

FCPower

105KW/215KWH

COMMERCIAL & INDUSTRIAL ESS

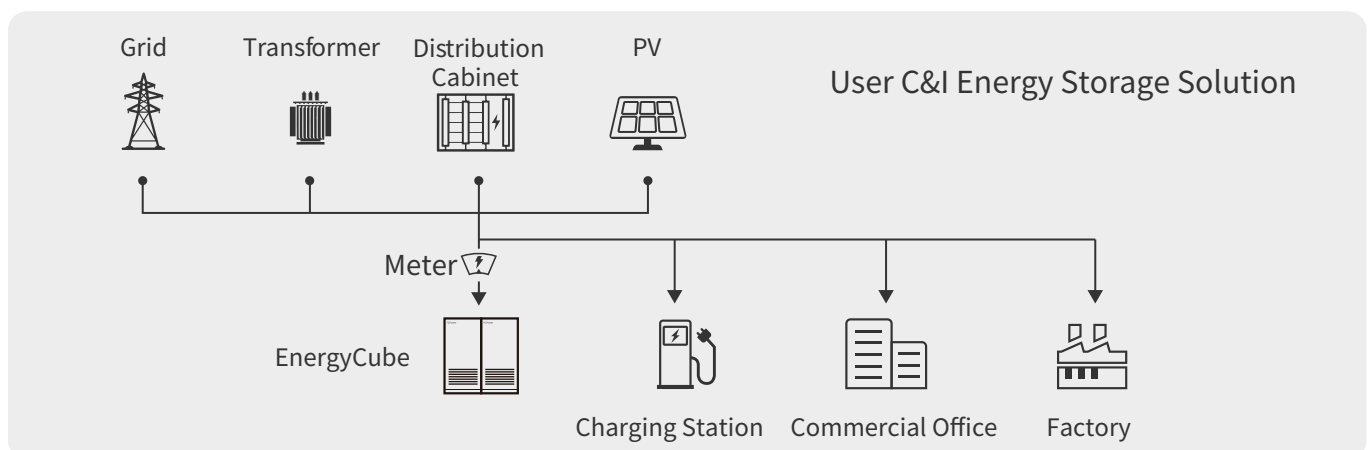
Energy Cube Liquid-Cooling



POWERFUL ENERGY FULLY EVOLVED



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 $\leq 75\text{dB}$.



