



# EnergyCube N

100kW/200kWh

Smart Energy Storage Future

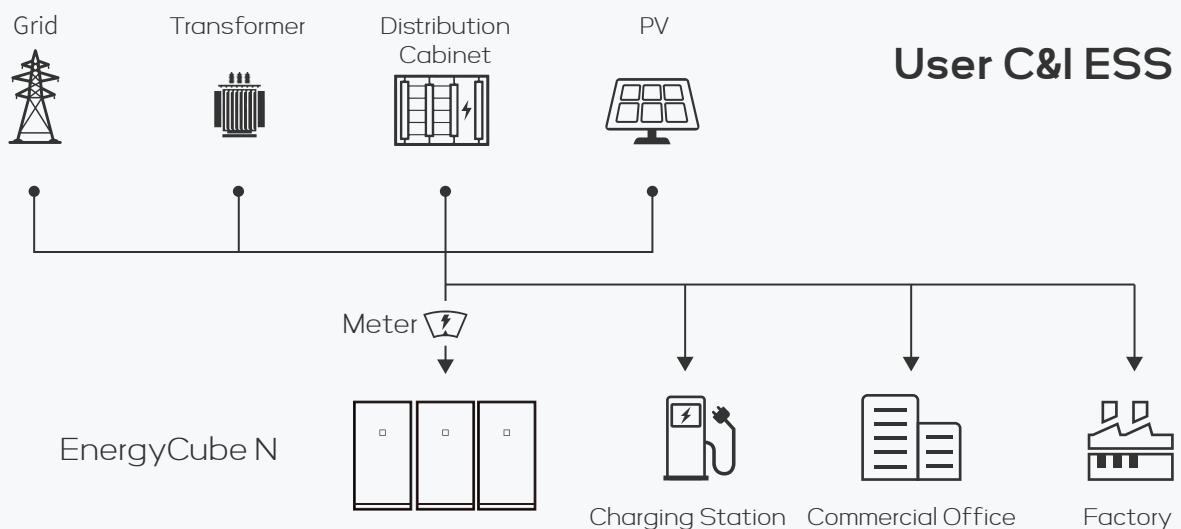


Industrial & Commercial  
Energy Storage Solution

## Integrated design

## Adaptation for Multi-Scenario Deployment

The EnergyCube N has optimized the internal structure and cabinet design based on the first generation. It further integrates equipment such as the battery system, energy management system, AC/DC bidirectional inverter, and intelligent temperature control system. Compared to the previous generation, it saves nearly half of the volume while significantly improving product safety and application versatility. The Energy Cube can start the system without external power supply, establish an independent grid, and is suitable for various applications, including peak shaving, large-scale power grid expansion, factory backup power, commercial and industrial power support, emergency power supply, and charging station expansion.







### High Integration

The equipment is highly integrated, with a compact product size, occupying only 1.2 square meters per cabinet.



### Reliable Performance

Low Loss Series Connection on the DC Side  
Dynamic Temperature Regulation  
Enhanced ESS Cycling Efficiency



### Security and stability

Utilizing Top-Tier Battery Cell Suppliers  
Battery Safety Warnings and Fault Switching  
Automatic Fire System Response



### Multi-Unit Parallel Expansion

Flexible Scalability, On-Demand Configuration  
Supports Multiple Units  
Parallel Cooperative Control

