

Power 50kW/100kW

Capacity 150kWh~300kWh

POWER BASE POOL ZR-BP100-01



Characteristics

- Adopt two-stage topology, wide voltage input range;
- Can be inserted into photovoltaic panels, support photovoltaic direct charging ;
- MPPT photovoltaic maximum power tracking function;
- STS can achieve seamless switching off grid;
- PCS power 50kW-100kW, meeting the needs of microgrid.
- Modular design, easy to install and easy to transport;
- It adopts lithium iron phosphate battery with long life and high safety performance.;
- Each cluster has a battery capacity of 96.8kWh and supports 15 cluster expansion;
- Integrate PCS, lithium battery system, and control cabinet to ensure product compatibility.
- Scientific and safe, short construction period; green and environmental protection, promoting environmental friendliness; intensive land use, reducing resource consumption, etc.

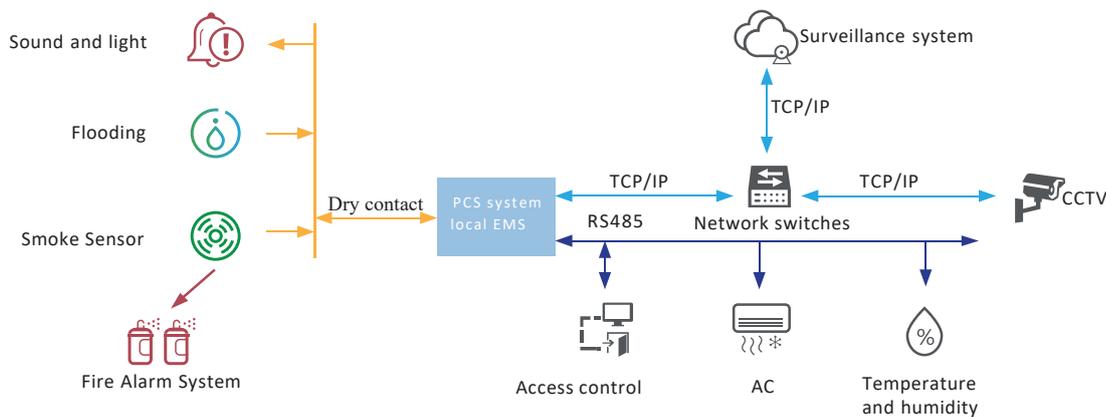


Security Systems

- Modular structure, flexible configuration of system capacity.
- Standard container, turnkey system.
- Intelligent battery management, within local EMS.
- Support the access of other micro-sources to realize the intelligent and efficient management of the system.
- Outdoor IP55 protection level
- Dustproof, waterproof and corrosion-proof
- Constant temperature design in the warehouse, the battery works in the best temperature environment
- Intelligent fire fighting system, automatic fire extinguishing
- Intelligent sound and light alarm and remote upload function, high security

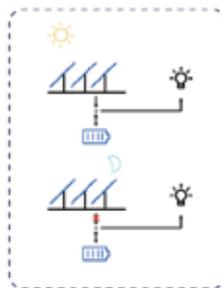
Security System ▶

The security system in the container, including sound and light, water immersion, smoke and other alarm systems, fire protection systems, temperature and humidity, access control, temperature control systems and monitoring systems, etc., the internal EMS conducts centralized monitoring and dispatching via dry contacts, RS485 and TCP/IP.





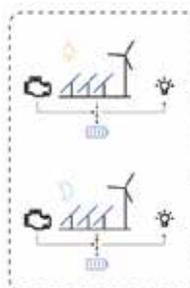
▶ Application 1: PV Microgrid



Through the mode of photovoltaic + energy storage, power supply can be realized in areas without electricity. When the photovoltaic is sufficient during the day, it can be used by the load, and the excess power is stored in the battery. When the photovoltaic is insufficient at night, the energy stored in the battery is released to the load to continue supplying power.

It can solve the small power supply needs of remote areas, such as communication base stations, border posts, small villages, etc.

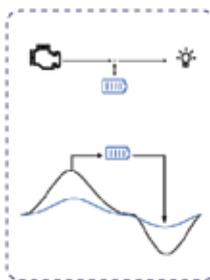
▶ Application 2: PV+Diesel Microgrid



Through the combined operation of photovoltaic energy storage diesel engines, continuous power supply in areas without electricity and weak electricity can be realized. When the photovoltaic is sufficient during the day, it can be used by the load, and the excess power is stored in the battery. When the photovoltaic is insufficient at night, the stored electric energy of the battery is released to the load to continue supplying power. Under the diesel engine is working in standby mode, when the new energy generation is insufficient during the day or night, the diesel engine is started to supplement the power supply.

It can solve the needs of medium-sized power supply in remote areas, such as islands, large villages, and factories in weak current areas.

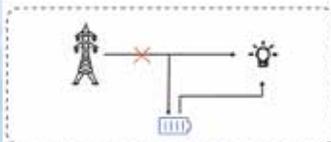
▶ Application 3: Diesel replacement and optimized control



The combined operation of energy storage diesel engines can achieve maximum efficiency utilization of diesel engines and solve the problem of diesel engine wear. When the load is large, the diesel engine and energy storage can operate together, and the energy storage can quickly respond to load jitter, so that the diesel engine can be kept in the best operating state. When the load is very small, the diesel engine stops working, and energy storage supplies power to the load, saving fuel.

It can solve the large-scale power supply demand in weak current areas, construction sites, oil extraction rigs, large villages, etc.

▶ Application 4: Emergency power supply and backup power



The energy storage system is connected to the original power system through a quick switch. When the mains power fails, it can quickly switch to the energy storage system to ensure the reliability of power supply. Moving the system to a place without electricity, through black start and virtual synchronous machine control can ensure emergency load power supply.

It can solve temporary electricity demand, large-scale events, plant backup, transformer expansion, power supply reliability guarantee, etc.

ZR-BP100-01

Regular Features		
Grid Voltage	400Vac	
Grid Frequency	50/60Hz (±2.5Hz)	
Rated Power	50kW/100kW	
Protection Level	IP54	
Working Temp Range	-10°C~50°C	
Humidity Range	0~95%	
Altitude	3000m	
Battery Cluster(Cabinet) Features		
Model	ZR-EP100-01	
Battery Chemistry	LiFePO4	
Rated Voltage	460.8Vdc	
Rated Energy	96.8kWh	
Size(W*H*D)	1270mm ×2140mm×833mm	
Weight	About 1.0t	
Battery Connection	18 sets of ZR-FE24210-0835R1 in series	
Battery Cluster Connection	Max. 15 cabinets in parallel	
Energy Converter Features		
Qty of Battery Cluster(s)	1 or more	2 or more
Model	ZR-BP50-01	ZR-BP100-01
Battery Voltage Range	250~520V	
Maximum DC Current	130A	260A
	260A	
PV Voltage Range	520~900V	
PV Maximum Current	220A	440A
Connection	3P4S	
Power Factor	-1~1	
Communication	RS485,CAN,Ethernet	
Isolation	Power-line Frequency Isolation	
Certifications	CE LVD,IEC 62109	
	EMC, AS/NZS61000	
	AS4777	



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