

500kW/1075kWh

Integrated Energy Storage System



Features

- Modular design for flexible capacity expansion up to 1075kWh
- Up to 500kW of direct-drive photovoltaics for efficient utilization
- Intelligent temperature control ensures stable operation in extreme environments
- One-stop integration simplifies installation and maintenance



Diverse Functions

It supports peak shaving and valley filling, demand-side response, backup power supply, and other major functions; it enables remote updates of operational strategies and firmware upgrades, resulting in lower operation and maintenance costs



High Integration

High Integration: The system is productized, integrating energy storage batteries, PCS (Power Conversion System), power distribution, temperature control, fire protection, water immersion door sensors, and monitoring communication, providing comprehensive control over the system's operational status and risks. One-stop delivery shortens the on-site installation and commissioning period of the project



Flexible and Convenient

Flexible and Convenient: Modular PCS allows for linear expansion of battery units and bidirectional energy storage inverter units; it possesses independent charging and discharging control capabilities for multiple battery packs, enhancing battery utilization and safety



Safe and Intelligent

A fault escalation handling mechanism responds to preset fault scenarios. Customized BMS (Battery Management System) provides comprehensive measurement and protection functions. It supports cloud-based dispatching and operational report analysis.

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Specifications

Model	ZECO-ESS1075(500kW/1075kWh)
Battery parameters	
Battery rated capacity	215kWh*5
Battery voltage range	672~864V
Battery pack series and parallel connection	1P*20S*12S
Maximum charge/discharge current	140A
Adaptive battery	LFP
Cell Capacity	280Ah
PV parameters	
Maximum PV input voltage	Battery minimum voltage -50V
PV Input power	500kW
AC-side parameters (Off-grid)	
Rated AC voltage	500kW
Rated AC frequency	50/60Hz (±5Hz)
THDU	<3% (Linear Load)
Overload capacity	110%, normal operation; 120%, 1 minute
General parameters	
Degree of protection	IP20 (Indoor)
Protective Class	/
Isolation mode	Transformer isolation
Shutdown self-discharge	<100W (Without transformer)
Display	LCD
Relative humidity	0 ~ 95% (no condensation)
Noise	<78dB
Ambient temperature	-25°C to +60°C(derating above 45°C)
Cooling mode	Intelligent air-cooled
Altitude	2000m (> 2000m reduction)
Communication interface	Rs485 / CAN
Dimensions (W*D*H)	1200*1000*2300mm(Energy Storage Converter) 1200*800*2100mm(PV Converter) 12192*2438*2896mm(Container)
Weight (approx.)	~17.5t