

China SHEL



5.015MWh High-Capacity Energy Storage System Lithium Battery Storage for High-Demand Industrial Applications

IEC 62619 UL9540A UN38.3 UL1973

63056 UL9540(A) UN3536

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System: IEC 62477 IEC 62619 UL1973 IEC

Basic Information

- Place of Origin:
- Brand Name:
- Certification:
- Model Number: 5015LP
- Minimum Order Quantity: 1 unit
- Price:
- Packaging Details:
- Payment Terms:
- Supply Ability:



Liquid-cooled Battery Container -B20FT5015LP

Product Specification

 Highlight: 	industrial lithium battery storage, industrial commercial energy solutions, ip65 lithium battery storage
 PACK Ingress Rating: 	IP65
 Voltage Range: 	1165-1498Vdc
 Rated Voltage: 	1331.2Vdc
 Rated Energy: 	5.015MWh
Configuration:	12P416S

5.015MWh High-Capacity Energy Storage System Lithium Battery Storage for High-Demand Industrial Applications

The 20-ft liquid-cooled ESS container product integrates PACK, EMS, BMS, HVAC, fire safety system into one container. Compared with the air cooling, the liquid cooling enpowers the ESS product with higher power density and ensures the temperature difference between the cells within 3°C, which effectively extends battery service life and improves energy efficiency. The 20-ft liquid-cooled ESS container product can be applied to power generation side, grid side, as well as C&I ESS scenarios which has strict requirements on power and capacity..

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Product Description

Features

Higher Energy Density

The 20-foot liquid-cooled energy storage container has a maximum capacity of 5.015MWh, providing higher energy density, and saving costs.

IIIII Lower Operating Noise

The product significantly reduces the use of fans, resulting in lower noise compared to air-cooled products.

Longer Service Life The temperature cor

temperature consistency of battery cell temperatures extends the service life and enhances the safety of batteries, and increases returns.

The variable-frequency compressor adjusts its operating status based on temperature conditions,

Lower Local Power Consumption

Better Temperature Control

In comparison to air cooling, the liquid cooling scheme reduces the battery cell temperature difference by 200%, keeping the temperature difference within 3°C

Higher Protection

The product utilizes the IP55 (PACK IP65) high protection level & C4 protection level and the high/low-temperature design

The 5.015MWh High-Capacity Energy Storage System is an advanced solution tailored for utility-scale energy storage and high-demand industrial applications. With a robust 12P416S configuration and a rated voltage of 1331.2Vdc, this system is engineered to deliver unparalleled performance, efficiency, and reliability. The wide voltage range of 1165-1498Vdc ensures seamless integration with diverse power infrastructures, while the chiller-assisted liquid cooling system guarantees optimal thermal management under extreme operational conditions (-25°C to 55°C).

Safety is at the forefront of this design, featuring a triple-layer fire suppression system that includes **NOVEC1230**, aerosol, and water-based protection. The system's robust **IP55-rated enclosure** and **IP65-rated PACKs** provide exceptional durability in challenging environments, ensuring uninterrupted performance. With global certifications such as **IEC62619**, **UL9540A**, and **UN38.3**, the 5.015MWh system sets a new benchmark for safety and compliance, making it a dependable choice for large-scale energy projects.

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Item	Specification	
Configuration	12P416S	
Rated Energy	5.015MWh	
Rated Voltage	1331.2Vdc	
Voltage Range	1165-1498Vdc	
PACK Ingress Rating	IP65	
Rated Charge/Discharge Rate	0.5P	
Operating Temperature	-25°C~55°C	
Fire Safety	NOVEC1230/aerosol+water	
Ingress Rating	IP55	
Cooling	Chiller+liquid cooling	
Altitude	<2,000m(derating above 2,000m)	
Dimensions(W*D*H)	6,058 mmx2,550mmx2,591 mm	
Compliance	Cell:IEC62619,UL9540A,UN38.3,UL1973 System:IEC62477,IEC62619,UL1973,IEC63056,UL954 0(A),UN3536	

Application Scenarios

Utility-Scale Renewable Energy Storage:

The **5.015MWh Energy Storage System** is a game-changer for renewable energy projects, designed to store surplus energy from solar farms or wind power plants efficiently. Its high capacity and advanced cooling system ensure consistent performance, even during peak energy generation periods. This system enables grid operators to stabilize energy supply, mitigate intermittency issues, and enhance overall renewable energy utilization.

Smart Grid Support and Peak Load Shaving:

With its high charge/discharge rate of **0.5C** and rapid response capabilities, this system is ideal for managing grid stability in smart grid networks. It supports peak load shaving, enabling utility providers to reduce strain on the grid during high-demand periods. The system's compact yet powerful design (dimensions: **6,058mm x 2,550mm x 2,591mm**) ensures easy deployment and scalability for urban and rural grid support projects.

The **5.015MWh High-Capacity Energy Storage System** is a cutting-edge energy solution that combines high performance, safety, and adaptability to meet the growing demands of modern energy systems. Whether for renewable energy integration or advanced grid applications, it sets the standard for next-generation energy storage solutions.

Supports global air and sea shipping

If you require more detailed product information or have customized requests, please contact us. Providing efficient service that satisfies our customers is our responsibility.

