

HARNESSING THE POWER OF NATURE

Professional Energy Storage System Solution Service Provider



Hengtong Group Co., Ltd.

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HENG TONG GROUP

Hengtong group is a global high-tech industrial conglomerate specializing in fiber-optic networks, smart energy, the IoT, and advanced new materials. Founded in 1991 and headquartered in Wujiang, Suzhou. Hengtong operates over 70 subsidiaries, including five publicly listed companies both in China and abroad. With a global workforce of over 20,000 employees (including 4,000+ overseas), the group achieved a total revenue of 220 billion RMB in 2025.



140 th
Top 500 Enterprises
of China



TOP 3
Submarine Cable Systems



35 th
Top 100 Private
Enterprises of China



TOP 3
Global Submarine
Communication Systems



26 th
Top 500 Manufacturing
Enterprises of China



TOP 3
Global Top 3 in Optical
Fiber Communications

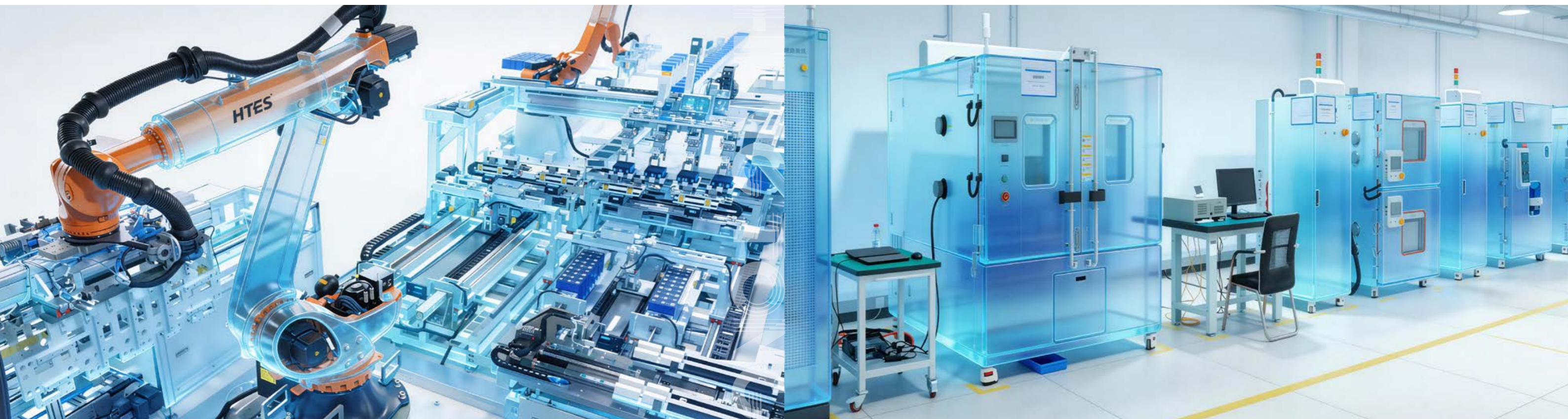
JIANGSU HENGTONG ENERGY STORAGE TECHNOLOGY CO., LTD.

Professional Energy Storage System Solution Service Provider

Jiangsu Hengtong Energy Storage Technology Co., Ltd. is a wholly-owned subsidiary of Hengtong Group. Established in June 2019, it is a National High-Tech Enterprise and a "Specialized, Refined, Unique, and Innovative" Enterprise. The company focuses on the R&D of advanced energy storage technologies, integrated product manufacturing, and the development, turnkey delivery, and operation and management of energy storage power stations.

State-of-the-Art Labs & Inspection Equipment

With high-precision testing instrumentation, industry-leading technical experts, and rigorous, scientific test protocols, we ensure zero-blind-spot product verification and comprehensive quality control throughout the entire lifecycle. Furthermore, through strategic partnerships with global certification bodies, we continuously enhance our testing capabilities and qualifications, striving to build a nation-leading, world-class laboratory.



CORPORATE QUALIFICATION



QUALIFICATION

4

- National High-Tech Enterprise
- Jiangsu Provincial "Specialized, Refined, Unique, and Innovative" Enterprise
- Grade 2 - General Contracting Qualification in Power Engineering
- Grade 3 - License for Installation, Repair, and Testing of Electric Power Facilities

3

- ISO 9001 Quality Management System
- ISO 14001 Environmental Management System
- ISO 45001 Occupational Health and Safety Management System

100+

- 100+ Intellectual Property Rights

4

- 5G Smart Factory
- Work Safety License
- Work Safety License for Construction Enterprise
- Construction Industry Qualification Certificate



CORE COMPETENCIES

INNOVATION | QUALITY | MANUFACTURING | SERVICE



In-house R&D Capabilities

- Full-stack R&D capabilities covering Battery Systems, BMS, PCS, EMS, and System Integration.
- Multi-disciplinary R&D team with expertise in power electronics, thermal management, and software algorithms.
- Tailored development to meet diverse grid requirements and application scenarios.
- Possesses core patents and a comprehensive system of independent intellectual property rights



