ HOUSES
		
DC side parameters		
Battery capacity	1004.8Wh	Hold EnerGo 1 + *5
Battery cell type	LFP 314Ah	/
Battery voltage range	2.5~3.65V	/
AC side parameters		
AC max power	300W	300W*5
Total current waveform distortion rate	⩽5% (at rated power)	
Rated grid voltage	230V	
Grid voltage deviation	-7%~+10%	
AC overload capacity	1.1 times 10 seconds	
AC wiring method	L +N+PE	
Rated grid frequency	50Hz±2.5Hz	
Power Factor	0.90~1	
AC protection	AC lightning protection	
System parameters		
Maximum system efficiency	85%	
Photovoltaic input voltage	DC16~38V 200W (max)	/
USB & Type-C	DC5V 2.1A	/
Battery cell cooling method	Air cooling	/
Remote Monitoring	APP	/
Noise	⩽ 75dB@1m	⩽20dB@1m
Communication methods	Bluetooth / WIFI	/
Interaction	/	voice
Installation location	Outdoor /Indoor	Indoor
Operating temperature range	Charging：0~40°C；Discharging：-20~40°C	-20~40°C
Maximum operating altitude	3000m	
Operating humidity range	5%~95%RH, no condensation	
Protection level	IP20	
Product dimensions (W*D*H)	145(W)x220(D)x310(H)mm	856(W)x260(D)x75.5(H)mm
Weight	9.5kg	5.5kg
Product Certification	UN38.3, IEC62619, IEC62368, IEC62040, CE-RED, EN18031, EU2023/1543	IEC62368, IEC61000

LARGE HYBRID ESS SOLUTION

500kW Hybrid Energy Storage Inverter
2058kWh/2570kWh Containerized BESS
2500kW/4000kW Transformer and Power Converter System
500kW/1028kWh Hybrid ESS 500kW/1543kWh Hybrid ESS
1000kW/1543kWh Hybrid ESS 1000kW/2058kWh Hybrid ESS


APP Monitoring

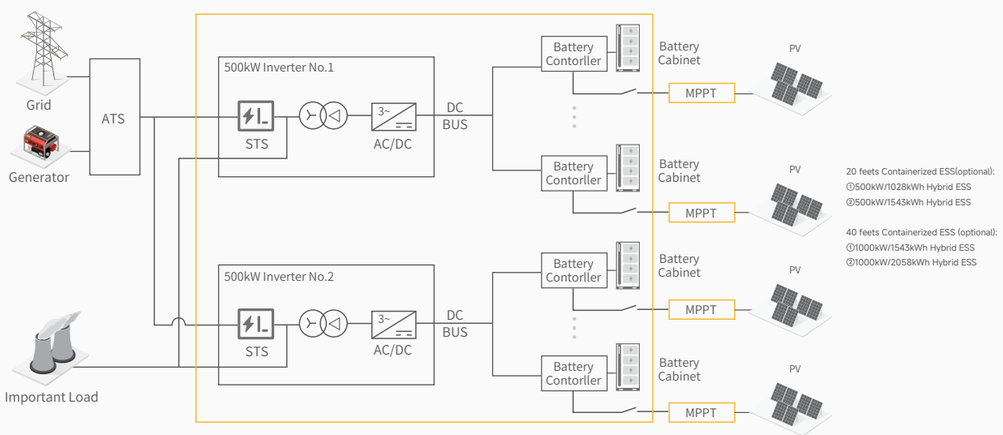

Cost Effective


Safe Reliable


Flexible Design

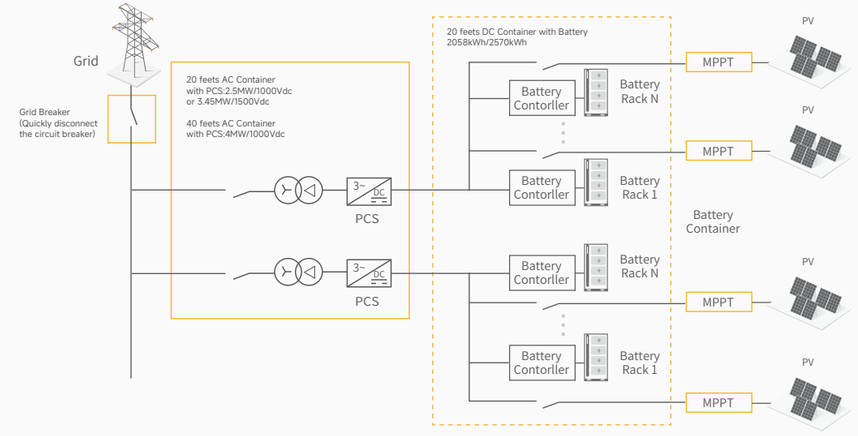
MW Containerized ESS

The containerized hybrid energy storage system is an integrated energy solution that highly integrates the battery system, PCS (power converter), energy management system (EMS), and temperature control and fire protection system into a standard container. It supports dual-mode operation of on-grid and off-grid, and which is suitable for industrial and commercial energy storage, microgrids, and off-grid power supply scenarios. It features the integration of three electrical systems and AC/DC integration, with simple on-site installation and wiring.



