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INSPUR INTELLIGENT TERMINAL

ZERO-CARBON PRODUCT MANUAL

About Us

Inspur Group is a leading Chinese provider of cloud computing and big data services. The group comprises three listed companies. Its core operations cover computing equipment, software, cloud computing services, next-generation communications, big data, and a variety of application scenarios. Inspur has delivered IT products and services to more than 120 countries and regions worldwide.

Inspur Intelligent Terminal Co., Ltd., a secondary subsidiary of Inspur Group, is dedicated to becoming a global leading provider of industry-specific intelligent terminals. Its offerings span display terminals, zero-carbon terminals, intelligent robots, and service terminals with a diversified product portfolio including LED display, LCD display, EV chargers, energy storage, MRI, inspection robots, cleaning robots, delivery robots, and service terminals for government, commercial, and medical use. The market covers more than 50 countries and regions worldwide.

The company has a strong presence in application scenarios such as digital cultural exhibition halls, intelligent command centers, commercial cultural and tourism districts, exhibition rental services, smart charging networks, smart microgrids, zero-carbon parks, medical imaging infrastructure, public service outlets, intelligent inspection, and unmanned delivery. It has successfully launched several benchmark projects, such as Video Wall of Kai Tak Park Monitoring Room in Hong Kong, AIA Exhibition Center in Malaysia, Monitoring Center of Istanbul City, Turkey, which have established a positive demonstration effect within the industry.

Zero-Carbon Terminal focuses on the field of new energy products and has established three major product lines: photovoltaic (PV), charging piles, and energy storage. We provide photovoltaic systems, energy storage containers, charging piles, battery swap cabinets, and related solutions for domestic and international markets. These products are primarily applied in zero-carbon parks, commercial and industrial photovoltaics, energy storage, charging and swapping infrastructure development, integrated photovoltaic-energy storage-charging station construction, and residential integrated photovoltaic-energy storage systems. The division is committed to exploring new pathways for the synergistic development of digitalization and green transformation, contributing its efforts to promoting low-carbon living and sustainable development.

Overseas Market Layout

Inspur Intelligent Terminal has established 11 overseas marketing centers, including the Southeast Asia Representative Office, Middle East Representative Office, Africa Representative Office, Central Asia Representative Office, Turkey Representative Office, Central and Eastern Europe Representative Office, Latin America Representative Office, Europe Representative Office, Australia Representative Office, Hong Kong (China) Center, and Taiwan (China) Center. Currently, our business covers more than 50 countries and regions worldwide.

Build 11 Overseas Marketing Centers
Cover 50 Countries and Regions
Develop 100 Overseas Partners

Inspur DC EV Charger

30kW 40kW 60kW 80kW 120kW 160kW 240kW

Inspur DC EV Charger represents high-efficiency, intelligent electric vehicle charging infrastructure. Equipped with dual-gun design and intelligent management systems, they deliver comprehensive functionalities including charging control, energy metering, payment processing, human-machine interaction, and remote communication. Supporting multiple charging modes and VIN-based plug-and-play operation, they ensure seamless user experiences and optimized energy management.

Product Highlights

- Reliability & Efficiency: Ultra-wide voltage output with ⩾96% peak charging efficiency
- Charging Modes: Auto-recognition of single/dual-gun charging, VIN plug-and-play support
- User-Friendly Interface: 7-inch touchscreen, RFID recognition, multi-status indicators
- Environmental Protection: IP54 rating for robust outdoor performance
- Safety Isolation: Segregated high/low voltage systems, AC/DC separation, acrylic shock barriers
- Protection Functions: Comprehensive safeguards including
  - AC input over/under voltage protection
  - DC output over/under voltage protection
  - Overload/short-circuit/surge protection
  - Overtemperature/battery reverse connection protection
  - Emergency stop/reverse current protection
  - Insulation detection/door open/contactor adhesion protection

Application

Transportation Hubs | Tourist Attractions | Commercial Complexes | Corporate & Institutional Facilities | Fuel Service Stations

Inspur AC EV Charger (Wall-mounted/Pole-mounted)

7kW 11kW 22kW

Inspur AC EV Charger consists of several core components including the housing unit, display screen, card reader, main control module, relays, smart meters, and charging cable assemblies. Operating on standard 220V single-phase AC input, the system converts power to the appropriate AC output required by electric vehicle onboard chargers, delivering convenient and reliable charging services.

Product Highlights

- Smart Charging: Scheduled charging support with full-power output without degradation
- Charging Modes: Multiple options including auto-complete/fixed amount/fixed energy/fixed time modes
- Reliability & Durability: Metal housing with enhanced corrosion/aging resistance and EMI shielding
- Battery-Friendly: Slow charging prevents battery damage and extends lifespan
- Environmental Protection: IP55 rating for harsh environment operation
- Protection Features: Comprehensive safeguards including
  - Over/under voltage protection
  - Overload/short-circuit protection
  - Grounding/overtemperature/low-temperature protection
  - Lightning surge/emergency stop/leakage protection
- Convenience: Modular design with compact form factor for easy installation and maintenance

Application

Residential Communities | Corporate & Institutional Facilities | Industrial Parks | Educational & Medical Campuses

Integrated Energy Storage Cabinet

50kW/100kWh

INSPUR-ESS-L100 Energy Storage Cabinet is a high-performance integrated energy storage system. This product incorporates advanced battery technology, high-efficiency power conversion systems, and intelligent management systems to optimize energy utilization efficiency. Featuring large capacity, high efficiency, intelligent control, and modular design, it delivers reliable energy solutions for commercial and industrial applications.

