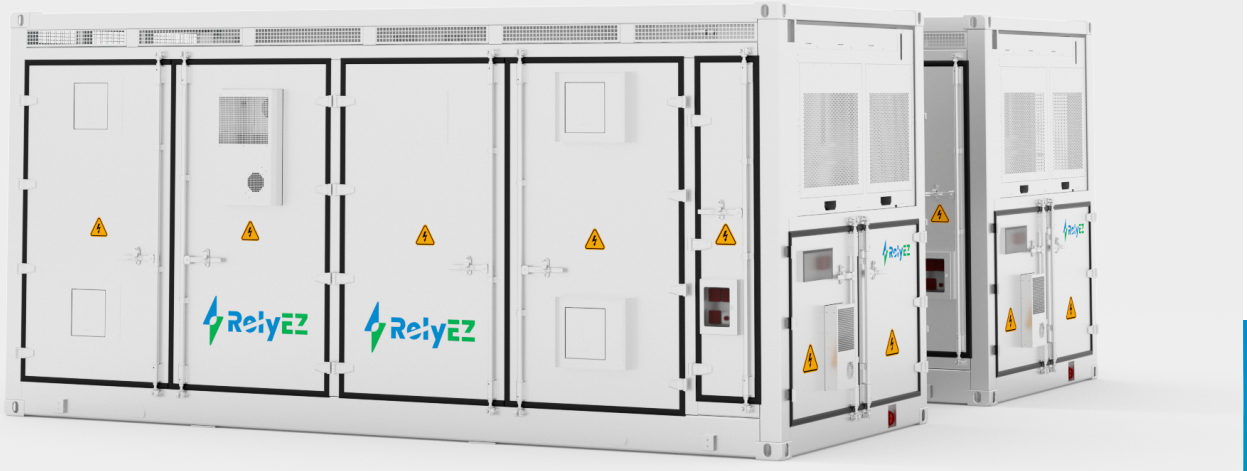
RelyEZ GridUltra Liquid-Cooled Energy Storage System

GridUltra 5016-6

PRODUCT INTRODUCTION

It utilizes a customized non-walk-in container, and its modular design enhances the interior space utilization rate. The advanced cluster-level architecture design concept enables one-cluster-one-management, effectively improving the all-around safety of the energy storage system and the full lifecycle of the energy storage batteries, providing a safer technical guarantee for the operation of the energy storage system.



Modular Container System

Uses customized non-walk-in containers with a modular design and high energy density, enabling short project delivery lead times and easy installation and maintenance.

Smart Liquid-Cooled Safety Compartment

The liquid-cooled module features an IP67 protection rating, a smart fire protection system design with multi-point monitoring and warning, and rapid fire extinguishing capability. The liquid cooling system delivers excellent battery temperature uniformity, with the system cell temperature difference controlled within 3°C.

Long-Life Liquid-Cooled Battery System

The liquid-cooled battery system features a long lifespan and high efficiency, with a system cycle life exceeding 8,000 cycles and a design life of up to 15 years.

Energy Storage System

The battery compartment contains 6 battery racks, 1 AC/DC system, 1 fire protection system, and 1 liquid cooling system, among other components.

Battery Rack and Battery Cluster

Each rack consists of 2 battery clusters and 1 integrated PCS.

Each cluster is composed of 4 liquid-cooled battery modules connected in series.

Battery Module

Each individual battery module is composed of 104 pieces of 314Ah LFP cells configured in a 1P104S arrangement. It features high energy density, a wide operating temperature range, long service life, high protection rating, and multiple safety features.

PRODUCT SPECIFICATIONS

Item	GridUltra 5016-6
	DC Side Parameters
Configuration	6P416S
Nominal Energy	5016 kWh 0.5P, 100% DOD
Nominal Voltage	DC 1331.2 V
Voltage Range	DC 1040 to 1518.4 V
	AC Side Parameters
Rated AC Power	6x450 kW
Rated Current	AC 6x376 A
AC Voltage Range	AC 690 V (-15% to 10%)
Rated Frequency	50Hz / 60Hz + 2.5Hz
Overload Capability	1.1× continuous, 1.2× for 1 min, 1.5× for 10 s
THDI	<3% (Rated Power)
	Basic Parameters
Auxiliary Power Supply Voltage	AC 380 V
Dimensions (LxWxH)	6058x2438x2896 (mm)
Weight	About 45 t
IP Rating	IP55
Cooling Method	Full Liquid Cooling
Humidity	0~95% (Non-Condensing)
Operation Ambient Temperature	-30 °C to 50 °C
Max Allowable Altitude	⩽3000 m/<4000 m (Optional, Derated)
Communication Interface	RS-485: Ethernet: CAN
Communication Protocol	CAN /Modbus-TCP/RTU

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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