

Orca - 5MWh

Liquid-cooling Energy Storage System



Low Costs

- Intelligent liquid-cooling temperature control reduces system auxiliary power consumption, All pre-assembled, no battery module handling on site



Effective and Flexible

- Cluster-based management, no inter-cluster circulation
 - Industry's first MTBF certified, IEEE 693 High design level compliance
- Suitable for extreme environments such as deserts, seashores, extreme cold and high altitudes, high corrosion protection grade.



Ultimate Security

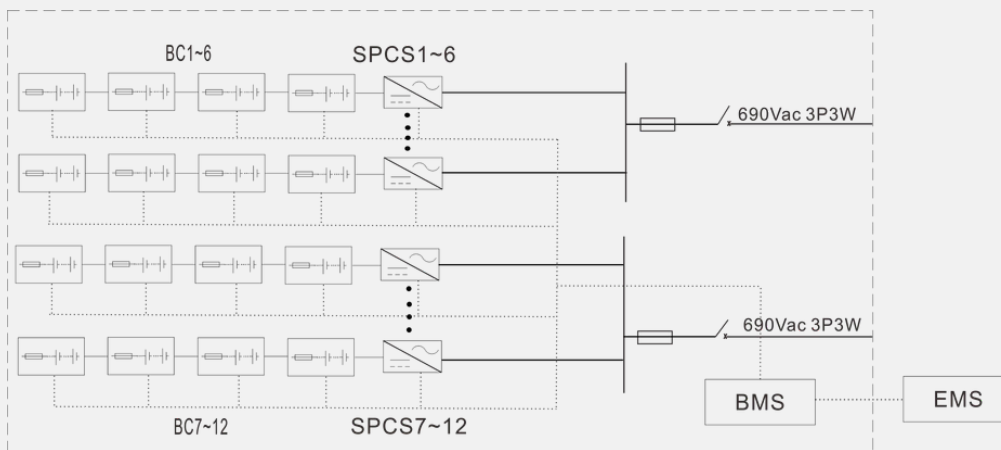
- Multi-level electrical protection and fire protection design, arc-flash and synergistic protection functions
- Intelligent management of battery health, early warning of faulty batteries



Intelligent Operation and Maintenance

- Online intelligent monitoring, reducing the number of manual inspections
- Rapid state detection and fault recording, to achieve rapid positioning and analysis of system faults.

Circuit Diagram



Type Designation	ORCA MWh
AC-side Parameters	
Nominal Power	215kW *12
Max. THD of Current	< 3 % (Nominal Power)
DC Component	< 0.5 %
Nominal Voltage	690V
AC Voltage Range	607V ~759V
Power factor	≥0.99 (Nominal Power)
Frequency Range	50/60Hz
System Parameters	
Nominal Capacity	5015.9kWh
Nominal Power	2507.9kW@0.5CP
Battery Voltage Range	1123.2~1497.6V
Nominal Battery Voltage	1331.2V
Cell Type	LFP 3.2V / 314Ah
System Configuration	1P416S*12
SOC Calculation Accuracy	≤3%
SOH (End of Life)	70%
Operating Temperature Range	-30°C~50°C
Relative Humidity	≤100%RH
Max. Working Altitude	4000m
Protection Grade	IP55 or NEMA Type 3
Cooling Concept	Liquid cooling
Noises	≤75dB(A)
Weight	≤44t
Corrosion-proof Grade	C4-M
Seismic Level	IEEE 693 High design level compliance (Optional)
Snow/Ice Loads	30lb /sqft
Wind Loads	129mph
Dimensions (W*D*H)	6058*2438*2896mm
Fire Suppression Concept	Perfluoroacetone, Dry pipes with sprinklers Ethernet
Communication Interface	UL1973, UL9540A, UL9540, UN38.3, NFPA855, NEC, IEC 62620, IEC 63056, IEC 62485-5 etc.
Compliance	
Transportation	Fully populated with battery packs

*Subject to actual delivery.

