Hexon Energy Co. Ltd

Company Introduction

HEXON ENERGY CO. LTD is a leading provider of user-side 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.

Company Introduction

HEXON ESS

500 million	2 Factories	200 Acres	15GWh
Total Investment	Facilities	Floor Area	Production Capbility



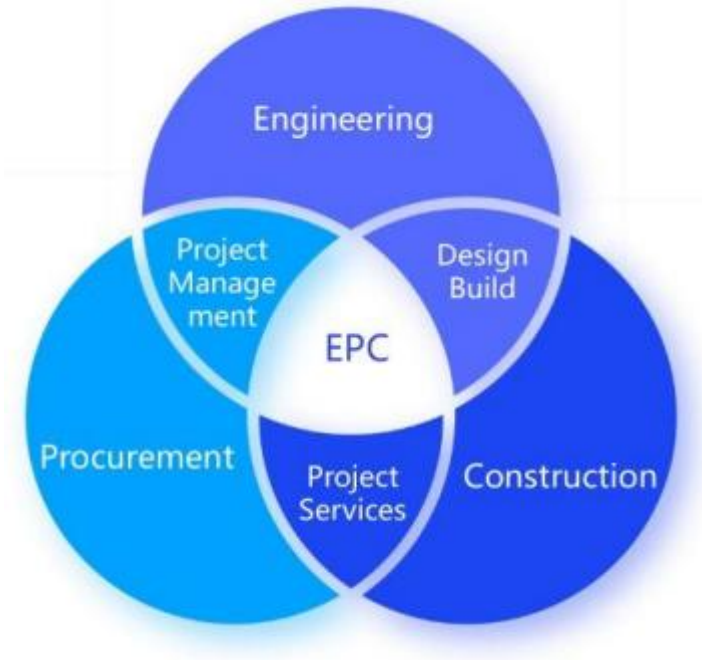



Company Introduction

The company boasts world - leading Engineering, Procurement, and Construction (EPC) capabilities, covering the entire chain of project design, equipment procurement, construction, as well as operation and maintenance management.

It has successfully delivered multiple photovoltaic power stations and energy storage projects of hundred - megawatt scale. Its project cycle management and cost - optimization capabilities have been recognized by the industry.

- Electricity general contracting Grade II & III
- Electricity installation, repair and testing Grade IV
- Foundation Specialized Contractor Grade III
- Specialized Contractor Grade III for Electromechanical Installation



Company Introduction

- **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
- Vice President Unit of Energy Storage Branch, China Battery Industry Association
- Vice President Unit of Guangdong Solar Energy Association
- Top-quality PV EPC Enterprise for 3 Consecutive Years
- Top 10 Most Influential PV Enterprises in Solar Industry Development
- Member Unit of Guangdong Energy Association
- CQC Product Certification
- ISO Management System Certification

Technical Expertise

Photovoltaic power plant design

We have rich experience in the design of PV 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.

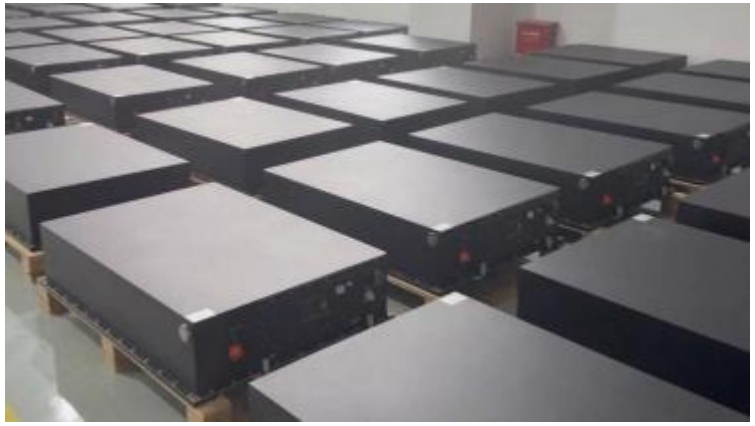
During the construction of the project, we strictly control the quality to ensure that the construction progress and project quality meet the requirements.

