Hisense | 科林电气 KE ELECTRIC

KE-5100 MW-Class

LIQUID-COOLED BATTERY ENERGY STORAGE CONTAINER



Full-scenario coverage: Suitable for utility-scale renewable energy integration, standalone energy storage power stations, grid peak shaving and frequency regulation, industrial & commercial parks, and PV-storage-charging integrated stations.

ULTIMATE SAFETY

- Physical Isolation Between Electrical and Battery Compartments; Three-level Fire Protection + PACK-Level Fire Suppression;
- Stable Operation Under Extreme Conditions Such As Wide Temperature Range and High Altitude;
- IP55 Protection Rating for the Entire Unit, Certified to Multiple International Standards.

HIGHER EFFICIENCY

- CTP High-efficiency Cell-to-pack Technology Significantly Improves Energy Density, Saving Over 20% Floor Space Compared to Traditional Solutions;
- Fully Self-developed PACK/BMS/EMS/PCS for Millisecond-level Coordinated Response;
- Standard 20-foot Container Fully Integrated and Factory-assembled for Quick On-site Deployment and Commissioning.

LONGER LIFESPAN

- High-stability LFP Cells with Intelligent BMS Active Balancing Technology, Deliver a Cycle Life of ⩾8,000 Cycles;
- Intelligent Liquid Cooling Thermal Management System Keeps Cell Temperature Difference Within the Cluster < 3°C, Safeguarding Cell Consistency;
- Adaptive expansion force design, PACK protection rating IP67, long-term reliability under daily cycling conditions.

GREATER FLEXIBILITY

- Smooth Capacity Expansion from 1.25MWh to 800MWh, Supporting Grid-tied, Off-grid, Microgrid, and VPP Operation Modes;
- Rated Rate 0.5C, Adaptable to 2h/3h/4h Multi-rate System Configurations;
- Supports Side-by-side and Back-to-back Installation, Salt Spray Grade C4 (C5 optional), Suitable for Coastal and Industrial Environments.

Product Parameters

PARAMETER CATEGORY	PARAMETER NAME	KE-5100 MW-Class
SYSTEM OVERALL PARAMETERS	Battery Module Configuration	12*1P416S
	System Available Energy	2.51/5.02MWh
	Nominal Voltage	1331.2V (Operating range: 1164.8~1456V)
	Max. Voltage Range	1164.8~1456V
	Nominal Power	2.5MW
	Rated Charge/Discharge Rate	⩽0.5C
CELL PARAMETERS	Cell Type	LFP
	Rated Capacity	314Ah
	Nominal Energy	1004.8Wh
	Nominal Voltage	3.2V
	Life Cycle	⩾8000 Cycles (25°C, 0.5C, 70%EOL)
BATTERY PACK PARAMETERS	Battery Module Configuration	1P104S
	Nominal Energy	104.5kWh
	Nominal Voltage	332.8V
BATTERY CLUSTER PARAMETERS	Battery Module Configuration	1P416S
	Number of Battery Modules	4
	Nominal Energy	418.0kWh
	Nominal Voltage	1331.2V
ENVIRONMENTAL PARAMETERS	Operating Ambient Temperature	-20°C~55°C
	Working Altitude	⩽5000m (Derated 3000~5000m)
	Operating Ambient Humidity	0%~100%
	Salt Spray Grade	C4 (C5 optional)
STRUCTURE & SAFETY PARAMETERS	Mass	<45T
	Thermal Management Type	Intelligent liquid cooling
	IP Code	IP55
	Fire Suppression Type	Three-level fire protection (PACK-level + cluster-level + cabinet-level) + pack-level fire suppression (optional)
	Communication Interface	RS-485, CAN, Ethernet
	Cabinet Dimension (L×W×H)	6058×2438×2896mm
	Certifications	IEC 62619, IEC 63056, IEC 62477, IEC 61000, RoHs, etc.

* All parameters listed above are based on the 5.02 MWh model. For specifications of other energy capacities (2.51 MWh), please refer to the respective model datasheets.

SHIJIAZHUANG KELIN ELECTRIC CO.,LTD.

TEL: +86 400-0311-128

EMAIL: info@kechina.com

ADD: Nanjiangbi,Hongqi Street,Luquan District,Shijiazhuang City,Hebei Province,P.R.China