Comprehensive Quality Control

- Certified to ISO 9001, ISO 14001, and ISO 45001 standards
- Fully compliant with international safety and performance standards, including UN38.3, IEC 62619, IEC 63050, IEC 63056, and IEC 61000
- Full-process quality control: Strict testing from sourcing to shipping
- Global Market Ready: Certified by leading international regulatory bodies



Smart Factory

- An intelligent manufacturing hub leveraging 5G private networks for full-scale automation and digitalization
- Automated lines & advanced equipment: Optimizing efficiency and manufacturing consistency
- Integrated WMS/MES/ERP framework: Ensuring total visibility and control from raw materials to outbound logistics
- Scalable delivery & Rapid-response: Meeting global demand with speed and precision



Professional After-sales Support

- A global service network covering 150+ countries and regions
- Extensive network of 40+ sales and after-sales service outlets, providing rapid-response support
- 12 Global Manufacturing Bases: Ensuring rapid-response spare parts availability
- Providing remote O&M, fault diagnosis, and system optimization services

CORE PRODUCT COMPETENCIES



Weak Grid Adaptability & High-Stability Grid-Tied Capability

- Maintains stable operation under non-ideal grid conditions, including voltage fluctuations, harmonic distortion, and frequency transients
- Ultra-Weak Grid Ready (SCR < 2): No oscillations, no stepping out of sync
- Fast Frequency Support: Ultra-rapid power transition and switching to stabilize grid frequency



High-Safety and Inherently Safe Design

- Multi-level electrical protection and redundant design to ensure reliable system operation
- Pack-level immersion cooling design to achieve intrinsic safety and mitigate thermal runaway risks
- Equipped with integrated fire suppression, ventilation, pressure relief, and temperature control systems to ensure maximum safety under extreme conditions

Advanced Control Algorithms and Architecture

- Self-Adaptive Control: Intelligent adjustment for battery aging and fluctuating environments
- Advanced PLL algorithms to enhance grid-tied stability and dynamic response capabilities
- Dual-core DSP+FPGA architecture, enabling high-precision real-time control and ultra-low latency



High Lifecycle Value

- Supports Multi-Voltage Grid Connection (10kV-35kV)
- Optimize charging and discharging based on load and electricity pricing for peak shaving and load shifting
- Enables participation in electricity market trading and ancillary services for revenue generation



Grid Support & Reactive Power Control Capabilities

- Supports Virtual Synchronous Generator (VSG) and Droop Control
- Provides synthetic inertia support and frequency stabilization capabilities
- Four-quadrant operation, supporting multiple control modes including voltage, reactive power, and power factor
- Provides a maximum reactive power output of up to 1.1x rated capacity



Intelligent O&M and Modular Expansion

- Modular design, supporting plug-and-play and seamless capacity expansion
- Robust fault isolation, supporting derated operation without system shutdown
- Supports remote monitoring, diagnostics, and cloud-edge collaborative management
- Simple O&M with low spare parts requirement, reducing total lifecycle costs