Hybrid Energy Storage System(Power station type)

The power station type hybrid energy storage system divides the power station energy storage system into two parts: the AC side transformer and converter system and the DC battery system, namely the AC power source side container and the DC battery side container. The grid and load are connected to the output of the AC power source side container, and the output of the DC battery side is connected to the input of the AC power source side container on site.



500kW Hybrid Energy Storage Inverter

- The equipment supports multiple units being used in parallel.
- It has the functions of grid-connected charging and discharging, and off-grid independent inverter.
- Standard equipped with STS module, supporting automatic switching between on-grid and off-grid modes.
- Standard isolated transformer is equipped, with strong shock resistance.

	Model	500kW
DC side	Voltage range	500-850V
	Max current	1128A
AC side	Rated voltag	400V
	Rated current	722A
	Rated frequenc	50/60Hz
	Rated power	500kW
	Capacity of transformel	500kVA
	Connection method	3W+N+PE
	Hybrid switching timee	<20ms
AC side (On-grid)	THDi	<3%
	Power factor	>0.99
AC side (off-grid)	THDu	<3%(Linear load)
System	Max. efficiency	97.5%
	Weight	2700kg
	Dimensions(WxDxH)	1600(W)*1050(D)*2050(H)mm
	Operating temperature	-30~55°C (Derating use over 40°C)
	IP grade	IP21
	Cooling concept	BMS(CAN)/EMS(TCP/IP)

2058kWh/2570kWh Containerized BESS (Battery DC side)

- Refined thermal management results in small temperature differences between battery cells and longer lifespan.
- Adopting photovoltaic DC coupling and external MPPT for higher charging efficiency of battery.
- Integrated design of photovoltaic access ports and high-voltage boxes leads to a superior system.

Model	2058kWh	2570kWh
Cell type	LFP 314Ah	
Pack capacity and configuration	16.077kWh/1P16S	
Battery capacity and Pack quantity	2058kWh/ 8x16	2570kWh/10x16
Charge and discharge C-rate	<0.5C	
Depth of discharge	95% DOD	
Cycle index	>8000	
Rated voltage	819.2V	
Max. PV input power	16*120kW	20*120kW
Dimensions(W*D*H)	6058x2438x2896mm	
IP grade	IP54	
Cooling concept	Smart air cooling	
Weight	<26T	

2500kW/4000kW Transformer and Power Converter System (Battery AC side)

- Four-quadrant operation, with battery charge and discharge management function and operation modes such as VSG, VF, PQ, etc.
- Parallel operation of hundreds of MW off-grid and independent participation in black start of power grid.
- Interacting with BMS and EMS supports multiple protection of system.
- It is equipped with primary frequency modulation and rapid dispatching functions for power sources, grids and loads, and supports rapid power response.
- Integrated design of converter and transformer, which is easy and convenient to install.

	Model	2500kW	4000kW
DC side	Input branches	2	4
	Max. input current	2*1935A	4*1935A
	Input voltage range	700~950V	
AC side	Rated voltage	400V	
	Rated frequency	50/60Hz	
	Rated power	2500kW	4000kW
	Rated current	3609A	5774A
	Transformer Turns ratio	400/480	
	Vector groupDesignation	DyN1 1	
AC side (On-grid)	THDi	<3%	
	Power factor	>0.99	
AC side (off-grid)	THDu	<3%(Linear load)	
System	Dimensions(WxDxH)	6058(W)*2438(D)*2896(H)mm	12192(W)*x2438(D)*x2896(H)mm
	Weight	<15t	<26t
	Operating temperature	-30~55℃ (Derating use over 40℃)	
	IP grade	IP54	
	Cooling concept	Smart air cooling	

500kW/1028kWh Hybrid ESS 500kW/1543kWh Hybrid ESS

- Standard 20-foot high-cube container.
- The on-site wiring is simple: integrating the AC side and the DC side, three-electricity integration, intelligent storage in one, and it can be used by simply connecting to the power grid and the load on site.
- Standard configuration with intelligent switch of on-grid and off-grid modes and isolated transformer.
- The integrated PV DC input interface is connected to the external MPPT.

