

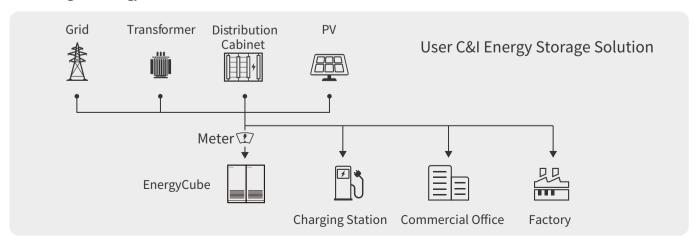
105KW/215KWH COMMERCIAL & INDUSTRIAL ESS

Energy Cube Liquid-Cooling





The liquid-cooled Energy Cube utilizes an independent liquid cooling system, achieving higher energy density and cooling capacity within a compact design. It offers high efficiency, low noise, safety, reliability, and easy scalability. When integrated with PCS (Power Conversion Systems), it can regulate grid voltage, correct three-phase imbalance, and manage harmonics, enhancing power quality. With a footprint of only 1.3m², its modular design and high protection level make it adaptable to various applications, serving as a backup power source to help businesses reduce energy costs and increase the use of green energy.



Ultimate Temperature Control **Dynamic Liquid Cooling**



Independent Liquid Cooling

Features liquid cooling design with low noise operation at ≤75dB.



Safe & Reliable

Partitioned system isolation with active safety monitoring and PACK-level immersion fire protection technology.



Cloud-Edge Collaboration

24/7 real-time monitoring with multiple operation control modes.



Modular Design

Modular structure for easy installation and commissioning, allowing flexible expansion as needed.



EMS Energy Storage Cloud

Multiple Strategy Modes

Maximizing Economic Returns



Cloud Control

The system dynamically monitors and assesses the local device data, allocates power outputs for various energy storage devices, coordinates power among multiple devices, optimizes operational modes, ensuring the highest system utilization efficiency and maxi - mum returns.

Security Monitoring

24/7 Cloud-Based Real-Time Monitor - ing, Analyzing Battery Pack Consistency and Safety, Advanced Algorithms Predict Potential Risks, Real-Time Warnings, Ensuring Battery and Equipment Safety, Rapid Dispatch and Repair in Case of System Failures.

Increase Earnings

Real-time monitoring of device operation status, peak and off-peak power consumption, load power, and energy storage revenue through the system. Achieve remote control of devices and online system updates, optimize device operation strategies, offer peak shaving, demand control, emergency control, load tracking, and various other strategies to enhance overall economic benefits.



Savings on Electricity Costs through Peak-Off-Peak Price Differentials

During periods of low electricity prices, use the grid to charge the devices. During periods of high electricity prices, discharge the batteries to power the load.

Used as a Backup Power Source during Power Outages

It can serve as a backup power source during power outages, providing power to critical facilities to ensure uninterrupted business operations.

Providing Power Compensation

Providing Power Compensation Function to Ensure Stable Power Supply for Businesses and Ensure Safe Equipment Operation.

PV and Energy Storage Integration Building an Independent Grid

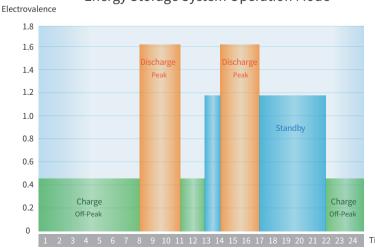
Storing excess electricity generated by the photovoltaic system using the Energy Cube and converting it for later use.







Energy Storage System Operation Mode



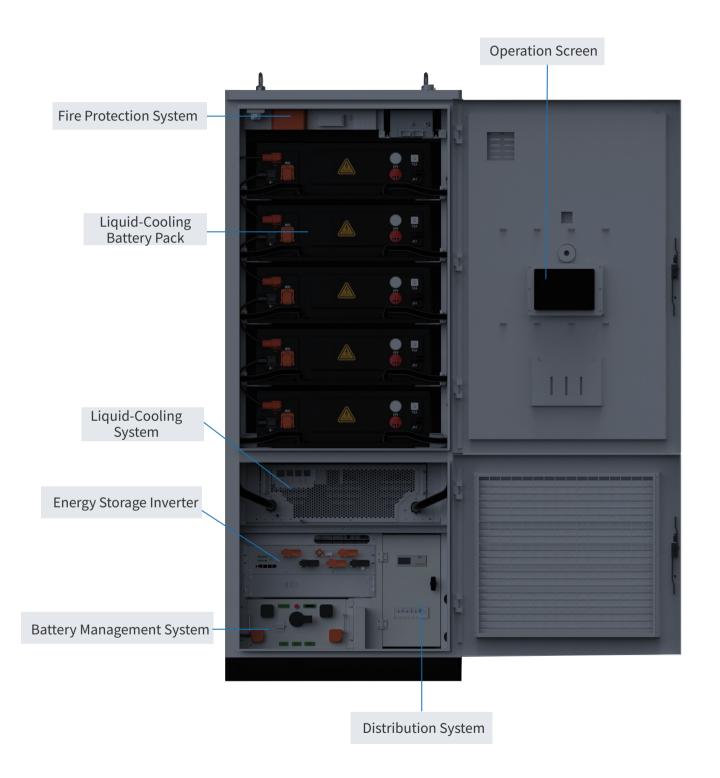
22:00-8:00

Charging during off-peak electricity price periods 8:00-11:00 14:00-17:00

Discharging during peak electricity price periods

During device charging, the system automatically monitors the current electrical load and PV generation under the transformer, and adjusts the charging power of the system based on real-time load conditions. This control ensures that the total power consumption remains below the transformer capacity, preventing overload.