GRID-SIDE ENERGY STORAGE SOLUTION



Electricity Trading



Green Power Absorption



Peak Shaving and Frequency Regulation



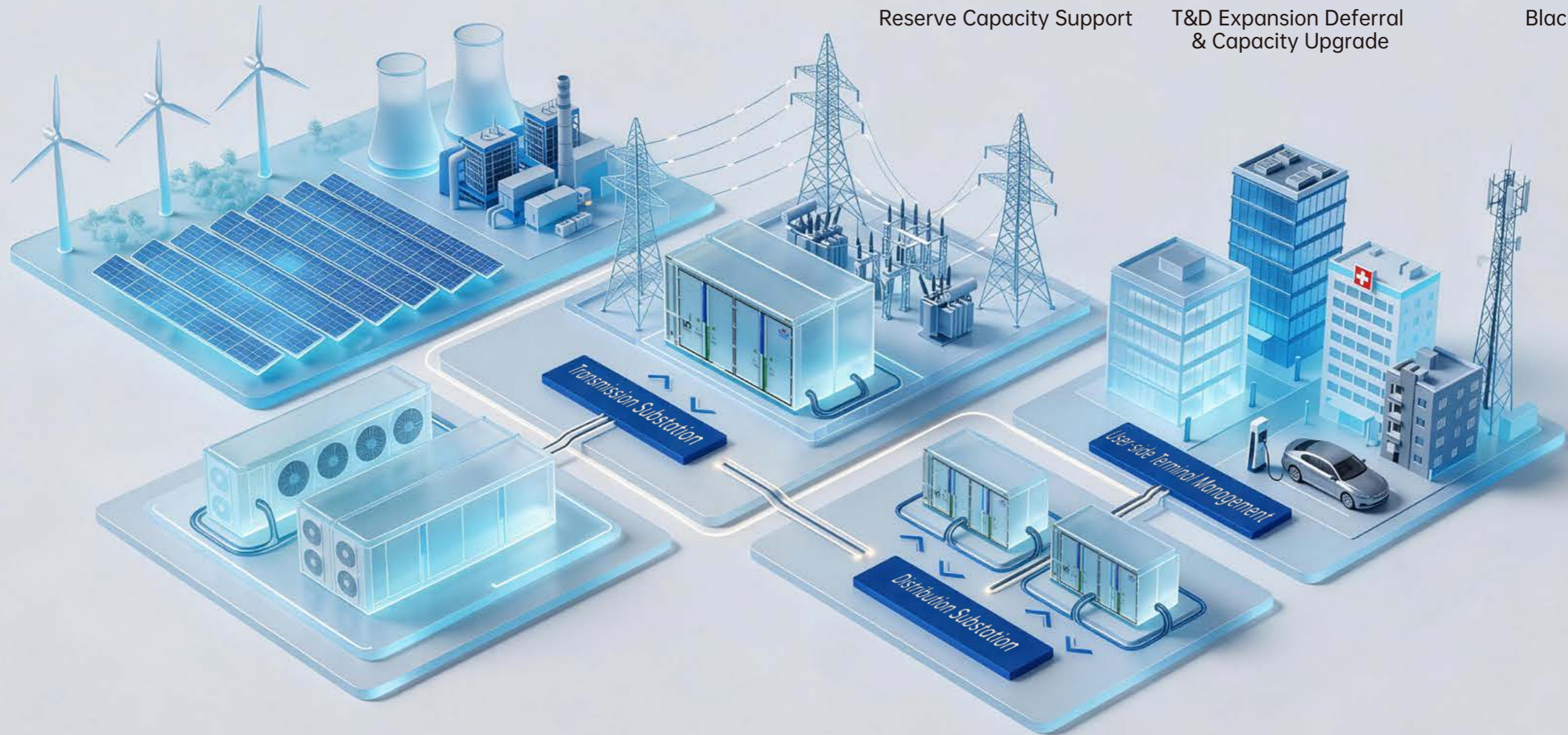
Reserve Capacity Support



T&D Expansion Deferral & Capacity Upgrade



Black Start



HELIOS C20

5.016MWh 20ft String-type Containerized Energy Storage System

Highly efficient and flexible, ensuring safety and controllability while enhancing system discharge efficiency, stability, and reliability. It enables multi-dimensional data analysis and management for all cells within the enclosure.

Product Model	HT-CTNESS-L5000H V1
DC Side	
Cell Type	LFP-3.2V314Ah
Battery Configuration	12P416S
Rated Capacity	5.016MWh
Rated Voltage	1331.2V
Voltage Range	1164.8~1497.6V
Rated Power	0.5P/0.5P
System Parameters	
Dimensions	6058*2438*2896mm
Weight	≈43t
IP Rating	IP54
Anti-Corrosion Grade	C3(Optional:C4/C5)
Max. Operating Altitude	< 2000m ^①
Operating Temperature Range	-30°C ~ +55°C ^②
Relative Humidity	0~95%(Non-condensing)
Thermal Management	Liquid Cooling
Fire Suppression System	Equipped with fire detection and alarm system ^③
Noise Level	≤85dB
Others	
Communication Protocol	Ethernet, RS485, CAN, etc.
Certifications	IEC 62619,UL 9540A,UN 38.3,UN 3536,CE



<p>Convenient Remote O&M Capabilities</p> <p>Cloud-based Centralized Monitoring Platform; Intelligent Diagnostics & Early Warning System; Remote Configuration & Control Strategy Dispatch</p>	<p>Active Safety</p> <p>Five-layer safety system covering Cell, Module, PACK, RACK, and System levels, with millisecond-level cell monitoring and integrated fire linkage</p>	<p>Efficiency Enhancement</p> <p>Individual string management for effectively enhanced system efficiency; Intelligent thermal control strategy for high system energy efficiency</p>
<p>Stable & Reliable</p> <p>High-quality Core Components; Robust Environmental Adaptability; Comprehensive Grid Support Functions</p>	<p>Lower Operating Cost</p> <p>Factory Prefabrication; Standardization & Scalability; Long Cycle Life & Low Degradation</p>	<p>Versatile Applications</p> <p>Modular design adaptable to diverse application scenarios</p>

Notes:
 1.Altitude Derating: For altitudes between 2000m and 3000m, the system will operate with power derating.
 2.Temperature Derating: The system will undergo power derating when the ambient temperature is below -15°C or above +45°C.
 3.Optional Features: Fire sprinklers, explosion venting panels, pressure relief ports, and Novec 1230 (FK-5-1-12) fire suppression systems are available as options.
 4.Scalability: The energy storage system supports flexible configuration and seamless capacity expansion.