	Model	500kW/1028kWh	500kW/1543kWh
DC side	Cell type	LFP314Ah	
	Charge/Discharge C-rate	<0.5C	
	Pack capacity and configuration	16.077kWh/1P16S	
	Battery capacity and Pack quantity	1028kWh/4*16	1543kWh/6*16
	Max. PV input power	8*120kW	12*120kW
AC side	Rated voltage	400V	
	Rated frequency	50/60HZ	
	Rated power	500kW	
	Rated current	722A	
	Hybrid switching time	<20ms	
AC side (On-grid)	THDi	<3%	
	Power factor	>0.99	
AC side (off-grid)	THDu	<3%(Linear load)	
System	Weight	<15t	<20t
	Dimensions(W*D*H)	6058(W)*2438(D)*2896(H)mm	
	Operating temperature	-30~55°C(Derating use over 40°C°C)	
	IP grade	IP54	
	Cooling concept	Smart air cooling	

1000kW/1543kWh Hybrid ESS 1000kW/2058kWh Hybrid ESS

- Standard 40-foot high-cube container.
- The on-site wiring is simple: integrating the AC side and the DC side, three-electricity integration, intelligent storage in one, and it can be used by simply connecting to the power grid and the load on site.
- Standard configuration with intelligent switch of on-grid and off-grid modes and isolated transformer.
- The integrated PV DC input interface is connected to the external MPPT.

	Model	1000kW/1543kWh	1000kW/2058kWh
DC side	Cell type	LFP314Ah	
	Charge/Discharge C-rate	<0.5C	
	Pack capacity and configuration	16.077kWh/1P16S	
	Battery capacity and Pack quantity	1543kWh/6*16	2058kWh/8*16
	Max. PV input power	12*120kW	16*120kWV
AC side	Rated voltage	400V	
	Rated frequency	50/60HZ	
	Rated power	1000kW	
	Rated current	1444A	
	Hybrid switching time	<20ms	
AC side (On-grid)	THDi	<3%	
	Power factor	>0.99	
AC side (off-grid)	THDu	<3%(Linear load)	
System	Weight	<21t	<26t
	Dimensions(W*D*H)	12192(W)*2438(D)*2896(H)*mm	
	Operating temperature	-30~55°C(Derating use over 40°C)	
	IP grade	IP54	
	Cooling concept	Smart air cooling	

MEDIUM-SIZED HYBRID ESS SOLUTION

DC-coupled Hybrid Energy Storage System
Integrated PV-ESS-Diesel Generator Microgrid System
Medium-sized Hybrid Energy Storage Inverter
PV MPPT Controller
Battery Energy Storage System(Outdoor cabinet)
Containerized Battery Energy Storage System


APP Monitoring


Cost Effective

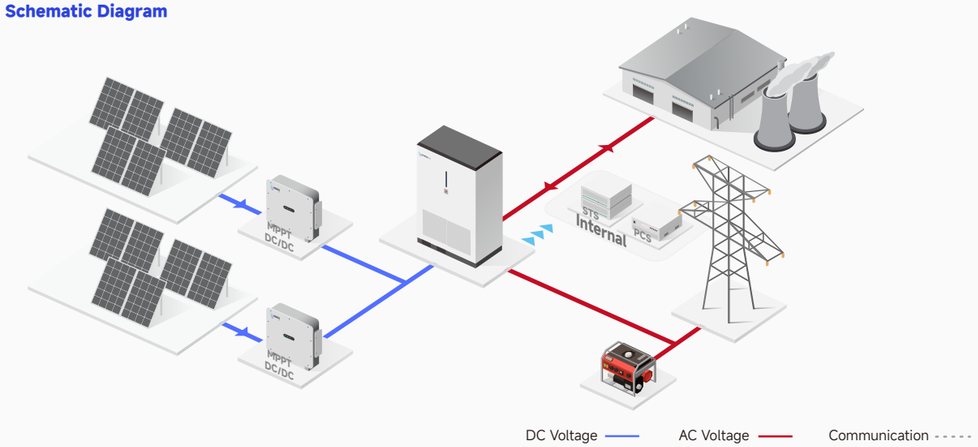

Safe Reliable


Flexible Design

DC-coupled Hybrid Energy Storage System

- Supply continuous power even under power outage condition, realizing the seamless switching between on-grid and off-grid.
- Photovoltaic DC coupling makes higher charging efficiency of energy storage batteries.
- Outdoor PV MPPT controller offers more flexible configuration and simpler installation.