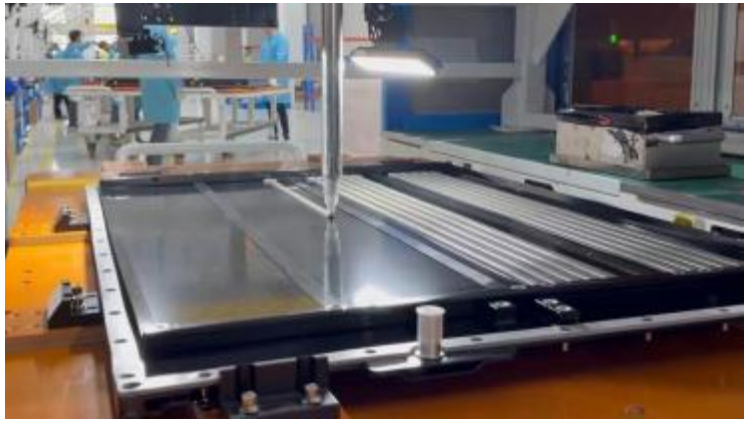
O&M Capability

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.

Production Capbility





Service Capability

- Hexon not only improves its own service capabilities but also enhances its service capabilities through resource integration.

22 - Chinese Service Provider

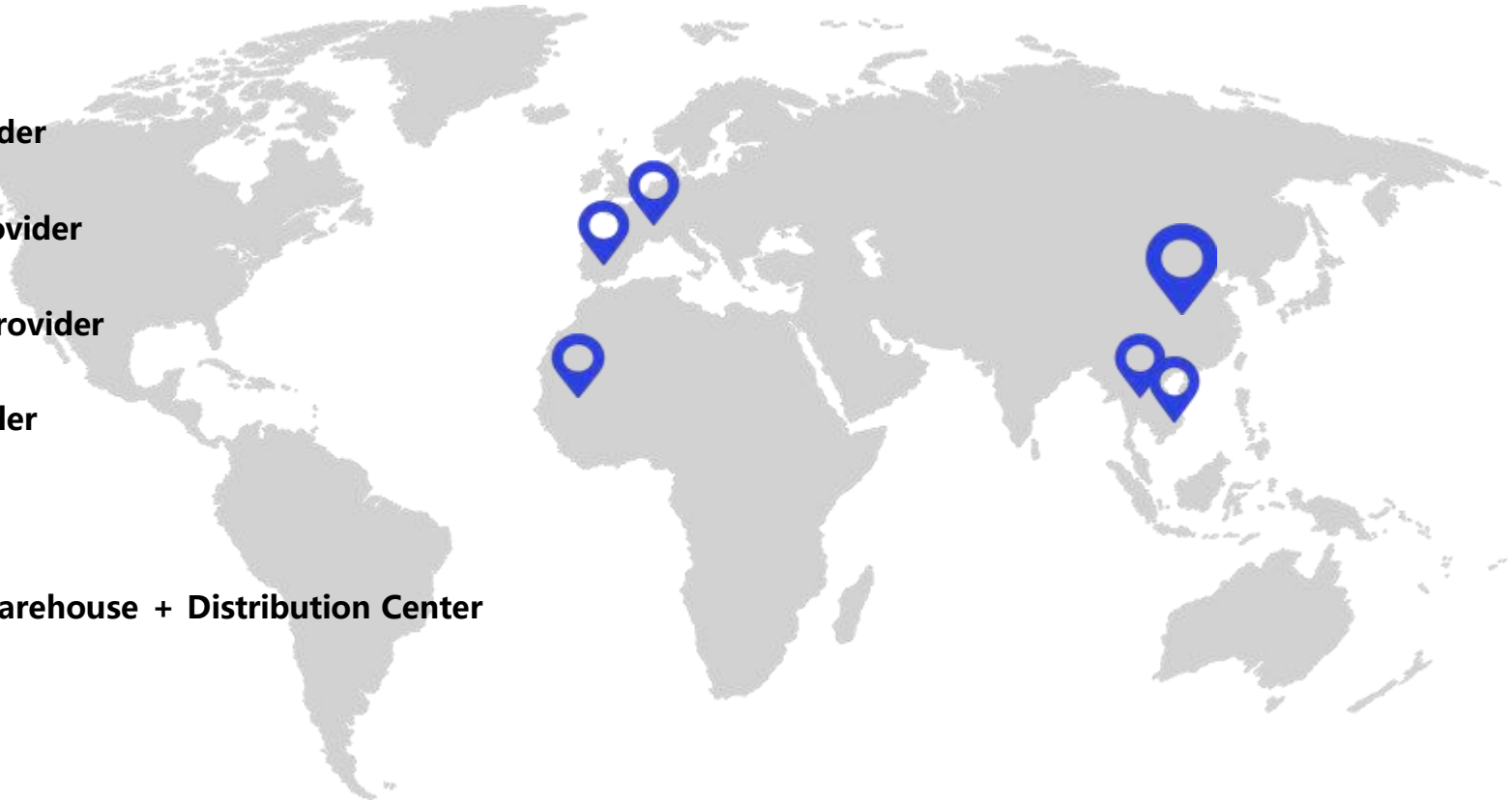
3 - European Service Provider

2 - Asia-Pacific Service Provider

2 - African Service Provider

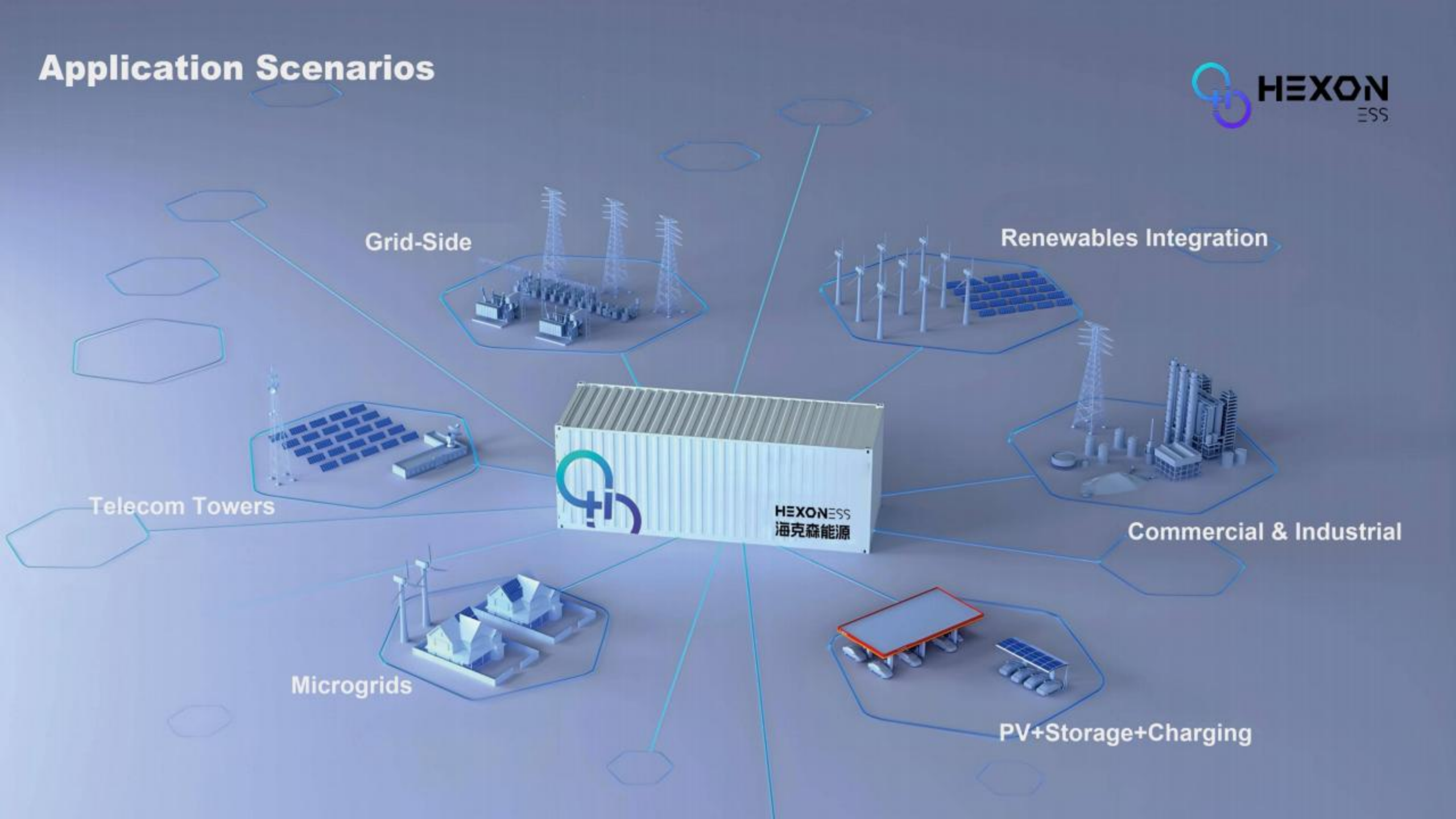