Product Appearance



Product Parameter

Rated Energy 215kWh Cycle Life 6000 cycles Rated Voltage 768V Fire Protection System Perfluorohexanone + Aeron Water fire suppression	DC Side Parameters			
Rated Capacity 280Ah Coolant Ethylene glycol solution (5 Rated Energy 215kWh Cycle Life 6000 cycles Rated Foreign 768V Fire Protection System Perfluorohexanone + Aero. Water fire suppression Rated Power 105kW Detector Type Temperature, smoke Rated Charge/Discharge C-rate 0.5P AC Side Parameters Rated AC Power 105kW Three-phase, four-wire Allowed Grid Voltage 380V (-20%~+15%) Allowed Grid Voltage 30W (-20%~+15%) Allowed Grid Frequency 50Hz/60Hz±2.5Hz 700ms 400ms 400m	Battery Type	LFP	Operating Voltage Range	600V ∼876V
Rated Energy 215kWh Cycle Life 6000 cycles Rated Voltage 768V Fire Protection System Perfluorohexanone + Aero Water fire suppression Rated Power 105kW Detector Type Temperature, smoke Rated Charge/Discharge C-rate 0.5P AC Side Parameters Rated AC Power 105kW AC Overload Capability 115.5kW Wiring Method Three-phase, four-wire Allowed Grid Voltage 380V (-20%~+15%) Allowed Grid Frequency 50Hz/60Hz±2.5Hz Total Harmonic Distortion (THD) \$\leq\$ 3% (at full load) Power Factor -0.99/-1-1 DC Component in Current \$\leq\$ 0.5% Charge/Discharge Conversion Time \$\leq\$ 100ms Maximum Conversion Efficiency \$\leq\$ 98% System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level \$\leq\$ 75dB Dimensions (WDH mm) 1000*1300*2500 Weight \$\leq\$ 2000m (de-rating above 2000m) Allowed Relative Humidity \$\leq\$ 0.95% (non-condensing) Maximum Altitude \$\leq\$ 2000m (de-rating above 2000m) Communication Interface CAN, Ethernet Modbus TCP/RTU Peak shaving, demand control, reactive power adjustment, grid scheduling interface, Remote dispatch, local data storage, anti-backflow for	Configuration	1P240S	Cooling Method	Liquid cooling
Rated Voltage 768V Fire Protection System Perfluorohexanone + Aero. Water fire suppression Rated Power 105kW Detector Type Temperature, smoke Rated Charge/Discharge C-rate 0.5P AC Side Parameters Rated AC Power 105kW AC Overload Capability 115.5kW Wiring Method Three-phase, four-wire Allowed Grid Voltage 380V (-20%~+15%) Allowed Grid Voltage 380V (-20%~+15%) Allowed Grid Frequency 50Hz/60Hz±2.5Hz Total Harmonic Distortion (THD) \$\leq 3\text{3}\text{ (at full load)}\$ Power Factor -0.99/-1~1 DC Component in Current \$\leq 0.5\text{5}\text{ (above System Parameters)}\$ Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level \$\leq 75dB\$ Dimensions (WDH mm) 1000°1300°2500 Weight \$\leq -2.6\text{ to so}\$ (mon-condensing) Maximum Altitude \$\leq 2000m (de-rating above 2000m)\$ Communication Interface Communication Protocol System Operation Mode grid scheduling interface, Remote dispatch, local data storage, anti-backflow for the content of the content o	Rated Capacity	280Ah	Coolant	Ethylene glycol solution (50%
Rated Power Rated Power Rated Power Rated Charge/Discharge C-rate O.5P AC Side Parameters Rated AC Power Rated AC Power Rated AC Power Rated Grid Voltage Allowed Grid Voltage Allowed Grid Frequency Total Harmonic Distortion (THD) Power Factor DC Component in Current Charge/Discharge Conversion Time Charge/Discharge Conversion Time Allowed System Parameters Operating Environment Power In 105kW Rated AC Power AC Overload Capability In 15.5kW Wiring Method Three-phase, four-wire Allowed Grid Voltage Rated AC Power Allowed Grid Voltage Rated AC Power Allowed Grid Voltage Rated AC Power Allowed Grid Frequency Soltz/60Hz±2.5Hz Total Harmonic Distortion (THD) Say (at full load) Power Factor -0.99/1-1 DC Component in Current Charge/Discharge Conversion Time <100ms Maximum Conversion Efficiency System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level Frie Protection System Temperature, smoke Rated Charge/Discharge Conversion Water Resistance Rating Battery compartment: IP65, Electrical compartment: IP54 Allowed Relative Humidity Po-95% (non-condensing) Maximum Altitude Communication Interface CAN, Ethernet Communication Protocol System Operation Mode grid scheduling interface, Remote dispatch, local data storage, anti-backflow for	Rated Energy	215kWh	Cycle Life	•