COMMERCIAL & INDUSTRIAL ENERGY STORAGE SOLUTION

PV Absorption & Self-Consumption

Concept: Prioritizes solar energy for local loads. Excess power charges the ESS or feeds into the grid, while the ESS discharges when PV output is low.

Benefit: Maximizes renewable energy use and lowers electricity bills.

Critical Backup Power for AI / Data Centers

Concept: The ESS maintains a high State of Charge (SOC) to serve as a highly reliable UPS.

Benefit: Enables millisecond-level seamless switching during grid outages, ensuring uninterrupted operation for AI computing and data centers.

Microgrid Applications

Concept: Supports the coordinated operation of PV, storage, loads, and the utility grid.

Benefit: Can seamlessly switch to Island Mode (Off-Grid) during grid anomalies, ensuring continuous power for critical loads and enhancing energy independence.



Supports multi-cabinet expansion with a wide range of capacity configurations. Designed for easy on-site assembly and rapid deployment.



Independent single-channel control per cabinet, supporting a Depth of Discharge (DoD) of over 95%.



Advanced liquid cooling with constant temperature control keeps cell temperature differentials within 3°C, effectively ensuring system safety and high-performance operation.



Comprehensive application functionalities designed for versatile scenarios, including AI computing centers, industrial parks, microgrids, demand management, and commercial complexes.



Generation-side

Grid-side

Residential User-side

HELIOS I261

Immersion Cooling Energy Storage System

Ultimate Safety & Thermal Precision

- Empowered by full-immersion technology, battery modules are completely encapsulated in high-dielectric fluid (>40 kV/mm) to create a source-level fire barrier and eliminate leakage risks. Simultaneously, the advanced cooling architecture ensures omnidirectional heat exchange, maintaining a strict temperature delta (ΔT) of $\leq 2^{\circ}\text{C}$ to maximize cell consistency and extend battery lifespan.



Optimized Economics & AI-Powered Defense

- To maximize system efficiency, the standardized modular drawer design enables rapid deployment, while the low-energy immersion cooling significantly reduces operating expenses (OPEX). Furthermore, Hengtong's proprietary AI safety system monitors cell status in real time, building a dynamic smart shield for proactive risk prevention before any hazards occur.

Model	HT-CIESS-IL261HF V1
DC Side	
Cell Type	LFP-3.2V314Ah
Battery Configuration	1P260S
Rated Capacity	261kWh
Rated Voltage	832V DC
Voltage Range	702-936V DC
AC Side	
Rated Power	125kVA
Rated AC Voltage	400V
Grid Frequency	50/60Hz
Adjustable Reactive Power Range	-1...+1
THDI	< 3%(Rated Power)
AC Connection Type	3P+N
System Parameters	
Dimensions	970*1350*2350mm
Weight	≈2.6t
IP Rating	IP54
Anti-Corrosion Grade	C3(Optional C4/C5)
Max. Operating Altitude	< 2000 ⁰ m
Operating Temperature Range	-30 ⁰ C ~ +55 ⁰ C
Relative Humidity	0~95%(Non-condensing)
Thermal Management	Cold Plate Liquid Cooling + Immersion Cooling
Fire Suppression System	Aerosol Fire Suppression + Immersion Fire Suppression
Noise Level	≤72dB
Others	
Communication Protocol	Modbus TCP, Modbus RTU
Certifications	IEC 62619, UL 9540A, UN 38.3, UN 3536, CE



AI Data Centers



Island Microgrids



Supercharging Stations



Chemical Plants



Commercial Hubs

Notes:

- The system will operate with power derating when the altitude is between 2000m and 3000m.
- The system will operate with power derating when the ambient temperature is below -15°C or above $+45^{\circ}\text{C}$.
- The energy storage system supports flexible combinations and capacity expansion.

HELIOS B261

Outdoor Liquid-Cooled Energy Storage System

- Compact & Lightweight
- System Efficiency > 90%
- Intelligent Frequency Control
- Optimized Structural Design
- EMS Off-Peak Demand Tracking
- Automatic Backup Power
- Broad Cell Compatibility
- System-Level On/Off-Grid Switching
- PV-Storage Coordinated Control

Model	HTAES1-L125K261V1
DC Side	
Cell Type	LFP-3.2V314Ah
Battery Configuration	1P260S
Rated Capacity	261kWh
Rated Voltage	832V DC
Voltage Range	728-936V DC
AC Side	
Rated Power	125kVA
Rated AC Voltage	400V
Grid Frequency	50/60Hz
Adjustable Reactive Power Range	-1...+1
THDI	< 3%(Rated Power)
AC Connection Type	3P+N
System Parameters	
Dimensions	950*1340*2250mm
Weight	≈2.4t
IP Rating	IP54
Anti-Corrosion Grade	C3(Optional C4/C5)
Max. Operating Altitude	< 2000m ^①
Operating Temperature Range	-30°C ~ +55°C ^②
Relative Humidity	0~95%(Non-condensing)
Thermal Management	Cold Plate Liquid Cooling
Fire Suppression System	Pack-Level Fire Detection and Suppression
Noise Level	≤ 72dB
Others	
Communication Protocol	Modbus TCP,Modbus RTU
Certifications	IEC 62619,UL 9540A,UN 38.3,UN 3536,CE



