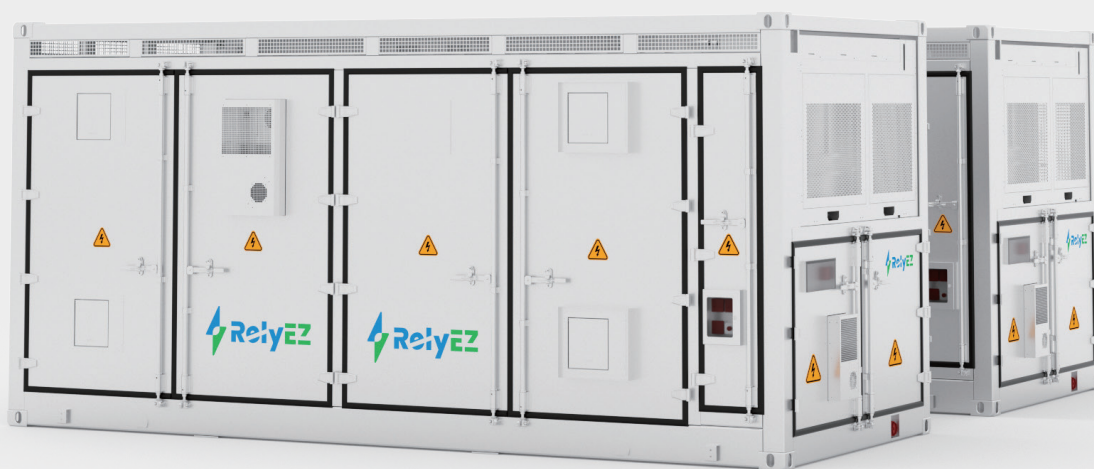


DeepCore Ultra Immersion Liquid-Cooled Energy Storage Battery System

DeepCore Ultra 5016

■ PRODUCT INTRODUCTION

Utilizes our self-developed immersion liquid-cooled battery modules, configured into the system through optimized series and parallel connections. The modules feature full immersion and cold plate-coupled thermal management technology, paired with a PWM adjustable circulation system. Leveraging intelligent algorithms, they deliver efficient energy storage and stable output, representing a qualitative breakthrough in liquid-cooled energy storage system safety and effectively extending battery service life.



Delivers a 2% Improvement in System Efficiency for Optimized Energy Consumption

Centralized cooling technology combined with AI control algorithms precisely regulates coolant flow, enabling intelligent system management and energy efficiency optimization.



Features an Immersion Liquid-Cooling Design for Stable and Reliable Safety Performance

Cells are immersed in insulating coolant, which isolates oxygen and dissipates heat to block all three elements of combustion, significantly enhancing system safety.



Cell Temperature Difference Controlled Within 2.5 °C, Ensuring High Temperature Uniformity

Operational temperature uniformity is superior to traditional air-cooled solutions, delivering a system cycle life of $\geq 10,000$ cycles and a design life of approximately 20 years for reliable operation.



Operates over a Temperature Range of -30 °C to 50 °C, Adapting to Harsh Working Conditions

Advanced thermal management strategies optimize temperature difference control across cell surfaces, making it suitable for extreme cold, high heat, high altitude, and high wind/sand environments for stable and reliable operation.

■ PRODUCT SPECIFICATIONS

Item	DeepCore Ultra 5016
Battery Parameters	
Configuration	12P416S
Nominal Energy	5015.9616 kWh
Nominal Voltage	DC 1331.2 V
Voltage Range	DC 1164.8 to 1497.6 V
System Parameters (0.5P)	
Rated Charge Current	1884 A
Max Charge Current	2411 A
Rated Charge Power	2500 kW
Rated Discharge Current	1884 A
Max Discharge Current	2411 A
Rated Discharge Power	2500 kW
Auxiliary Power Voltage	AC 380 V, 50 Hz, Three-phase Four-wire
Auxiliary Power Consumption	Max 45 kW
Operating Temperature	-30 °C to 50 °C
Storage Temperature	-20 °C to 45 °C
Application Altitude	≤3000 m / <4000 m (Optional, Derated)
Battery Compartment Short Circuit Current	12.5 kA*12
DC Output Branch Quantity	Single Output
BMS and PCS Communication Method	Supports CAN/Modbus485/TCP Communication, CAN Communication Recommended
System Parameters (0.5P)	
Product Dimensions (LxWxH)	6500x2800x3000 (mm)
Weight	Approximately 50 t
IP Rating	IP55
Cooling Method	Immersion Liquid Cooling

This document is regularly updated for accuracy and improvement. Please verify you are using the latest version. Illustrations are for reference only.



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