190 - Service staff

2+4 - Spare Parts Central Warehouse + Distribution Center



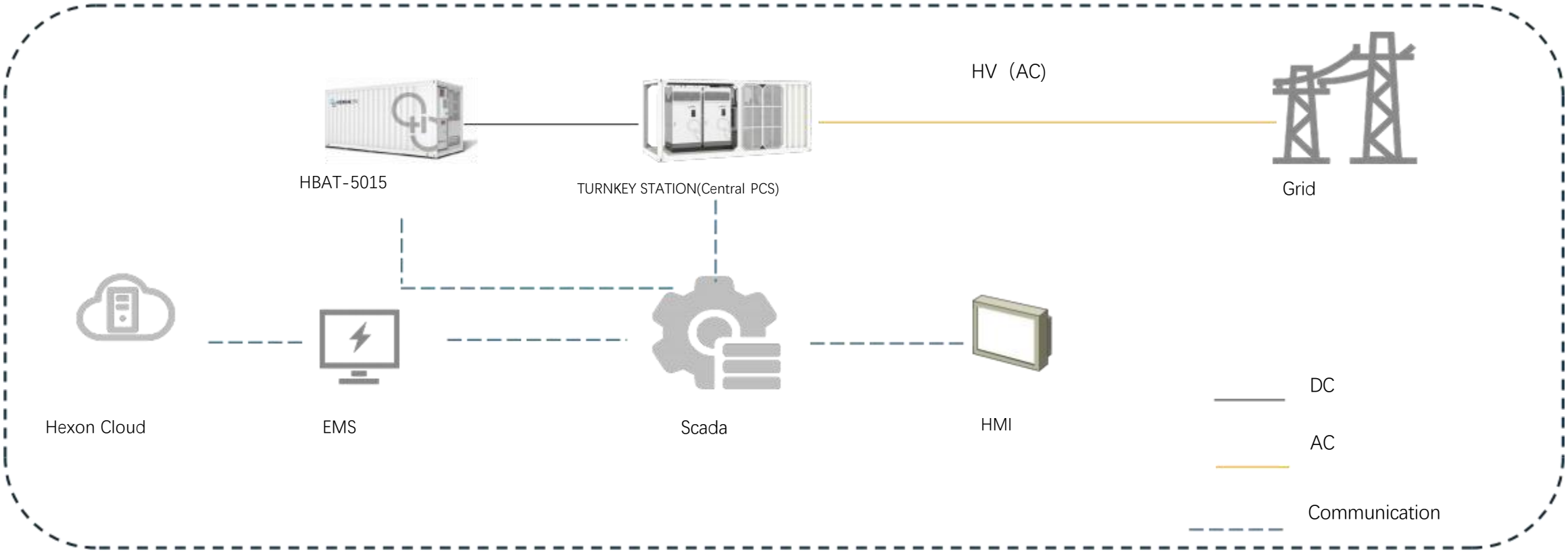
Solution and Products

Application Scenarios



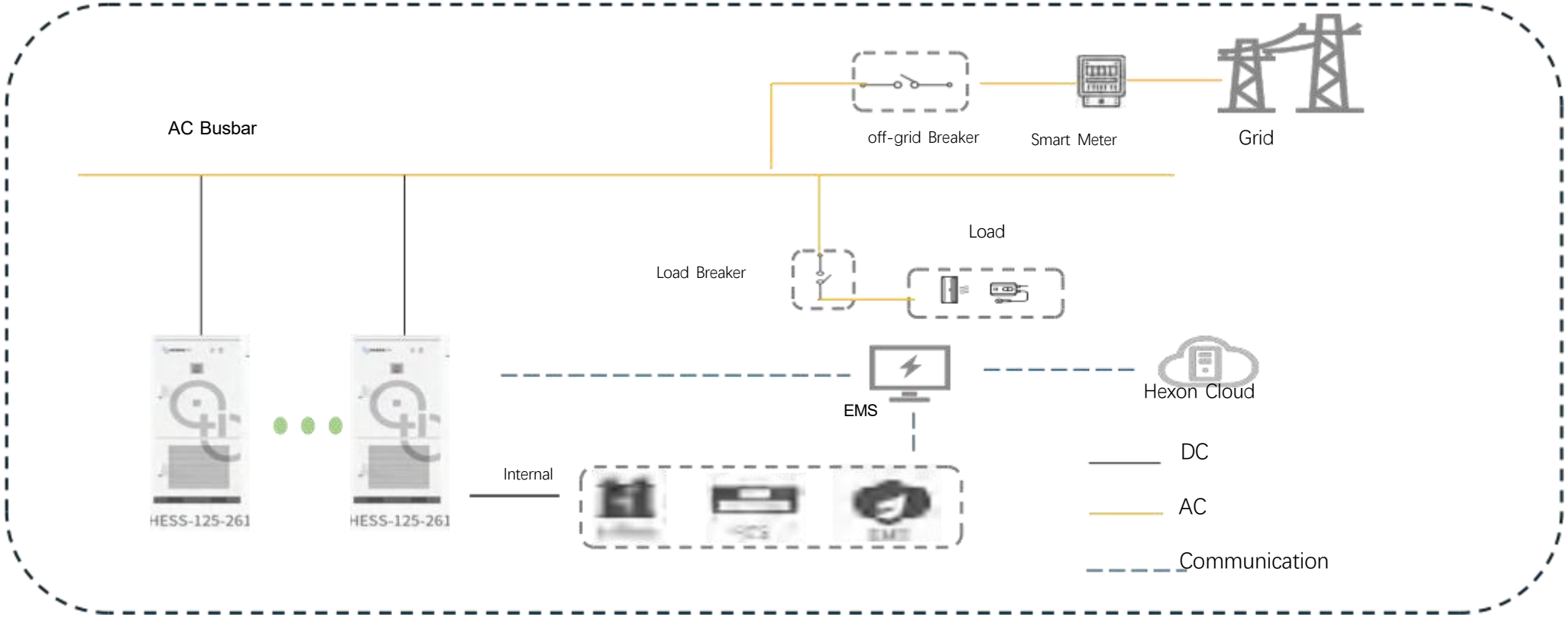
Large-Scale Ground-Mounted ESS Solution （aFRR）