Factories Hotel Hospitals Commercial Buildings Farm

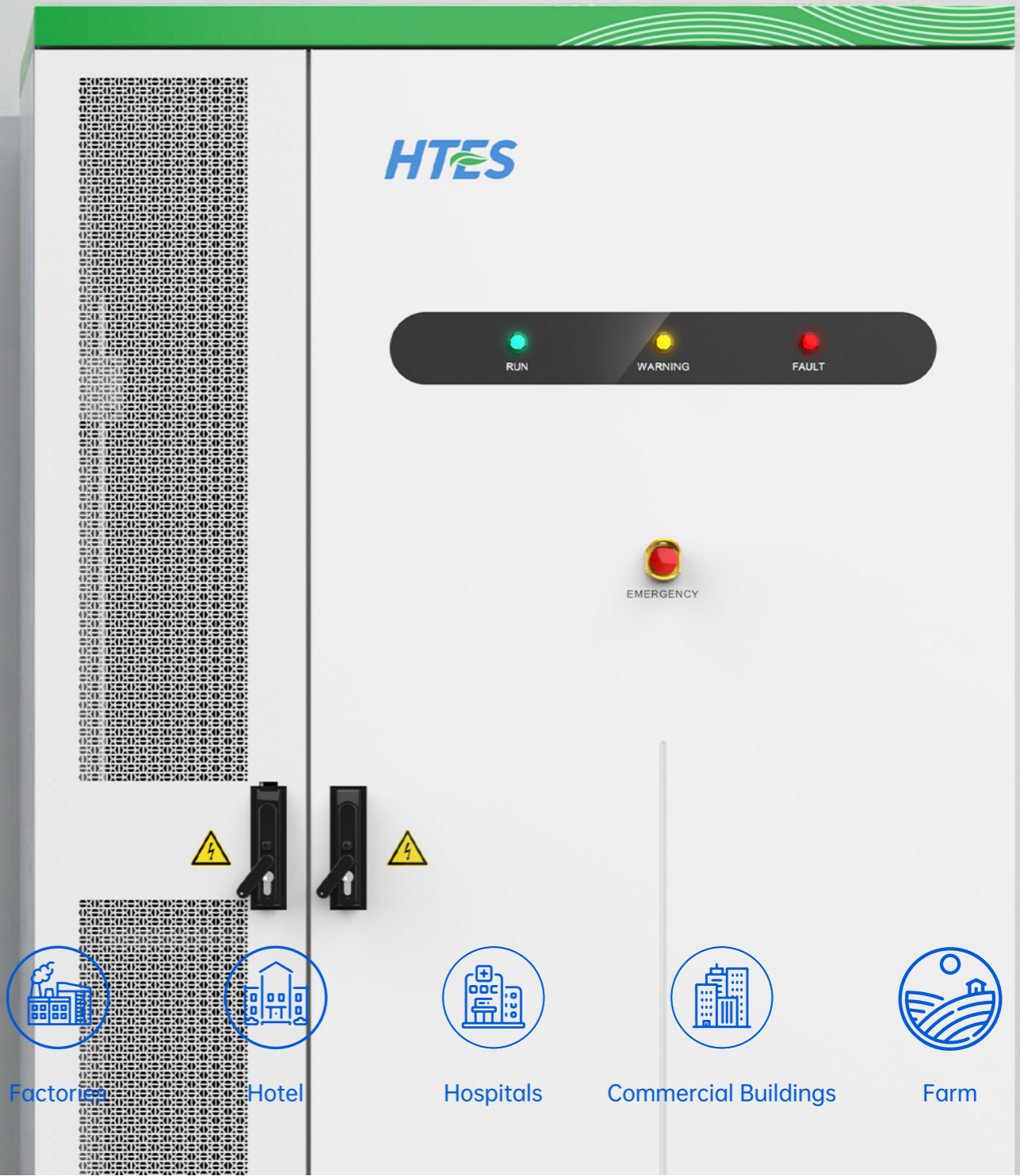
Notes:
 1.The system will operate with power derating when the altitude is between 2000m and 3000m.
 2.The system will operate with power derating when the ambient temperature is below -15 °C or above +45 °C.
 3.The energy storage system supports flexible combinations and capacity expansion.

