# All-In-One Energy Storage Systems+EV

All-In-One Energy Storage System: Integration for Efficient Energy Management



## **Q.ENERGY**

### All in One

- On-Off Grid Hybrid PV Inverter 7kw
- EV Charger (AC)
- LFP Battery 5kwh (Expandable up to 6 Parallel Batteries )
- Input PV power is 1.4 times of rated AC Out power
- Hardware and Software Dual Protection
- Anti-islanding, Short, Overcurrent, Overvolatage
- Overtemperature

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### **Q.ENERGY**

### Renewable Energy for SOLAR-POWERED HOME





# Inverters and Converters

#### **Energy Conversion**

Inverters and converters are essential for converting stored energy into usable electricity, enabling efficient energy consumption.

### **Energy Management**

These devices manage energy flow between the storage system, appliances, and the grid, ensuring efficient distribution of electricity.

### **Product Features**



Easy to install. Modular design. Expand the modules by stacking



PV inverter + ES + EV Charger, all in one. Save the installation cost of charging piles. And they have one APP



Expandable batteries. Up to 6 parallel batteries can be expanded by stacking



IP65 Dustproof and Waterproof Rating



Hardware and software dual protection (Complte protection: Anti-islanding, Short, Overcurrent,Overvoltage, Overtemperature, etc.)

Excess input PV power. The input PV power is 1.4 times of rated AC output power

**Benefits of** Integrated **Energy Storage** Solutions

### Efficiency and Cost Savings



### **Optimizing Energy Use**

An all-in-one energy storage system enhances efficiency by managing energy use effectively, leading to better resource allocation.



### **Reducing Energy Costs**

By storing energy when prices are low, users can significantly reduce costs incurred during peak demand periods.



### **Peak Demand Management**

Storing energy for use during peak demand helps to alleviate strain on the grid and enhances overall efficiency.

### Improved Energy Reliability and Stability

### **Backup Power Supply**

Energy storage systems provide backup power during outages to ensure uninterrupted energy supply for users.

### **Grid Stability**

These systems stabilize the energy grid during supply and demand fluctuations, enhancing overall reliability.

### **Consistent Energy Supply**

With improved energy storage, users can enjoy a consistent and reliable energy supply, minimizing disruptions.



Grid

### Environmental Impact and Sustainability



### Integration of Renewable Energy

Energy storage systems enable the effective integration of renewable energy sources like solar and wind into the power grid.

### **Reduction of Fossil Fuel Dependence**

By utilizing energy storage, the reliance on fossil fuels can be significantly reduced, promoting cleaner energy options.



### **Lowering Greenhouse Gas Emissions**

Energy storage systems help lower greenhouse gas emissions, contributing positively to the environment and combating climate change.

# Applications in Various Sectors

### **Residential Usage**

#### **Energy Independence**

Energy storage systems allow homeowners to harness solar energy, giving them greater independence from the grid.

### **Cost Savings**

Storing solar energy for nighttime use enables homeowners to save on energy costs, reducing monthly bills.

### **Sustainable Living**

Using energy storage systems contributes to a sustainable lifestyle, promoting renewable energy use in homes.



### **Commercial and Industrial Applications**



#### **Reducing Peak Energy Demand**

Energy storage systems help commercial and industrial facilities lower peak energy demand charges, saving costs and optimizing usage.

#### **Enhancing Energy Efficiency**

By integrating energy storage, facilities can improve energy efficiency, making operations more sustainable and cost-effective.

#### **Supporting Grid Services**

Energy storage supports grid services by providing stability and reliability, especially during peak times or outages.