Safe & Reliable

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



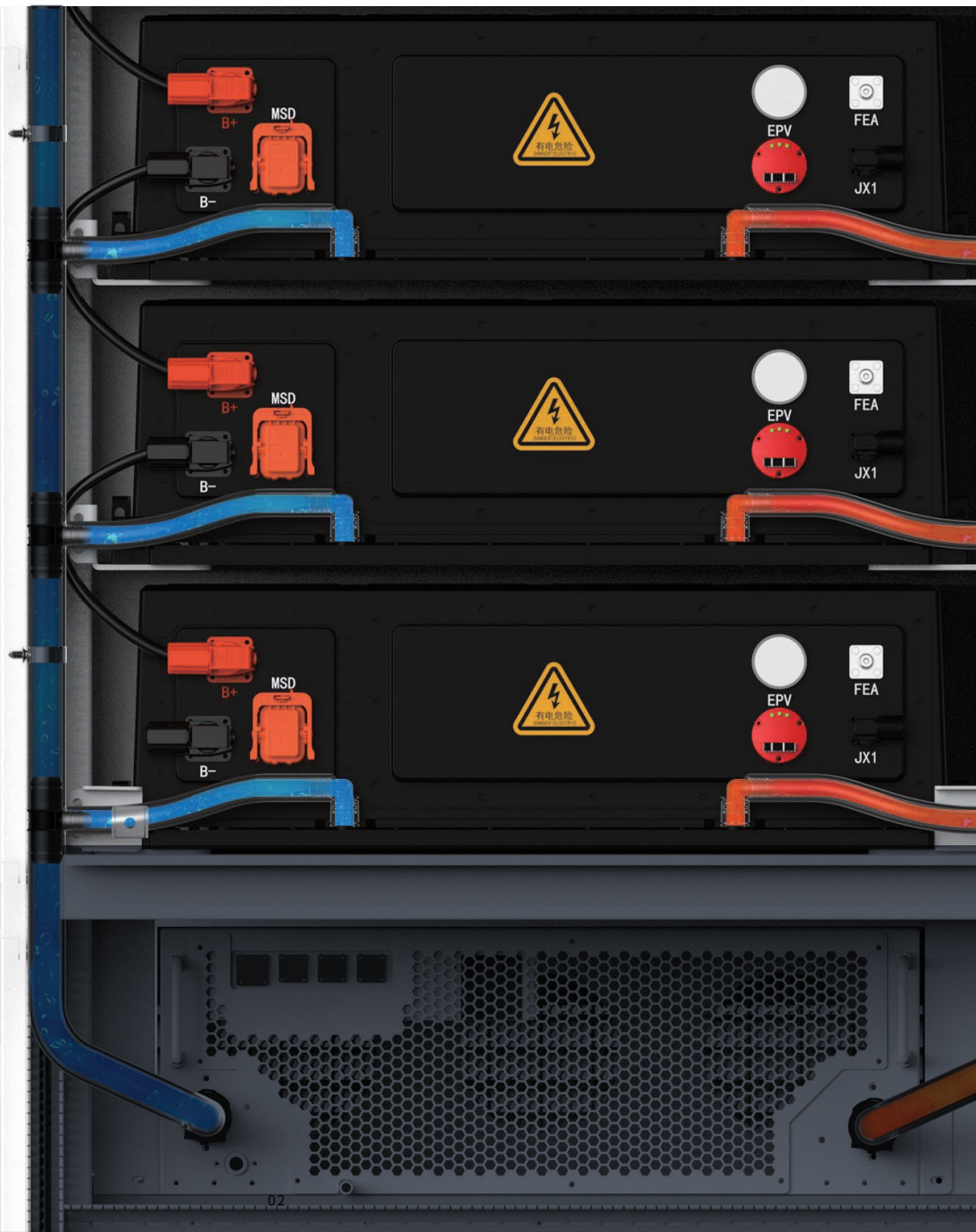
Cloud-Edge Collaboration

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 maximum returns.

Security Monitoring

24/7 Cloud-Based Real-Time Monitoring, 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.



Application Scenario

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.