HELIOS B372

Outdoor Liquid-Cooled Energy Storage System

- Simplified O&M with Remote Software Upgrades
- Excellent Battery Consistency & Superior Charge/Discharge Performance
- Pack-Level Active Warning & Fire Suppression + Cabinet-Level Fire Suppression
- Standardized & Modular Design, Shipped Fully Assembled for Flexible Installation
- High Protection Rating: Outdoor Battery Cabin IP55, Battery Pack IP67

Model	HTAES1-L372
DC Side	
Cell Type	LFP-3.2V280Ah
Battery Configuration	1P416S
Rated Capacity	372kWh
Rated Voltage	1331.2V DC
Voltage Range	1164.8~1497.6V DC
System Parameters	
Dimensions	1345*1396*2350mm
Weight	≈3.4t
IP Rating	IP55(Battery Cabin)
Anti-Corrosion Grade	C3(Optional C4/C5)
Max. Operating Altitude	< 2000m ^①
Operating Temperature Range	-30°C ~ +55°C ^②
Relative Humidity	0~95%(Non-condensing)
Thermal Management	Cold Plate Liquid Cooling
Fire Suppression System	Pack-Level Detection & Fire Suppression
Noise Level	≤ 72dB
Others	
Communication Protocol	CAN/RS485
Certifications	IEC 62619,UL 9540A,UN 38.3,UN 3536,CE



Notes:
 1.The system will operate with power derating when the altitude is between 2000m and 3000m.
 2.The system will operate with power derating when the ambient temperature is below -15 °C or above +45 °C.
 3.The energy storage system supports flexible combinations and capacity expansion.

HELIOS B418

Outdoor Liquid-Cooled Energy Storage System

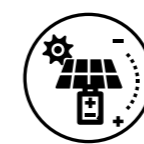


Notes:
 1.The system will operate with power derating when the altitude is between 2000m and 3000m.
 2.The system will operate with power derating when the ambient temperature is below -15 °C or above +45 °C.
 3.The energy storage system supports flexible combinations and capacity expansion.

Model	HTAES1-L418
DC Side	
Cell Type	LFP-3.2V314Ah
Battery Configuration	1P416S
Rated Capacity	418kWh
Rated Voltage	1331.2V DC
Voltage Range	1040~1497.6V DC
System Parameters	
Dimensions	1345*1396*2350mm
Weight	≈3.5t
IP Rating	IP55(Battery Cabin)
Anti-Corrosion Grade	C3 (Optional C4/C5)
Max. Operating Altitude	< 2000m ^①
Operating Temperature Range	-30°C ~ +55°C ^②
Relative Humidity	0~95%(Non-condensing)
Thermal Management	Cold Plate Liquid Cooling
Fire Suppression System	Aerosol Fire Suppression, Water-Based Fire Protection, Explosion-Proof Ventilation Device
Noise Level	≤72dB
Others	
Communication Protocol	Moudbus RTU、TCP/IP、CAN
Certifications	IEC 62619,UL 9540A,UN 38.3,UN 3536,CE



Data Centers



Solar-Storage-EV Stations



Factories



Commercial Buildings



Hospitals

- Intelligent Liquid Cooling: Ensures higher efficiency and longer battery cycle life.

- DC Circuit Safety Management: Fast-acting fuse protection and arc fault protection.

- Multi-Level Battery Protection System: Comprehensive safety guarantees.