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.



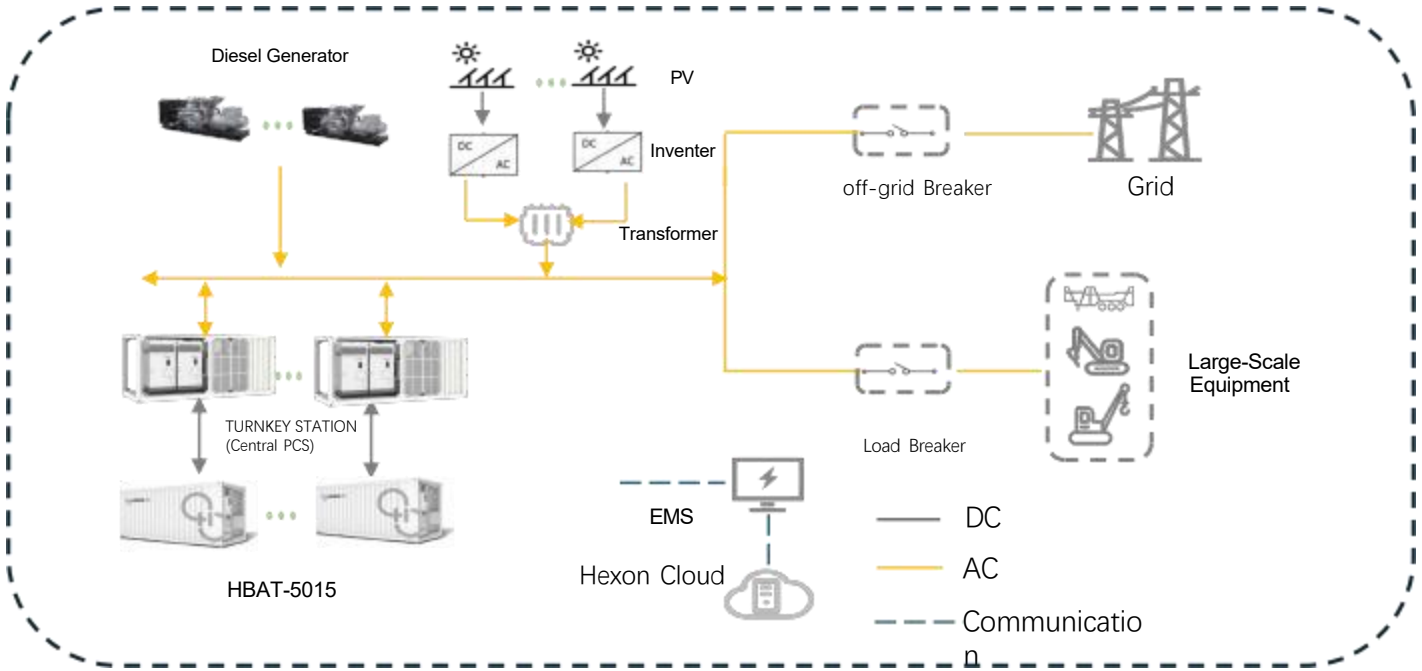
Commercial and Industrial Energy Storage Solution