System Schematic Diagram



Reference for System Configuration and Selection

Applicable total power range of user's load	Recommended model	Max PV capacity for access	
Load≤30kW	30kW/72kWh Hybrid Energy Storage System (with built-in PV MPPT controller)	38.4kW	Villas, villages, shopping malls, schools, banks, hospitals, sports venues, hotels, restaurants, office buildings
30kW < Load≤60kW	64kW/128kWh Hybrid energy storage system + PV MPPT controller	120kW	
60kW < Load≤120kW	125kW/225kWh Hybrid energy storage system + PV MPPT controller	240kW	
120kW < Load≤200kW	250kW Hybrid energy storage inverter +2-4 sets of 225kWh battery energy storage systems+PV MPPT controller	480~960kW	Small factories, supermarkets, hotels, farms, and livestock farms
200kW < Load≤450kW	500kW Hybrid energy storage inverter+4-6 sets of 225kWh Battery energy storage systems/1543kWh Containerized battery energy storage system+PV MPPT controller	2960~1440kW	
450kW<Load≤1200kW	2-3 sets of 500kW Hybrid energy storage inverters+1-2 units of 2058kWh/2570kWh Containerized batteryenergy storage system + PV MPPT controller	1920~4800kW	Medium-sized factories, mining areas

Battery Energy Storage System(Outdoor cabinet)

- Advantages: Well-known brand battery cells with standard equipped with photovoltaic access ports, which is safe and reliable.

HEX225-400-A

Model	HEX225-400-A
Cell type	LFP314Ah
Total capacity	225kWh
Cycle index	8000cls(0.5P,25+2°C,@70%SOH)
Rated voltage	716.8V
IP grade	Container (IP54)
Cooling concept	Smart air cooling
Operating temperature	-30~55°C
Networking	4G/IFI/Ethernet
Weight	2100kg
Dimensions(W*D*H)	1050(W)*1050(D)*2350(H)mm

PV MPPT Controller

- Advantages: DC coupled brings higher system efficiency; IP66 outdoor type with simple wiring and low construction cost.

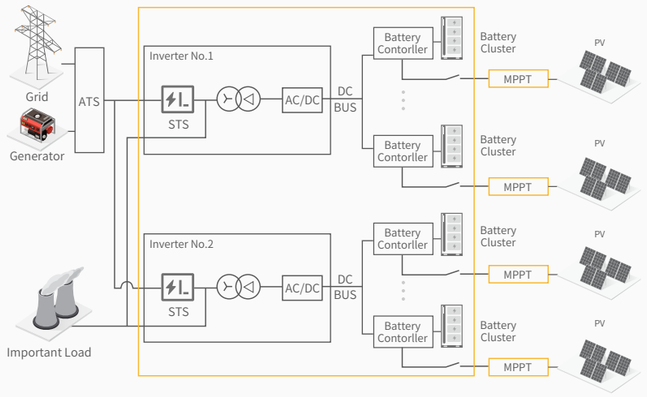
HEXMPPT-6 / HEXMPPT-12

Model	HEXMPPT-6 /HEXMPPT-12
Output power	60kW/120kW
MPPT voltage range	200-900V
Number of MPPT	2/4
Current per MPPT	55A
Cooling concept	Smart air cooling
IP grade	IP66
Weight	25kg/30kg
Dimensions(W*D*H)	610(W)*480(D)*260(H)mm

Medium-sized Hybrid Energy Storage Inverter

- Advantages: Up to 4 units of 250kW/500kW hybrid energy storage inverters can be paralleled; 400V AC output is widely applied in large-scale mining areas and factories.

System block diagram



HEXP250TS-400-A

Model	HEXP250TS-400-A
Rated output power	250kW
Max.output power	275kW
Output voltage	400V
Max.efficiency	97.5%
Operating temperature	-30~55°C
IP grade	(Integrated machine)IP21
Cooling concept	Smart air cooling
Communication	BMS(CAN)/EMS(TCP/IP)
Weight	1600kg
Dimensions(W*D*H)	1200(W)*800(D)*2050(H)mm

Containerized Battery Energy Storage System

- Advantages: Well-known brand battery cells with standard equipped with photovoltaic access ports, which is safe and reliable.

