5MWh Liquid-Cooled Energy Storage Container System

Model: HJ-G0-5000L/HJB-G0-5000L Power: 5MWh

Summary

HighJoule's 5MWh liquid-cooled energy storage system offers a reliable, efficient, and scalable solution for commercial, industrial, and renewable energy sectors. The HJ-G0-5000L/HJB-G0-5000L series ensures continuous power, reduces energy costs, and supports sustainability, with advanced liquid cooling and seamless integration for optimized energy management.

5MWh Liquid-Cooled Energy Storage Container System (HJ-G0-5000L/HJB-G0-5000L)

Product Features

High-Capacity Storage

5016kWh storage with 3.2V/314Ah LiFePO4 or semi-solid-state batteries (12P416S configuration), delivering stable 0.5C charge-discharge for long-duration energy

supply.

Precise Liquid Cooling

Advanced liquid cooling system maintains optimal battery temperature, ensuring consistent performance and extending service life in varying operating conditions.

Outdoor-Ready Design

IP54-rated 20ft container with C4/C5 anti-corrosion grade, built to resist harsh environments including high humidity, salt spray, and extreme temperatures.

Modular & Scalable

Supports parallel expansion of multiple units, with flexible adaptation to energy demand growth; compatible with DC 1164.8~1497.6V voltage range for system integration.

All-in-One Integration

Integrated BMS, liquid cooling, and optional perfluorohexanone + water fire protection, paired with DC 1331.2V rated voltage for seamless operation.

Fast Deployment

Pre-assembled 20ft container design enables plug-and-play installation, reducing on-site setup time with standardized structure and connections.

Smart Monitoring

Real-time data tracking via CAN2.0/RJ45/RS485 protocols; compatible with CAN/MODBUS/IEC104/IEC61850 for remote system management.

Comprehensive Safety Design

Equipped with optional fire suppression system, thermal stability from LiFePO4 chemistry, and emergency protection to prevent risks like thermal runaway.

Multi-Scenario Application

Ideal for power grid peak regulation, renewable energy storage, telecom base stations, and off-grid projects, adapting to diverse energy needs.

Technical Parameters

Product Model	**HJ-G0-5000L/HJB-G0-5000L**
Battery parameters	
Battery Type	**lithium iron phosphate (LiFePO4)/semi-solid-state battery**
Battery Capacity	**3.2V/314Ah**
System Battery Configuration	**12P416S**
Power Storage	**5016kWh**
System Rated Voltage	**DC 1331.2V**
System Voltage Range	**DC1164.8~DC1497.6V**
Charge and Discharge Rate	**0.5C**
Battery Cooling Method	**liquid cooling**
System parameters	
Dimensions	**20 feet container**
Weight	**45t**
IP Rating	**IP54**
Anti-corrosion grade	**C4/C5**
Cooling method	**Liquid Cooling**

Fire protection system	**Perfluorohexanone + water fire protection (optional)**
Certificate	**CAN/MODBUS/IEC104/IEC61850**
Communication Protocol	**CAN2.0/RJ45/RS485**

Application

The 5MWh Liquid-Cooled Energy Storage Container System (Model: HJ-G0-5000L/HJB-G0-5000L) with 5016kWh storage excels in diverse scenarios: it supports grid peak shaving and frequency regulation via its 0.5C charge-discharge rate and wide voltage range; integrates with solar/wind farms, using precise liquid cooling to store surplus green energy stably; meets C&I needs like factories with modular expansion and plug-and-play deployment for quick setup; powers off-grid telecom base stations or island microgrids, thanks to IP54 protection and C4/C5 anti-corrosion grade for harsh environments; and serves as reliable emergency backup, with real-time monitoring via multiple protocols.

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