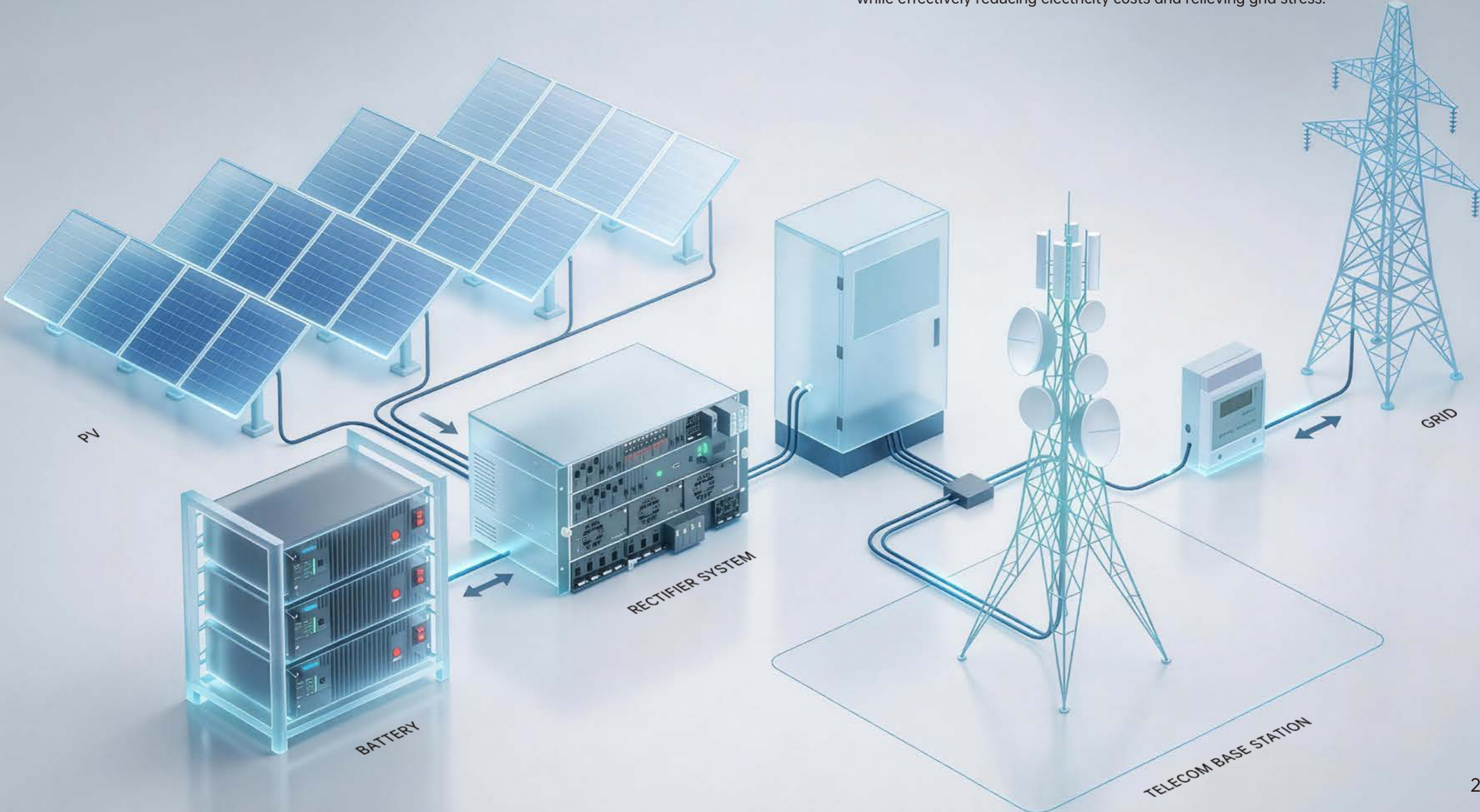
- Standardized & Modular Design: Streamlined architecture.

- Smart Leak Detection & Refill System: Enhances overall system safety.

- Supports Parallel Connection: Convenient capacity expansion.

TELECOM BASE STATION BATTERY SOLUTION

Hengtong Energy Storage delivers safe and reliable energy storage solutions for telecom base stations. Powered by highly safe and efficient smart lithium battery systems, our solutions enable peak shaving and off-peak charging. This ensures stable power supply for telecom sites while effectively reducing electricity costs and relieving grid stress.



MOKE 48100

TELECOM BASE STATION BACKUP BATTERY



Excellent High-Temperature Performance



Intelligent Protection



Long Service Life



Simplified O&M



Anti-Theft Function

Model	HTES-48100-VTA1	Operating Temperature	0-60°C(Charge)-20-60°C(Discharge)
Battery Type	LFP	Max. Charge Current	100A@25°C
Nominal Energy (kWh)	4.8kWh	Max. Continuous Discharge Current	100A@25°C
Nominal Capacity (Ah)	100Ah	Recommended Charge Current	20A@25°C
Nominal Voltage (V)	48V	IP Rating	IP20
Operating Voltage Range	40.5V-54V	Scalability	Up to 64 units in parallel
Dimensions (W*H*D)	445*133.5*450mm	Communication	RS485, CAN / SNMP (Optional)
Weight	41kg	Cycle Life	3500@80% DoD,25°C
Operating Humidity	5%-95%	Certifications	UN38.3,UL1973,IEC62619,IEC62620,CE-EMC

TELECOM BASE STATION BACKUP BATTERY



- Standard 3U Chassis, High Compatibility
- Real-Time Cell Monitoring
- Advanced BMS, Safe and Reliable
- Accurate SOC Algorithm with Auto-Calibration
- Supports Up to 64 Units in Parallel
- High Cell Consistency, Extending Battery Life