**High Performance /High Safety**  
**Battery Cycle Life Exceeds 6000 Cycles**



# EMMS 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.

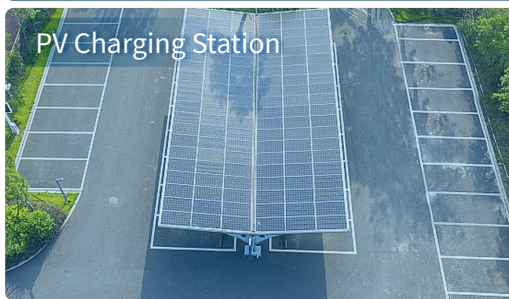
Commercial Office



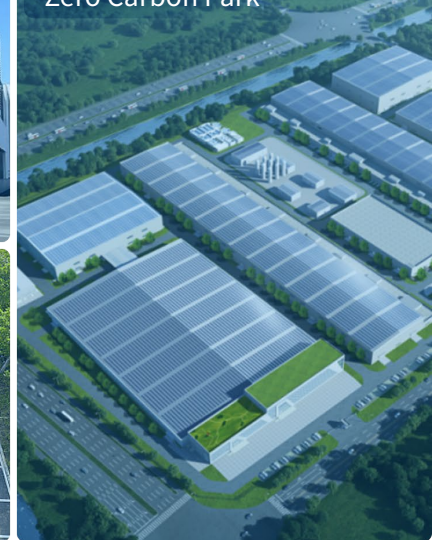
Factory



PV Charging Station

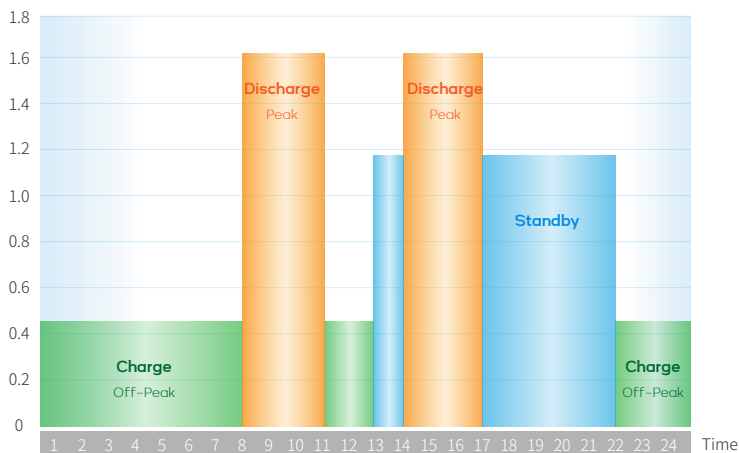


Zero Carbon Park



## Energy Storage System Operation Mode

Electrovalence



### 22:00-8:00

Charging during off-peak electricity price periods

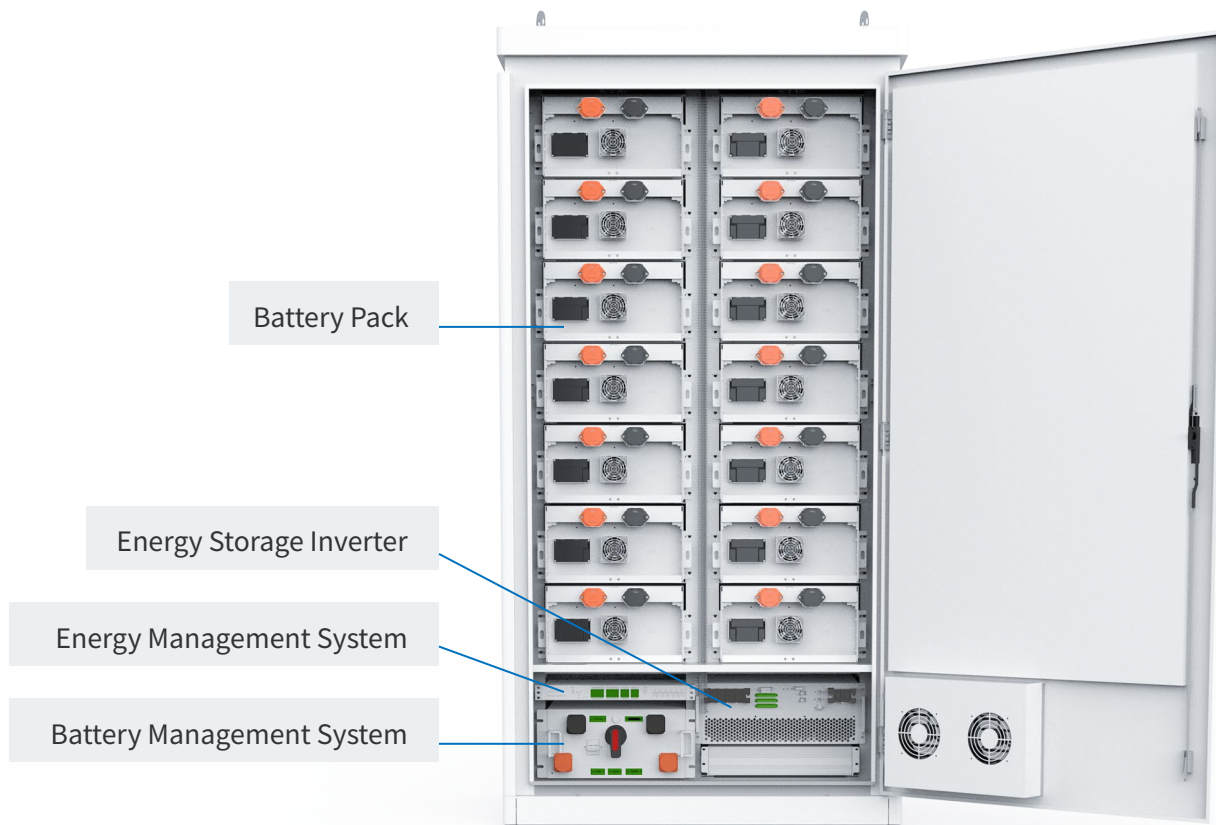
### 8:00-11:00 14:00-17:00

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 Exterior



# Product Parameter

Specification	Parameter
Rated Capacity	200.7kWh, 25°C@0.5C Rated
External Dimensions	2380*1200*1000mm(H*W*D)
Weight	About 2.4t
Rated DC Voltage	716.8V
Operating DC Voltage	627~817V
Maximum Charging/Discharging Power	100kW
AC Output Current	140A
Operating Environment	Below 2000 meters above sea level
Thermal Management	Automatic Air Conditioning
Grid-Connected/Off-Grid Mode (Optional)	Manual/Automatic
Output Mode	Three-Phase Four-Wire
Fire Suppression Method	Aerosol Automatic Fire Suppression
System Protection Level	IP54
Operating Environment	-15°C~50°C(Power Derating Above 40°C)
External Communication Protocols	ModBUS-TCP
AC Grid-Connection Parameters	
Rated Grid Voltage	400Vac
Voltage Range	-15%~+10%
Rated Frequency	50Hz
Maximum Output Current	150A
Power Factor	>0.99 (Rated Output Power)/1 (Lead)-1 (Lag)
Off-Grid Output Characteristics	
Rated Output Voltage	400Vac
Output Voltage Precision	1%
Maximum Output Current	150A
Voltage Distortion	<1%(Linear Load)
Rated Output Frequency	50Hz
Overload Capability	110%
Battery Module	
Battery Model	51.2V280Ah(IP16S)
Battery Standards	GB/T 36276 ,UN38.3

Due to ongoing innovation, research and development, and product improvements, the technical specifications included in this document may have slight variations, and WELTRUS does not guarantee their complete accuracy.