

ENERGY STORAGE SYSTEM

- MV & HV SERIES



Generators · Grid · Industrial Parks · Buildings · Charging Stations · Data Centers

Advanced Safety Design

- 3+2 Safety System: Three-tier fire protection design + dual safety assurance.
- AI-Based Early Warning: Utilizing automotive-grade battery cells for AI-enabled battery fault warning.

Convenient and Reliable

- Easy Grid Connection: Comprehensive performance and functional testing conducted prior to shipment, eliminating the need for on-site commissioning.
- Minimal Dismantling Requirement: Assigning one PCS per cluster achieves 90% reduction in fault losses.
- Robustness in Challenging Environments: Ability to withstand diverse outdoor conditions, including high temperatures, extreme cold, high humidity, and high altitudes.

Streamlined and Flexible

- Efficient Layout: Vertical alignment of AC and DC components, reducing the footprint of PCS and water cooling units, decreasing product volume by 25%.
- Dynamic Capacity Expansion: Supporting side-by-side and back-to-back mounting to maximize space utilization, ensuring flexibility and scalability without limitations on site layout.



Intelligent Management

- Remote Management: Online intelligent monitoring for decreased manual inspection frequency.
- Dynamic Adjustment: High SOC accuracy enables dynamically adapting energy management strategies based on load requirements.

Lower LCOS

- Ultra-long Life: Enhancing battery pack consistency to extend system life by 20%.
- Efficient Heat Dissipation: Utilizing liquid-cooled pack, maintaining a cell temperature difference less than 2.8°C, and reducing auxiliary energy consumption by 30%.
- Separate Management of Each Cluster: The inter-cluster voltage balancing control eliminates the barrel effect, yielding an 8% increase in capacity over the battery lifecycle.

PRODUCT SPECIFICATIONS

Model	R372L1	R372L2	R418L1	R407L1
Rated Power	186kW	186kW	209kW	204kW
Rated Energy	372.74kWh	372.74kWh	418kWh	407.35kWh
Single Cell	3.2V 280Ah	3.2V 280Ah	3.2V 314Ah	3.2V 306Ah
Battery Pack	1P52S*8	1P52S*8	1P52S*8	1P52S*8
DC Voltage	1164.8~1497.6V	1164.8~1497.6V	1164.8~1497.6V	1164.8~1497.6V
Rated AC Voltage	690V	690V	690V	690V
Rated Output	156A	156A	175A	171A
Protection Grade	IP54	IP54	IP54	IP54
Thermal Management Technology	Liquid Cooling	Liquid Cooling	Liquid Cooling	Liquid Cooling
Dimensions (W*D*H)	≈1402×1338×2320mm	≈1402×1338×2320mm	≈1402×1338×2320mm	≈1402×1338×2320mm
Weight	≈3300kg	≈3400kg	≈3500kg	≈3500kg
Design Life	15 years	15 years	15 years	15 years
Max. Allowable Altitude	4,000 meters <small>(derating above 2,000 meters)</small>	4,000 meters <small>(derating above 2,000 meters)</small>	4,000 meters <small>(derating above 2,000 meters)</small>	4,000 meters <small>(derating above 2,000 meters)</small>
Internal Isolation Method	No Transformer	No Transformer	No Transformer	No Transformer
Temperature & Humidity Requirements	-30°C~50°C	-30°C~50°C	-30°C~50°C	-30°C~50°C
System Efficiency	88.5%	88.5%	88%	89%
Max. Efficiency	89.5%	89.5%	89%	90%
Structure	Left-right	Left-right	Left-right	Left-right

ENERGY STORAGE SOLUTION

