5MWh Container ESS

The 5Mwh container Ess is optimized and integrated by high-quality 314Ah LFp battery, intelligent BMS EMS &Pcs , thermal management svstem, fire protection system with high safety, high integration, long lifespan, high efficiency advantages.

It is widely applicable in grid-connected scenarios such as frequency regulation, voltage support peak-valley arbitrage, peak shaving, demand response, and renewable energy integration, it can also be used in off-grid like black start, backup power, and microgrids.

Model	5MWh
Basic Parameters	
Rated Power	2507 kW
Battery Capacity	5015 kWh
Cabinet Dimensions (W-D-H)	6250 mm * 2700 mm * 3100 mm
Weight	< 42t
Open ways	Side Opening
Mobility	/
DC Side Parameters	
Cell	LFP 3.2V / 314 Ah
System Voltage Range	1164.8VDC ~ 1500VDC
AC Side Parameters	
Permissible Grid Voltage	1331.2 (-15% ~ 15%) V
Rated Grid Frequency	50 / 60 Hz
System Parameters	
Maximum Cycle Efficiency	>90 %
Battery Compartment IP Grade	IP55 (Battery Compartment)
Operating Temperature	-20℃ ~ +50℃
Corrosion Resistance Grade	C3
Temperature Control Method	Liquid Cooling System
Fire Suppression System	Gas Fire Suppression + Emergency Ventilation + Water Fire Suppression
Compartment Design	Multi - Compartment Design
Power Distribution Design	Centralized PCS, DC Bus Control Cabinet
AC Output Interface	Aviation Plug / Copper Busbar

Product Feature

SAFETY

Three-level protection at the pack, cluster, and PCS levels, enabling precise hierarchical shutdown to minimize losses. Multi-compartment container design to prevent thermal runaway, with a three - layer fire protection system and two-level spray protection.

EFFICIENCY

PCS maximum efficiency ≥ 98%. Seamless parallel operation of multiple units, supporting 2/3/4-hour system applications. Integrated high - efficiency liquid cooling system with a temperature difference within the container < 5℃.

HIGH INTEGRATION

Separate design for the electrical compartment and battery compartment, Easy maintenance. Modular design allows flexible capacity expansion to meet varying scale requirements. Liquid - cooled battery systems of the same capacity save 40% land occupation.