HEX2570-400-A

Model	HEX2570-400-A
Cell type	LFP314Ah
Total capacity	2570kWh
Cycle index	8000cls(0.5P,25+2°C,@70%SOH)
Rated voltage	819.2V
IP grade	Container (IP54)
Cooling concept	Smart air cooling
Operating temperature	-30~55°C
Weight	<26t
Dimensions(W*D*H)	6058(W)*2438(D)*2896(H)mm

HEXP500TS-400-A

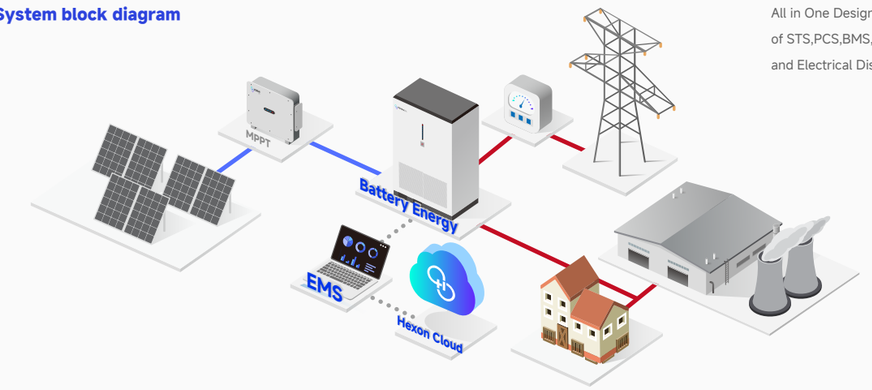
Model	HEXP500TS-400-A
Rated output power	500kW
Max.output power	550kW
Output voltage	400V
Max.efficiency	97.5%
Operating temperature	-30~55°C
IP grade	(Integrated machine) IP21
Cooling concept	Smart air cooling
Communication	BMS(CAN)/EMS(TCP/IP
Weight	2700kg
Dimensions(W*D*H)	1600(W)*1050(D)*2050(H)mm

Integrated PV-ESS-Diesel Generator Microgrid System

- Advantages: High integration of photovoltaic and energy storage designed in one cabinet with DC-coupled. High efficiency and small size, which is easy for installation and maintenance; It has seamless switching between grid-connected and off-grid modes within 20ms and multi-mode operation functions. It also can supports peak shaving and valley filling, bringing strong single-phase load capacity. It can be expanded in 1+1 parallel mode.

System block diagram

All in One Design : Integration of STS,PCS,BMS,EMS, Battery and Electrical Distribution.



HEXSTS30-72kWh-400-A HEXSTS64-128kWh-400-A

Model	HEXSTS30-72kWh-400-A	HEXSTS64-128kWh-400-A
AC output power	30kW	64kW
Cell type	LFP100Ah	LFP314Ah
Total capacity	72kWh	128kWh
Charge/Discharge C-rate	0.5C	
Max. PV input power	38.4kW	100kW
IP grade	(Integrated machine)IP54	
Cooling concept	Smart air cooling	
Networking	4G/WIFI/Ethernet	
Weight	1050kg	1450kg
Dimensions(W*D*H)	900()W*900(D)*1850(H)mm	1050(W)*1050(D)*2050(H)mm

HEXSTS125-225kWh-400-A

Model	HEXSTS125-225kWh-400-A
AC output power	125kW
Cell type	LFP314Ah
Total capacity	225kWh
Charge/Discharge C-rate	0.5C
Max. PV input power	200kW
IP grade:	(Integrated machine)IP54
Cooling concept:	Smart air cooling
Networking:	4G/WIFI/Ethernet
Weight	2400kg
Dimensions(W*D*H)	1600(W)*1050(D)*2050(H)mm

APPLICATION CASES

Lianyungang Energy Group Independent and Shared New Energy Storage Project
Location: Jiangsu Province, China
Scale: 150MW/300MWh

Shangchu Energy Independent shared Energy Storage PowerStation
Location: Ningxia, China
Scale:100MW/200MWh

Ganyu District 50MW/100MWh Independent New Energy Storage Power Station
Location: Jiangsu Province, China
Scale:50MW/100MWh

267.84kW Photovoltaic + 250kW/400kWh Energy Storage Project in the Philippines
Location: Philippines
Scale: 250kW/400kWh

Lianyungang Donghai 50MW/100MWh Energy Storage Power Station Project
Location: Jiangsu Province, China
Scale: 50MW/100MWh

125kW/225kWh Energy Storage Project in Guinea
Location: Guinea
Scale：125kW/225kWh

Delong Manufacturing Tech Park Project
Location: Guangdong Province, China
Scale: 480kW/930kW

Dongguan Zhongchuang Zhibang Industrial Park User-Side Energy Storage Power Station Project
Location: Guangdong Province, China
Scale: 1.118MW 2.236MWh

BUSINESS PARTNER