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AC Side Parameters Rated AC Power 105kW AC Overload Capability 115.5kW Wiring Method Three-phase, four-wire Allowed Grid Voltage 380V (-20%~+15%) Allowed Grid Frequency 50Hz/60Hz±2.5Hz Total Harmonic Distortion (THD) ≤ 3% (at full load) Power Factor -0.99/-1~1 DC Component in Current ≤0.5% Charge/Discharge Conversion Time <100ms Maximum Conversion Efficiency >98% System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level ≤75dB Dimensions (WDH mm) 1000*1300*2500 Weight -2.6 tons Water Resistance Rating Battery compartment: IP65, Electrical compartment: IP54 Allowed Relative Humidity 0-95% (non-condensing) Maximum Altitude ≤2000m (de-rating above 2000m) Communication Interface CAN, Ethernet Communication Protocol ModbusTCP/RTU Peak shaving, demand control, reactive power adjustment, grid scheduling interface, Remote dispatch, local data storage, anti-backflow for	Rated Power	105kW	Detector Type	Temperature, smoke, C
Rated AC Power AC Overload Capability Wiring Method Three-phase, four-wire Allowed Grid Voltage 380V (-20%~+15%) Allowed Grid Frequency 50Hz/60Hz±2.5Hz Total Harmonic Distortion (THD) Power Factor Charge/Discharge Conversion Time Charge/Discharge Conversion Time Allowed Series Operating Environment Power Factor Operating Environment Power Environment Operating Environment Operating Environment Op	Rated Charge/Discharge C-rate	0.5P		
AC Overload Capability Wiring Method Three-phase, four-wire Allowed Grid Voltage Allowed Grid Frequency 50Hz/60Hz±2.5Hz Total Harmonic Distortion (THD) Power Factor Charge/Discharge Conversion Time Charge/Discharge Conversion Time Allowed Brid Frequency System Parameters Operating Environment Power Factor -20°C to 50°C (de-rated operation above 45°C) Noise Level System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Weight -2.6 tons Water Resistance Rating Battery compartment: IP65, Electrical compartment: IP54 Allowed Relative Humidity O-95% (non-condensing) Maximum Altitude Communication Interface CAN, Ethernet Communication Protocol System Operation Mode Peak shaving, demand control, reactive power adjustment, grid scheduling interface, Remote dispatch, local data storage, anti-backflow for the control of the contro	AC Side Parameters			
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Allowed Grid Voltage Allowed Grid Frequency 50Hz/60Hz±2.5Hz Total Harmonic Distortion (THD) Say (at full load) Power Factor -0.99/-1~1 DC Component in Current Charge/Discharge Conversion Time Allowed Grid Frequency Charge/Discharge Conversion Time Allowed Grid Frequency Charge/Discharge Conversion Time System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level System Operating Battery compartment: IP65, Electrical compartment: IP54 Allowed Relative Humidity O-95% (non-condensing) Maximum Altitude System Operation Interface CAN, Ethernet Communication Protocol System Operation Mode Peak shaving, demand control, reactive power adjustment, grid scheduling interface, Remote dispatch, local data storage, anti-backflow for	AC Overload Capability	115.5kW		
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Power Factor -0.99/-1~1 DC Component in Current ≪0.5% Charge/Discharge Conversion Time <100ms Maximum Conversion Efficiency ≥98% System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level ≪75dB Dimensions (WDH mm) 1000*1300*2500 Weight ~2.6 tons Water Resistance Rating Battery compartment: IP65, Electrical compartment: IP54 Allowed Relative Humidity 0-95% (non-condensing) Maximum Altitude ≪2000m (de-rating above 2000m) Communication Interface CAN, Ethernet Communication Protocol ModbusTCP/RTU System Operation Mode grid scheduling interface, Remote dispatch, local data storage, anti-backflow for	Allowed Grid Frequency	50Hz/60Hz±2.5Hz		
DC Component in Current Charge/Discharge Conversion Time <100ms Maximum Conversion Efficiency System Parameters Operating Environment -20°C to 50°C (de-rated operation above 45°C) Noise Level ≤75dB Dimensions (WDH mm) 1000*1300*2500 Weight -2.6 tons Water Resistance Rating Battery compartment: IP65, Electrical compartment: IP54 Allowed Relative Humidity 0-95% (non-condensing) Maximum Altitude ≤2000m (de-rating above 2000m) Communication Interface CAN, Ethernet Communication Protocol Peak shaving, demand control, reactive power adjustment, grid scheduling interface, Remote dispatch, local data storage, anti-backflow for the state of the s	Total Harmonic Distortion (THD)	≤ 3% (at full load)		
Charge/Discharge Conversion Time 				