MOKE

PARAMETERS

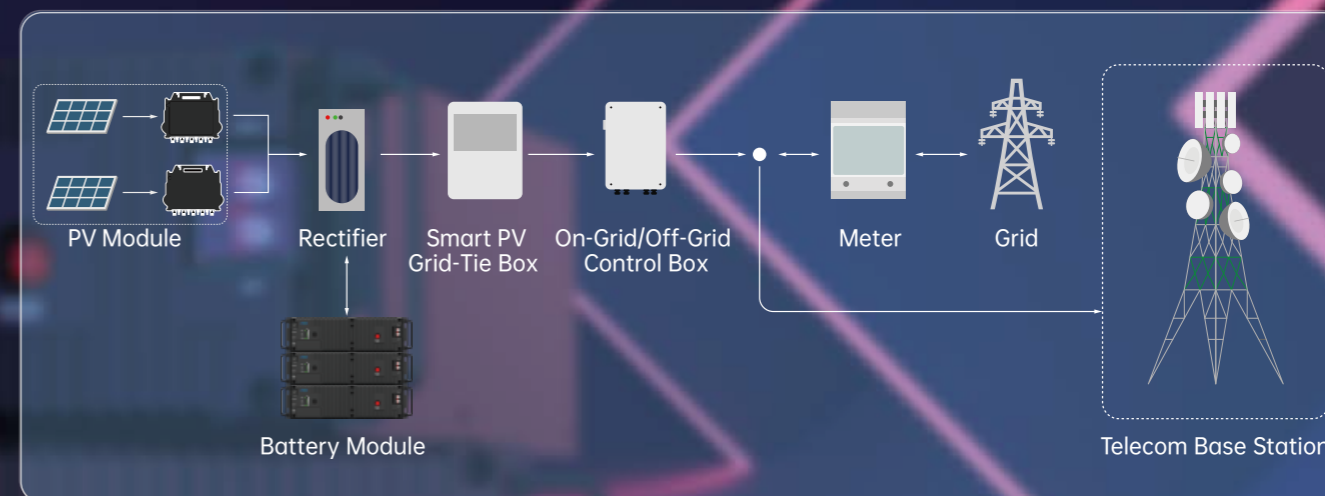
Model	MOKE48100-CT
Dimensions(mm)	
Rated Capacity	100Ah
Nominal Voltage	48V
Max. Charge/Discharge Current	100A
Nominal Charge/Discharge Current	50A
Max. Charge/Discharge Power	4800W@25°C
Cycle Life	3500@0.5C 80%DoD25°C

Weight	43kg
Operating Voltage Range	40.5V-54V
Discharge Cut-off Voltage	54.0V
Rated Charge Voltage	40.5V
Operating Temperature (Charge)	0°C-55°C
Operating Temperature (Discharge)	-20°C-55°C
Storage Temperature	0°C-45°C
Communication	RS485, CAN, Dry Contact
Functions	Compatible with VRLA (Lead-Acid) / Standard Lithium Batteries
Operating Humidity	5%-95%
Atmospheric Pressure	70kPa-106kPa
IP Rating	IP20
Altitude	<2000m
Protection Functions	Overcharge, Over-discharge, Overtemperature, Overcurrent, Short Circuit, etc.
Design Standards	UN38.3, CE-EMC, IEC62619

MOKE 48100-CT

TELECOM BASE STATION BACKUP BATTERY SOLU-

Powered by a smart lithium battery control strategy, this product is designed specifically for 48V telecom backup power applications. It features a maintenance-free design, high energy density, and a long cycle life.



- Comprehensive Safety Protections
- Smart Anti-Theft Solution
- DC-DC Compatibility
- High-Rate Charge/Discharge
- 15-Year Design Life

O&M SERVICE

Global Service Network

Domestic Service Regions - China
Covering 15 Provinces & Regions

- East China** Jiangsu, An'hui, Zhejiang, Shanghai, Shandong
- Northeast China** Liaoning, Heilongjiang, Inner Mongolia
- North China** Beijing, Tianjin
- Northwest China** Shanxi
- Southwest China** Sichuan
- South China** Guangdong, Hong Kong, Hai'nan

Global Presence / Overseas Reach

12 Manufacturing Bases

40+ Sales Centers

150+ Countries & Regions

Service Commitments

2
Hours Rapid Response

Cloud
Real-Time Cloud-Based O&M

7*24
On-Site Service

PROJECT REFERENCES



High-Altitude Off-Grid PV-Storage-Diesel Hybrid Project

7.8 MWh COD 2025
📍 TAJIKISTAN



Ningxia Guorun Yanchi Grid-Side Stand-alone Energy Storage Project

1GW/2GWh Target COD 2026
📍 WUZHONG, NINGXIA



Optical Communication Industrial Park Energy Storage Project

6.72MW/13.375MWh COD 2025
📍 SUZHOU, JIANGSU



C&I Energy Storage Project

60kWh COD 2019
📍 ITALY



PV & Energy Storage Project

2.3 MWh COD 2023
📍 NAPLES, ITALY



Limin C&I Energy Storage Project

6 MWh COD 2023
📍 TAIZHOU, ZHEJIANG



Cable Factory Containerized Energy Storage Project

8 MWh COD 2019
📍 CHANGSHU, JIANGSU



C&I Energy Storage Project

6.9 MWh COD 2025
📍 PORTUGAL



Residential Energy Storage Projects

3.5 MWh COD 2023
📍 JOHANNESBURG, SOUTH AFRICA



Tongli Bus Station PV-Storage-Charging Project

PV: 52 kWp | Storage: 100 kW/155 kWh
COD 2019
📍 WUJIANG, JIANGSU



Jujin Auto & Motorcycle Parts C&I Energy Storage Project

7.6 MWh COD 2025
📍 TAIZHOU, ZHEJIANG