Commercial Office



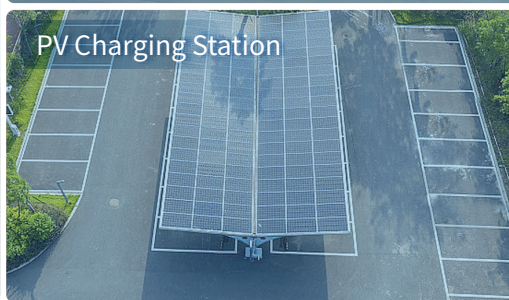
Factory



Zero Carbon Park

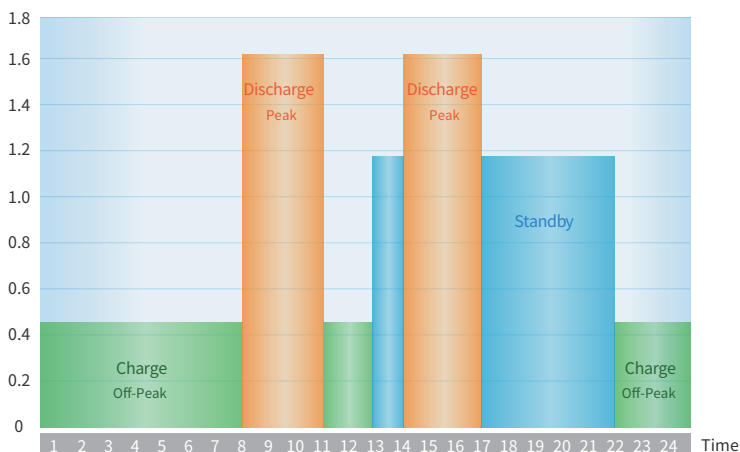


PV Charging Station



Energy Storage System Operation Mode

Electrovalence



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

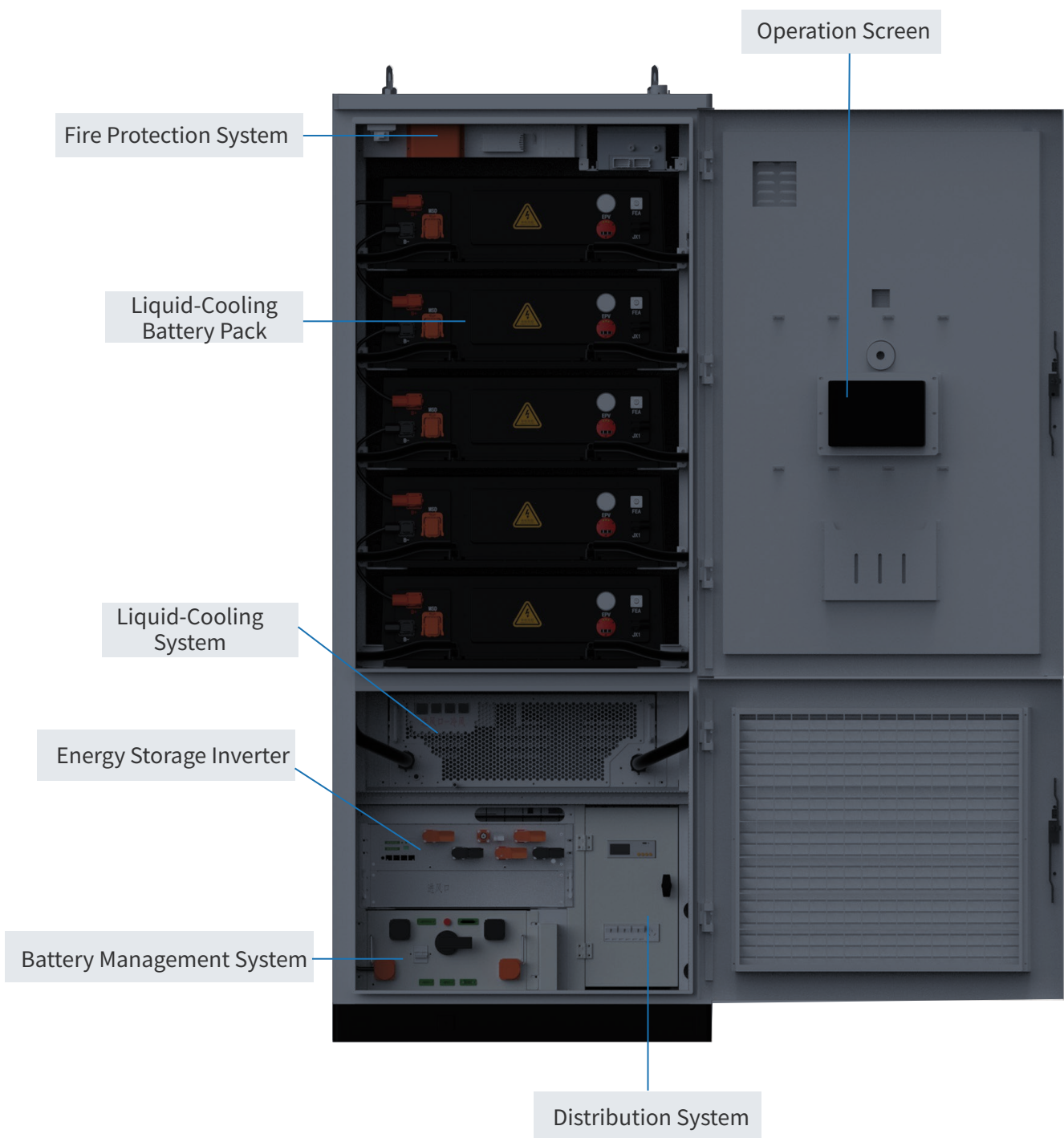
the charging power of the system based on

real-time load conditions. This control ensures

that the total power consumption remains below

the transformer capacity, preventing overload.

Product Appearance



Product Parameter

DC Side Parameters			
Battery Type	LFP	Operating Voltage Range	600V ~876V
Configuration	1P240S	Cooling Method	Liquid cooling
Rated Capacity	280Ah	Coolant	Ethylene glycol solution (50% v)
Rated Energy	215kWh	Cycle Life	6000 cycles
Rated Voltage	768V	Fire Protection System	Perfluorohexanone + Aerosol + Water fire suppression
Rated Power	105kW	Detector Type	Temperature, smoke, CO
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)		≤ 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	
System Operation Mode		Peak shaving, demand control, reactive power adjustment, grid scheduling interface, Remote dispatch, local data storage, anti-backflow feature	
Certification Standards		GB/T36276-2018; IEC62619;	