100KWH Air cooling BESS

GEYA POWER

- Industrial Park
- Villa Residence
- Farm
- Data Center

Product features

Efficient Air-Cooling System

These energy storage cabinets use an air-cooling system to maintain optimal temperatures for the battery modules. This cooling method is cost-effective, requires minimal maintenance, and is suitable for most industrial and commercial environments with moderate climate control needs.

High Capacity and Reliable Power Supply

Air-cooled storage cabinets provide substantial energy capacity, making them ideal for applications that require consistent, high-power output. They support energy-intensive operations, peak load management, and backup power in case of grid instability.

Enhanced Durability and Environmental Resistance

Built with durable materials and designed to protect internal components, air-cooled storage cabinets are resistant to dust and moisture, ensuring reliable performance even in challenging industrial environments. Many models include IP-rated enclosures for added protection.

Smart Monitoring and Safety Features

These systems are equipped with advanced monitoring technology that tracks key metrics like temperature, voltage, and charge levels in real-time. Safety features, such as overvoltage, overcurrent, and temperature controls, enhance operational safety and extend the battery lifecycle by preventing overheating and other potential hazards.

Technical Specification for 2 hours Backup (0.5C)

Model	30kW 100kwh(16S*7)	50kW 100kwh(16S*7)	50kW 112kwh(16S*7)	50kW 140kwh(20S*7)	50kW 160kwh(20S*8)
DC (Battery)					
Cells Type	LiFePO4 Lithium Iron Phosphate				
Cell specfication	3.2V280Ah	3.2V280Ah	3.2V314Ah	3.2V314Ah	3.2V314Ah
Configuration of Battery	112S1P	112S1P	112S1P	140S1P	160S1P
Battery Capacity	100kWh	100kWh	112kWh	140kWh	160kWh
Max. Power	30KW	50KW	50KW	50KW	50KW
Max. Current	140A	140A	140A	140A	157A
Battery Rated Voltage	358.4V	358.4V	358.4V	448V	512V
Battery Voltage Range	313.6V-403.2V	313.6V-403.2V	313.6V-403.2V	392V-504V	448V-576V
AC (On/Off Grid)					
Max. Power(kVA)	33KVA	55KVA	55KVA		
Active Power(kW)	30KW	50KW	50KW		
Rated Voltage(V)	400V	400V	400V		
Rated Current(A)	43A	86A	86A		
Voltage Range	320V-460V				
Rated Frequency	50/60Hz				
Range of Frequency	45-55/55-65Hz				
THDI	<3%				
Power factor	1.0(Adjustable from 0.8 leading to 0.8 lagging)				
AC System	3 phase 4 wires				
Overload capability	110%				
Solar Side (PV)	Optional				
Max. Power	100KW(30KW*2)				
High Volage side Voltage	560V-1000V				
High Voltage side Current	80A				
Low Voltage side Voltage	500V-900V				
Low Voltage side Current	100A				
Uninterrupted Load (STS)	Optional				
STS Power	50KW				
STS Voltage	400V 50HZ/60HZ				
Overload Power	110%				
Shift Time	<20mS				
System operation strategy					
Functional	Anti Backflow and Black Start				
Operation Mode Selections	Power peak shaving and valley filling, electricity price peak valley arbitrage, photovoltaic priority for electricity cost savings, wind power generation priority for electricity cost savings, off grid power supply for remote areas				
Operation scenario	Photovaltaic and diesel storage project, Wind power and diesel storage project, Wind and photovoltaic diesel storage project, Charging Station + Energy storage project, On-grid electricity selling project				
Specificaiton					
Cabinet Size (W * D * H)	1150*1246*2050mm				
Weight	≤1.65T				≤1.90T
Max. cycle efficiency	>90%				
Protection	IP55				
Auxiliary Power Supply	Self-powered, Externally powered				
Corrosion resistance rating	C3/C5				
Operating Humidity Range	0%-100%(Non-condensing)				
Operating Temperature Range	-30℃-50℃(>45℃derating)				
Max. Operation Altitude	2000m				
Battery cabinet cooling method	Intelligent Air Cooling				
Fire safety configuration	Smoke detector, Heat detector, Gas-based fire extinguishing system, Pressure relief valve, Pack-level fire protection, Cluster-level fire protection, Water-based fire protection, Automoatic pressure relief				
Communication	Ethernet、485、CAN				
Communication Protocal	Modbus TCP				

Note: Some spare parts are available. For details, please consult with our sales for further communicatioN.