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

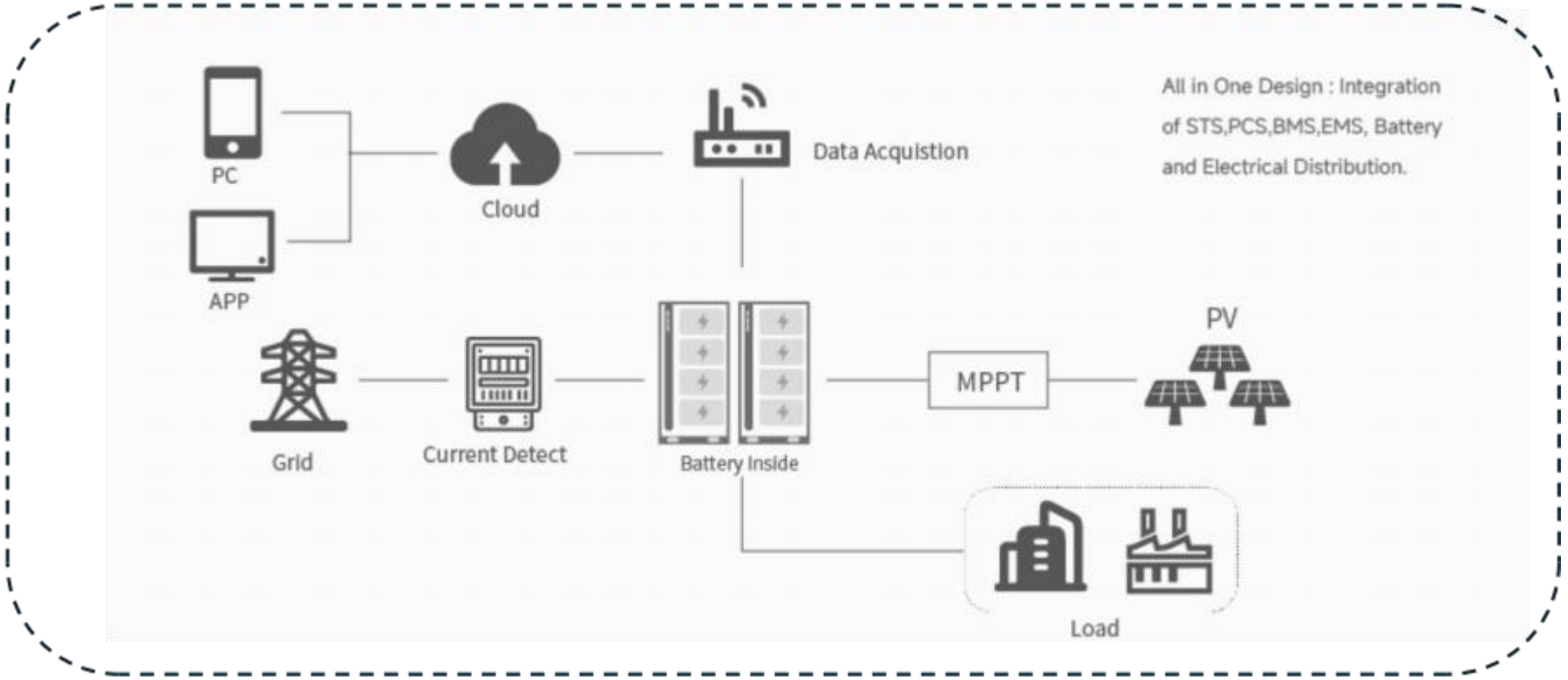
In complementary power supply systems that incorporate multiple energy sources—such as wind, solar, diesel generators, and the grid—integrated energy storage serves as the cornerstone of microgrids. It balances power output and ensures stable system operation. These solutions are ideal for remote locations 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.



Large.Scale Microgrid Solution

Integrated PV-ESS-Diesel Generator Microgrid System

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 modes.



