



Safe and reliable

- ★ LFP cells from first-tier manufacturers
- ★ 2 level BMS design, multi-monitoring of status
- ★ Unique and safe liquid-cooling PACK design
- ★ PACK-grade fire protection design
- ★ Hierarchical linkage, ensuring the safety of the battery system
- ★ 3 level electrical protection system of relays, fuses and circuit breakers
- ★ Outdoor cabinet corrosion protection rating C4/C5

Rapid deployment

- ★ Side-by-side multiple cabinets for rapid deployment
- ★ Fast access to string-type power conversion system (PCS) or inverter-booster cabin

High efficiency and convenient

- ★ High energy density, stable and reliable performance, and long service life
- ★ Modularized design, convenient for maintenance, management and capacity expansion
- ★ Quick cable connection, saving installation time on site

Active equalization

- ★ 2A active equalization, overcoming the impact of single cell capacity on system capacity
- ★ Balance accuracy can be controlled within 2%

Cost optimization

- ★ Small and light, saving space and installation cost
- ★ Long cycle life and low failure rate, reducing O&M investment



OUTDOOR LIQUID-COOLING LITHIUM BATTERY ENERGY STORAGE SYSTEM



System parameter

Parameter list



Cell type	LFP 3.2V314Ah
Battery pack configuration	52.25kWh / 1P52S
Battery system configuration	1P416S (1P52S*8)
Rated voltage	1331.2V
Voltage range	1164.8V ~ 1497.6V
Rated energy	418kWh
DOD (max/recommended)	100% / 90%
Discharge cut-off voltage	1164.8V or any cell in battery cluster reaches 2.8V (T > 0°C)
Charge cut-off voltage	1497.6V or any cell in battery cluster reaches 3.65V
Rated charge/discharge current	157A
Charge & Discharge rate	≤ 0.5P
Cycle life	6000
Protection rating	IP54
Overvoltage protection	YES
Thermal management	Liquid cooling
Liquid-cooling capacity	5kW
Cooling medium	50% glycol aqueous solution
Fire protection system	Perfluorohexanone / Water firefighting
Working temperature	-20 ~ 50°C(discharge) 0 ~ 50°C(charge)
Working humidity	0 ~ 95% (Condensation-free)
Storage temperature	-20 ~ 50°C
Altitude	≤ 3000m (derated use above 2000m)
Noise	≤ 75dB
Weight	3800kg
Dimension (W*D*H)	1300*1350*2305 mm
Inlet method	Down in and out
Communication interface	RS485 / Ethernet / CAN

Battery module

Adopting 3.2V314Ah*52 LFP cells, connected in 52 series and 1 parallel (52S1P) to form a 166.4V314Ah battery module; Module built-in BMU systems, collect single cell's voltage and temperature, and manage equalization of cells, ensuring the safe and efficient operation of the whole module.



Product features

- ★ Adopting square LFP 314Ah high-energy battery cell, with high energy density, stable and reliable performance and long service life.
- ★ PACK includes MSD (built-in fast fuse), high-voltage waterproof snap-in connector
- ★ Liquid-cooling heat dissipation, reserving liquid cooling channels, and adopting snap-in liquid cooling tube connectors.
- ★ High-accuracy BMU, collecting the temperature and voltage of each cell, ensuring the safe and stable operation of the equipment.
- ★ PACK-grade fire protection: each PACK is equipped with composite detector (built-in), PACK-grade spray head, and single-zone puncture valve.

Parameter list

Cell type	LFP 3.2V314Ah
Component part	52Cells, BMU
Rated energy	52.25kWh
Connection mode	52S1P
Nominal voltage	166.4V
Working voltage	145.6V ~ 189.8V
Rated charge & discharge rate	≤ 0.5P
Terminal output	High voltage waterproof snap-in connector
Thermal management	Liquid cooling
Cooling medium	50% glycol aqueous solution
Working temperature	-20 ~ 50°C (discharge) 0 ~ 50°C (charge)
Working humidity	0 ~ 95% (Condensation-free)
Storage temperature	-20 ~ 50°C
Protection rating	IP65
Communication method	CAN
Dimension (W*D*H)	785*1174*248mm
Weight	350kg