



Arenq Series



BESS

BESS

ARENQ®
Forward To Future

Liquid-cooled Battery Energy Storage system AQ-BESS-5MWh

ARENQ large-scale integrated energy storage system integrates a 5MWh liquid-cooled battery, 2500kW PCS converter-transformer unit and AI-powered EMS, featuring intelligent balancing, multi-level safety and high-efficiency grid connection, to meet peak shaving, renewable energy consumption, backup power and grid regulation demands for user-side and power-side energy storage scenarios.



Reduce Peaks and Fill Valleys

- Charge during off-peak hours, discharge during peak hours
- For enterprises & industrial parks
- Cut electricity costs & save bills



Off-grid Backup Power Supply

- Uninterrupted backup power for critical loads during outages
- Reduce economic losses from sudden power failure



Electricity Trading

- Short-term power trading with load forecasting
- Maximize operational profits



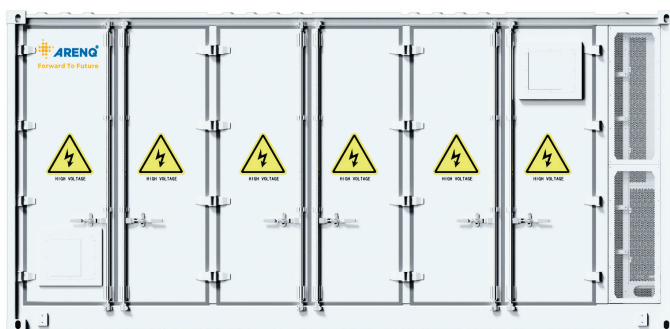
Demand Response

- For transformer capacity overload scenarios
- Rapid discharge to meet load demand



Liquid-cooled Battery Energy Storage system

AQ-BESS-5MWh



Technical Parameter

Battery Parameters (DC side)

Battery type	Lithium iron phosphate battery
Cell capacity	314Ah
Combination method	416S1P*12
Nominal voltage	1331.2V
Voltage range	1081.6-1497.6V
Nominal electricity quantity	5MWh
Charge and discharge rate	0.5C

Others

Operating temperature range	-20-55°C(>45°C,Reduce power)
Operating humidity range	5%~95% (No condensation)
Operating altitude requirements	3000m (>3000m,the credit limit must be reduced)
Temperature control scheme	Liquid cooling
Fire protection plan	Perfluorohexanone + water spray
Protection grade	1P54
Anti-corrosion grade	C3
Noise	<80db
Seismic resistance grade	Level 8
Entry and exit methods	Bottom in, bottom out
Dimension (L*W*H).	6058*2438*2896mm
Communication protocol	Modbus-RTU, Modbus-TCP, IEC104, etc
Communication methods.	RS485, Ethernet, Dry contacts, etc