Products - Utility

Turnkey Battery Energy Storage System

String PCS Skid + Battery Container+ EMS

1MW/2MWh ~ 5MW/10MWh(Customized)

Central PCS Skid+ Battery Container +EMS

1.75MW/3.34MWh ~ 5MW/10MWh(Customized)

Products - Utility

HEMERA Containerized Liquid Cooling Battery System

HBAT-5015/4180/3762/3344-15

(5015/4180/3762/3344kWh)

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%

Products – C&I

EOS C&I Energy Storage System

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

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

Arbitrge

Backup Power

Grid Services

Products – C&I

EOS C&I Energy Storage System

HESS-215-418 (690V/800V 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
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Cloud Diagnosis Fault identification in seconds
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Peak Shaving

Arbitrge

Backup Power

Grid Services

Products – Hybrid ESS

EOS+ Integrated PV-ESS-Diesel Generator Microgrid System

HEXSTS30-72kWh-400-A

HEXSTS64-128kWh-400-A

FWESTS125-225kWh-400-A

HEXP250TS-400-A

HEXP500TS-400-A

HEX225-400-A

HEX2570-400-A

PV MPPT Controler

Products - EMS

Microgrid Energy Management System

Data Dashboard

View the site overview, including statistics on charging and discharging

Power Plant Management

Site operation status, revenue, etc

Remote Management

Remote support operations and OTA upgrades

Battery Monitoring

Check the battery charge and discharge status and real-time data

References

References

Lianyungang Energy Group 150MW/300MWh Independent Shared New Energy Storage Project

Location: Guannan County, Lianyungang City, Jiangsu Province

Scale: 150MW/300MWh

Configuration:

•Non-walk-in liquid-cooled lithium iron phosphate (LFP) energy storage system (149MW/298MWh)

•Sodium-ion (Na-ion) energy storage system (1MW/2MWh)

Key Highlights:

•Meets the technical requirements for independent participation in grid ancillary services, including frequency regulation and peak shaving.

References

Lianyungang Donghai 50MW/100MWh Energy Storage Power Station Project

Location: Donghai County, Lianyungang City, Jiangsu Province, China

Scale: 50MW/100MWh

Technology: Utilizes high-capacity 314Ah lithium iron phosphate (LFP) battery cells, delivering significantly higher energy density compared to mainstream 280Ah-based energy storage systems.

Key Advantages:

•**Space Efficiency:** The 5MWh liquid-cooled energy storage system reduces footprint by **43%** compared to conventional 3.72MWh units (at 100MW scale).

•**Cost Savings:** Achieves **26% lower initial investment costs** versus industry-standard solutions.

References

Jiangsu Shenyuan Group 10MW/20MWh Energy Storage Station

Location: Taizhou, Jiangsu

Configuration:

•4× 5MWh liquid-cooled containers

•314Ah LFP batteries with ±1℃ temperature control

- **Operational Highlights:**

  Commissioned in 2023

  92% round-trip efficiency

  10ms grid-to-island mode switching

  Saves $1.2M annually in peak demand charges

Key Advantages:

• 24/7 critical load protection

• 26% lower OPEX vs air-cooled systems

• Qualified for TSO ancillary services

References

100MW/200MWh Energy Storage Power Station

Location: Ningxia

Configuration:

•100MW/200MWh shared energy storage power station, covering about 100 mu in Ningxia

•Equipped with 30 sets of lithium iron phosphate energy storage units; operated via self-developed green smart energy storage cloud platform

Key Advantages:

•Innovated shared energy storage business model, built financing structure, and adopted "investment-construction-operation integration" model to ensure fund & resource integration

•Overcame extreme Gobi conditions (45°C high temperatures, frequent sandstorms), completed hoisting of energy storage units in advance, breaking construction limits

•Realized millisecond-level source-grid-load coordinated management through self-developed cloud platform, ensuring efficient and stable operation

References

50MW/100 MWh Energy Storage Project in Ganyu

Location: Ganyu County, Jiangsu Province

Configuration:

Covers ~45 mu, with total installed capacity of 100 MWh Equipped with Hexoness Energy's full-set lithium iron phosphate energy storage system, including advanced BMS, efficient liquid-cooling temperature control, and Pack-level fire-fighting system

Key Advantages:

- BMS enables battery state estimation, equalization management, fault diagnosis, real-time monitoring & intelligent management for safe operation
- Liquid-cooling control keeps Pack internal temperature < 3°C and cabin-level temperature difference < 5°C, reducing battery aging
- Pack-level fire-fighting system integrates enclosed targeted extinguishing, detection, combustible gas detection, smoke prevention & explosion venting, with BMS-whole-machine linkage protection for full-life-cycle safety

References

China Electric Power Construction Group Jilin Institute invests in the (Ningxia) Chiyang Yanchi County 100MW/200MWh Energy Storage Power Station

Location: Ningxia

Configuration:

100MW/200MWh installed capacity, with complete power grid facilities

Constructed under the supervision of China Electric Power Construction Group Jilin Institute

Key Advantages:

