

RelyEZ GridUltra Liquid-Cooled Energy Storage Battery System

GridUltra 5016

■ PRODUCT INTRODUCTION

Uses customized non-walk-in containers, with a modular design that improves space utilization within the cabin. The advanced liquid cooling circulation design helps suppress the spread of battery thermal runaway, extending the service life of the energy storage system and improving system safety.



Modular Container System

Uses customized non-walk-in containers with a modular design, high integration, supporting fast delivery, quick installation, and maintenance.



Smart Liquid-Cooled Safety Compartment

The battery compartment has an IP55 rating, features a smart fire protection system design with multi-point monitoring and warning, and has fire extinguishing capability. The liquid cooling system delivers excellent battery temperature uniformity, with a system cell temperature difference $\leq 3^{\circ}\text{C}$.



Long-Life Liquid-Cooled Battery System

The liquid-cooled battery system has excellent energy efficiency, with a cycle life ≥ 8000 cycles and a design life of approximately 15 years. Ensures stable operation.



Energy Storage System

The battery compartment contains 6/12 battery racks, 1 bus distribution panel, 1 fire protection system, and 1 liquid cooling system.



Battery Cluster

Each battery cluster consists of 8 liquid-cooled battery modules and 1 high-voltage control box connected in series.



Battery Module

Each individual battery module is equipped with 314Ah lithium iron phosphate cells, supplied in two layout options: 1P52S (52 cells) and 1P104S (104 cells).

It delivers high energy density & compact structure, wide operating temperature tolerance, ultra-long service life, IP67 high protection rating and complete multiple safety features.

■ PRODUCT SPECIFICATIONS

Item		GridUltra 5016	
Battery Parameters			
Configuration	12P416S	6P416S	
Battery Pack	1P52S	1P104S	
Nominal Capacity	5016 kWh 0.5P, 100% DOD		
Nominal Voltage	DC 1331.2 V		
Voltage Range	DC 1164.8~1497.6 V		
DC System Parameters			
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	Adapted to Local Grid Voltage		
Operating Temperature	-30~50°C		
Application Altitude	≤2000 m / <3000 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		
Basic Parameters			
Product Dimensions (LxWxH)	6058x2438x2896 (mm)		
Weight	Approximately 42 t		
Container IP Rating	IP55		
Module IP Rating	IP67		
Cooling Method	Liquid Cooling		
Acoustic Noise	<79 dB (1m)		
Certifications/Reports	UL 60730-1, UL9540, UL1973, UL9540A, UL9540, UL9540A, IEC 62619, IEC 60730-1, IEC 63056, IEC 62477-1, IEC 61000-6-2/4, IEC 62477-1, IEC 61000-6-2/4, (EU) 2023/1542, UN 38.3, UN 3536 (EU) 2023/1542, UN 38.3, UN 3536		
Warranty			
Standard	5 years (included)		
Extended Warranty	15 years-covered by Munich Re		

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