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REGOMS PRODUCT DATASHEET

5.015MWh Battery Energy Storage System (BESS)

FOR ILLUSTRATION PURPOSE ONLY

5.015MWh BESS battery system offers a longer lifespan and higher energy density, helping reduce land use and construction costs. It features intelligent liquid cooling for efficient temperature control, ensuring long system life and low auxiliary power consumption. Its flexible, modular design allows adaptation to various Power Conversion Systems (PCS), while comprehensive monitoring covers the entire life cycle of each cell, including thermal management and early warnings for defective cells. Multi-layer safety measures—such as layered fuses, linked protection, and triple fire protection—enhance system reliability. The integrated design shortens delivery times and simplifies installation, while the open system requires minimal maintenance with low-frequency liquid injection and user-friendly operation. Additionally, cloud-based monitoring and intelligent work order management make the system easy to manage remotely.

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PRODUCT DATA SHEET

5.015MWh BESS Battery Pack Specification

Parameter	EPD332-05P105
Nominal Energy	104.49kWh
Nominal Capacity	314Ah
Configuration	1P104S
Voltage Range	291.2-374.4Vdc
Nominal Voltage	332.8Vdc
Peak Rate	0.5P
Fire Suppression	Pack-level immersion fire
Dimensions (mm)	2160*785*243
Weight	≈720KG

Advanced Safety

Pack Immersion Design

Pack-level immersion fire protection to improve safety. Fused and cell-level thermal insulation safety design prevent thermal events from spreading

Long Cycle Life

12,000 Cycles

Specialized ESS cell.
Prelithiated for longer life

Economical

↑10%

1P104S configuration with high BMS integration, reducing cost by 10%

Efficient Thermal Management

≤3℃

Advanced flow path and optimized pipeline, with robust flow inhibitors to improve thermal consistency

5.015MWh BESS Container System Specification

Parameter	ESD1331-05P5015
Nominal Energy	5015kWh
Nominal Capacity	3768Ah
Configuration	**12P416S**
Voltage Range	1164.8-1497.6Vdc
Nominal Voltage	1331.2Vdc
Peak Rate	**0.5P**
Availability	98%
Dimensions (mm)	6058*2438*2896
Weight	≈43t

5015kWh
High Energy

12,000 Cycles
Long Life Span

3-Layer Protection
High Safety

20ft
Standard Container

3℃
Intelligent Temperature Control

600MWh per acre
Optimized Energy Density

- High-Energy-Density System
- Optional Battery Container
- Optimal Space Utilization
- Integrated BMS
- Low Cost with Minimal Footprint

ESS Product Solution

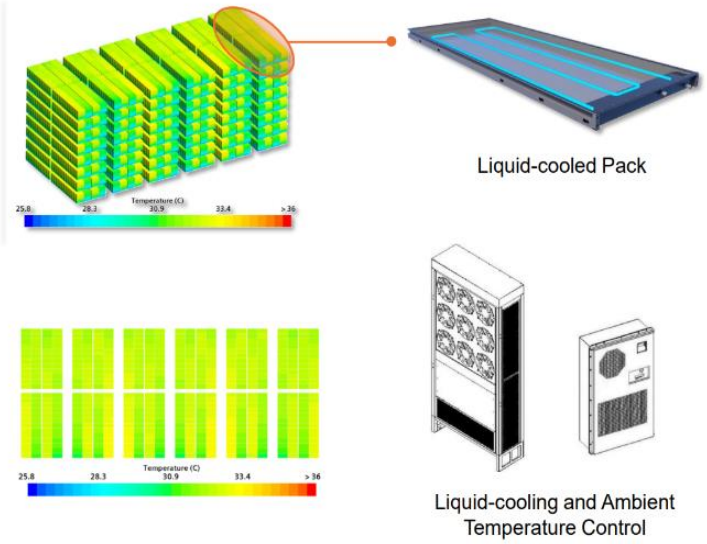
- Thermal Energy Storage
- Wind and Solar Energy Storage
- Shared Energy Storage
- Peak-valley Arbitrage

UL NFPA UN38.3 3536 GB IEC RoHS CSA GROUP MSDS TÜV SÜD

*The image illustrates two electrical racks physically mounted together to fit into the container, and one electrical rack comprises four battery packs connected in series.

Thermal Management System

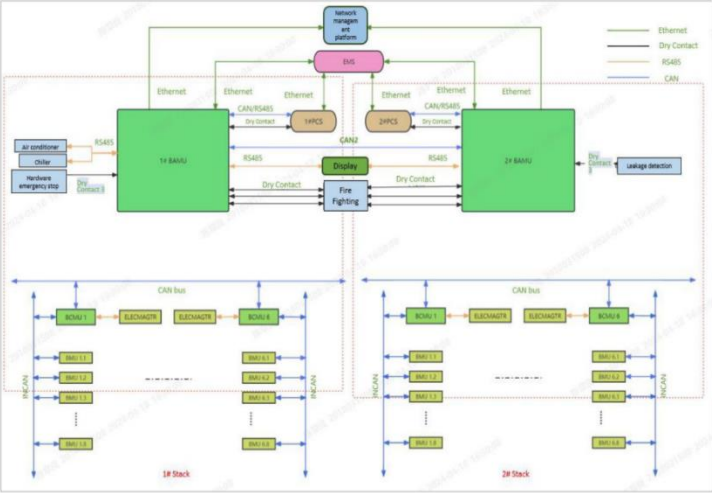
- Intelligent liquid cooling temperature control, low loss and long lifespan
- Efficient temperature control technology
- Balanced flow channel design
- Pack Temp. Difference≤3℃
- Auxiliary power consumption reduction 30%



Protection System

5.015MWh BESS BMS

The protection and monitoring functions of the battery system are implemented by the BMS battery management system. The BMS system of the battery system is managed at three levels, namely BMU,BCMU, and BAMU.



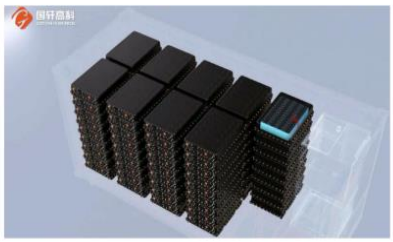
BAMU (container level): Collects lower-level BCMU information to estimate remaining battery capacity and health status in real time. Communicates with host and external systems through RS-485, CAN or Ethernet, and supports Modbus-RTU, CAN2.0B, IEC104, Modbus-TCP communication protocols.

BCMU (rack level, built in the high-voltage box): Detects the total voltage and total current of the entire battery pack, and transmits the information to the upper-level BMS in real time through the CAN protocol. It can calculate the capacity and health status of the battery during charging and discharging, predict the power and calculate the insulation resistance. It also controls the balance of relay switch and PACK level unit voltage.

BMU (package level): Monitors the voltage and temperature of individual cells and the total voltage of a single battery pack and transmits the information to the upper-level BMS in real time through the CAN protocol to control the voltage balance of individual cells.

Fire Suppression System

1st Layer Protection



- Cell full life state monitoring
- Coolant immersion fire extinguishing

2nd Layer Protection

- Detection and early warning Temp.+Smoke+Gas detector
- Self starting explosion-proof exhaust and ventilation.
- Fully submerged gas fire extinguishing system

3rd Layer Protection

- Fire water sprinkler system, full coverage sprinkler fire extinguishing to prevent heat diffusion and reignition.