- Strong power storage and regulation capabilities due to large scale
- Shared model reduces costs and boosts utilization rates
- Enhances power grid stability and promotes new energy consumption
- Experienced supervision and complete facilities ensure efficient operation

References

Wujiang Jingmeifeng Industrial Co., Ltd. Behind-the-Meter Energy Storage Project

Location: Wujiang District, Suzhou, Jiangsu

Capacity: 7MWh

Business Model: Peak-valley arbitrage

Hangzhou Fuyang Huilong Environmental Technology Co., Ltd. Energy Storage Project

Location: Hangzhou, Zhejiang Province

Capacity: 400kW/800kWh

Key Feature: Peak-valley arbitrage to reduce peak load demand

References

Solar + Energy Storage System Project

Location: Philippines

Capacity: 267.84kW PV + 250kW/400kWh

Key Features:

•Industrial peak load reduction

•Backup battery

Hybrid Energy Storage Project

Location: Guinea

Capacity: 125kW/225kWh

Key Benefit: Reduce energy cost

References

Zhejiang Yiwu Zhuopin Energy Storage System Project

Location: Yiwu City, Zhejiang Province

Capacity: 200kW/400kWh

Key Features:

•Peak-valley arbitrage

•Industrial peak load reduction

Delong Manufacturing Tech Park Project

Location: Guangdong

Capacity: 480kW/930kWh

Key Benefit: Enhances renewable energy utilization

References

1.118MW/2.236MWh energy storage system in Sinyink Science Park

Location: Dongguan City, Guangzhou Province

Capacity: 1.118MW/2.236MWh

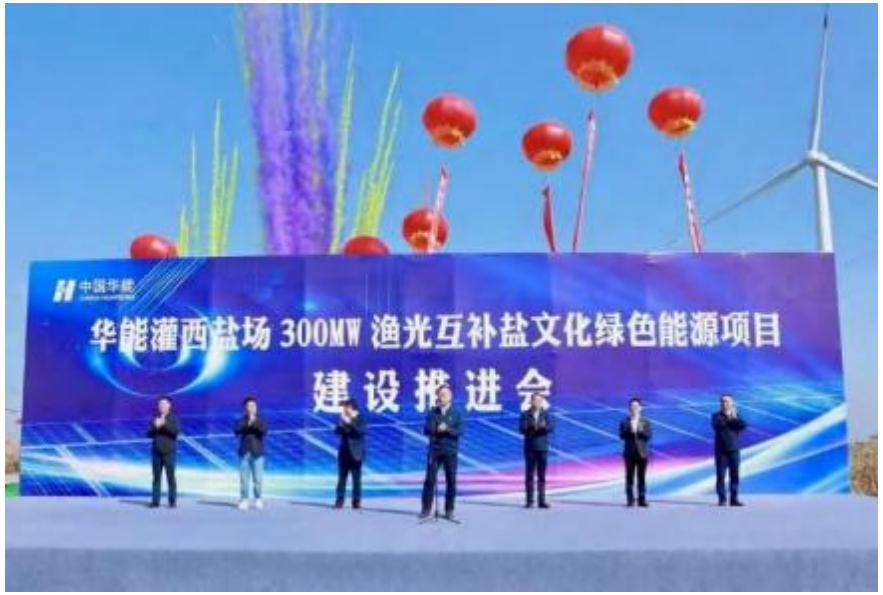
Key Features:

• Peak-valley arbitrage

• Industrial peak load reduction

•The annual charge and discharge capacity of the project is about 1.63 million degrees

References



Jiangsu Guanxi Salt Field 330MW Aquaculture-Photovoltaic Complementary Salt Culture Green Energy Project

Location: Guanyun County, Lianyungang City, Jiangsu Province

Highlights: The largest single centralized PV project invested in by Huaneng Jiangsu, featuring an aquaculture-photovoltaic complementary model

References

Jieyang Kaidi Technology Development Co., Ltd.

Capacity: 2.4MWp

Location: Puning City, Jieyang, Guangdong

Annual Green Power Output: 2.7 million kWh

Annual CO_2 Reduction: 2,200 metric tons

Dongguan Wanjiang Zhongchuang HuiZhiYing Tech Park BIPV Integrated Project

Location: Dongguan, Guangdong Province

System Scale:

•2.824MWp distributed PV

•1. 1MW/2.2MWh energy storage

Annual Environmental Benefits:

2.67 million kWh clean energy generation

2,160 metric tons CO_2 emissions reduction

Business Partners

Hexon: The Turnkey Storage.Centric Solution Provider

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