



BESS

Arenq Series



BESS

Liquid Cooled Integrated Cabinet Energy Storage System AQ125KW261KWH -M

AQ125KW261KWH -M is an newly developed C&I energy storage product for grid-connected application scenarios. The product highly integrates Li-FePO₄ battery, BMS, PCS, EMS, protection system, liquid cooling system. Innovative integrated design, small volume and large energy, provide customers with low-carbon and high-yield energy storage solutions.



High Integration

- Highly integrated with energy storage unit, PCS, BMS, EMS, fire protection and temperature control systems.
- Covering an area of 1.35M² and a height of only 2.17m, leading in the industry.



High Safety

- Three - level protection system, accurately monitoring short circuit, over - current, over - voltage, over - temperature and other abnormalities.
- Three - level fire protection for module, cluster level and water protection, and two - level explosion - proof design for module and cabinet.



High Efficiency

- PCS uses the third generation semiconductor silicon carbide solution.
- Intelligent liquid cooling temperature control strategy to reduce power consumption.
- System conversion efficiency up to 90%..



Intelligent Management

- Built-in EMS, with the ARENQ cloud platform to achieve remote monitoring, remote setting, revenue calculation, remote upgrade, data analysis, cloud warning and other functions.
- Mobile APP function and local web function, convenient on site operation and maintenance.



Liquid Cooled Integrated Cabinet Energy Storage System

AQ125KW261KWH -M



Technical Parameter	
System	
Nominal capacity	314 Ah
Nominal energy	261 kWh
Usable energy	≥ 243 kWh
Nominal output power	125 kW
IP rating	IP54
Operating temperature	-20~55°C
Cooling mode	Liquid cooling
Fire Protection	Aerosol
Altitude	4000 m (> 2000 m derate)
Cycle life	≥ 8000 cycles
Dimension (W*D*H)	1000 × 1350 × 2170 mm
Weight	~ 2500 kg
Certification	GB/T 36276
AC (on-grid)	
Nominal voltage	400 V
Nominal output current	180 A
AC access method	3L+N+PE
Allowable voltage range	400 V(-20 % ~+ 15 %)
Grid frequency range	50Hz/60Hz+2.5Hz
Power factor	-0.99~+0.99
Charge/discharge conversion time	<100ms
DC	
Voltage range	728V, 949V
DC Max. current	180A
Rated DC power	125kW
Battery type	Lithium iron phosphate (Li-FePO4)
PACK configuration	5*1P52S
Liquid Cooling System	
Cooling capacity	5kW
Rated circulating water flow	46.5@60kPaL/min
Refrigerant	R134a
Carrier refrigerant	Pure water, aqueous solution containing 50 per cent ethylene glycol