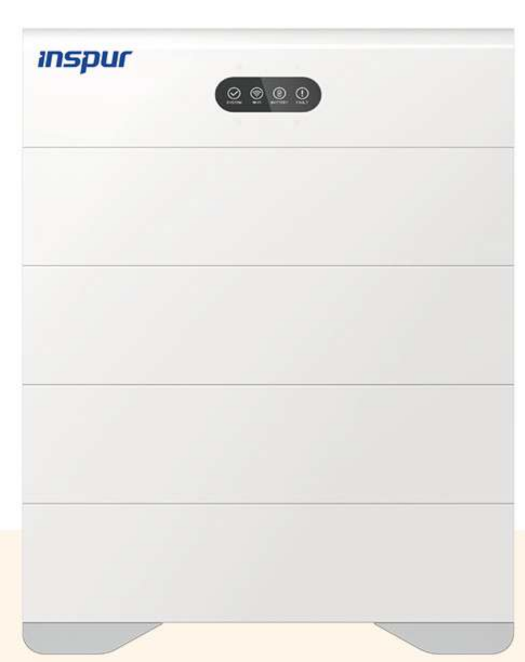
Product Highlights

- Safety & Reliability: Integrated design philosophy with standard cabinet architecture, zonal isolation, and advanced liquid cooling technology. Integrated combustible gas detection and fire suppression ensure system safety fire suppression ensure system safety
- Economic Efficiency: Individual string design eliminates parallel capacity loss. Smart BMS+EMS fusion technology and high-efficiency three-level PCS topology maximize system conversion efficiency
- Intelligent Operation: Adaptable to multiple scenarios. Embedded functions include peak shaving, demand control, emergency response, load tracking, global monitoring, and fault recording. Operational data accessible via WiFi/5G/LAN for unmanned management
- Plug-and-Play: Fully integrated turnkey solution with 400V grid connection capability

Application

Medium C&I Consumers | EV Charging Stations | Data Center Facilities

Stackable Residential Energy Storage Product



5kWh/10kWh

INSPUR-ESS-N5.0/INSPUR-ESS-N10.0 Stackable Residential ESS is a high-performance energy storage system designed to store electricity from renewable sources (e.g. solar) or grid supply at the household level, releasing power on demand. This efficient, flexible, and reliable energy solution meets diverse residential electricity needs while delivering significant economic and social benefits.

Product Highlights

- Minimalist Design, Practical Elegance
- Indoor/Outdoor Installation Ready, Cable-Free Setup
- Tool-Free Expansion for Effortless Scalability
- Highly Modular Architecture for Customizable Capacity

Application

Residential Households | Villa Properties | Remote Area Consumers | Small C&I Establishments

Integrated Energy Storage Cabinet

125kW/261kWh

INSPUR-ESS-L261 Integrated Energy Storage Cabinet is a high-performance energy storage system utilizing 314Ah mega cells, specifically engineered to meet commercial and industrial demands for stable and reliable power supply. Integrating advanced battery technology, high-efficiency power conversion systems, and intelligent management architecture, it optimizes energy utilization efficiency. This large-capacity, high-efficiency, smart, and modularly designed system delivers turnkey energy solutions for C&I applications.

Product Highlights

- High Integration: All-in-One unified design, occupies only 1.6m², saves 25% space
- Safety & Reliability: Advanced liquid cooling, 9-layer protection, standard cabinet design with zonal isolation
- Smart O&M: Fully integrated ESS, AI-powered diagnostics, modular design for maintenance efficiency

Application

Medium C&I Power Consumers | EV Charging Infrastructure | Data Center Power Facilities

Integrated Energy Storage Cabinet

209kW/836kWh

INSPUR-ESS-L836 Integrated Energy Storage Cabinet is a high-performance energy storage system with a nominal capacity of 836 kWh and rated power of 209 kW. Specifically engineered for commercial, industrial, and heavy industrial applications, it addresses the critical demands for economic feasibility, operational convenience, and stringent safety in large-scale energy storage deployments.

Product Highlights

- Ultimate Safety: Cell-level fire protection, AI health management, 3S integrated control protection
- Economic Efficiency: Extreme charge/discharge depth, >90% AC-side conversion efficiency, flexible deployment with elastic scalability
- Grid Compliance: Weak grid support, primary/secondary frequency regulation (AGC/AVC), enhanced inertia control capability

Application

Medium C&I Power Consumers | EV Charging Infrastructure | Data Center Power Facilities

Zero-Carbon Terminals

Container-type Energy Storage Product

2.50MW/5.0MWh

INSPUR-ESS-L5000 Container-type Energy Storage Product integrates a complete energy storage solution within a standardized shipping container. With a massive storage capacity of 5 MWh, the system incorporates energy storage batteries, Battery Management System (BMS), Power Conversion System (PCS), and essential auxiliary equipment including cooling systems and safety protection devices. This modular design enables exceptional transportability and installation flexibility, supporting diverse application scenarios.

Product Highlights

- Economic Design: Large-module, non-walk-in design enhances system integration, facilitating transportation, installation and maintenance
- Safety & Reliability: Multi-level balancing ensures battery consistency throughout lifecycle; comprehensive DC safety management with rapid short-circuit interruption and arc suppression
- Flexibility & Simplicity: 1500V ESS with intelligent thermal control enables full-chain high-efficiency modular parallel design for easy expansion and unified control
- Intelligent Operation: Real-time cell impedance monitoring, multi-dimensional battery analytics, rapid fault detection and recording for quick system diagnostics

Application

Wind-Solar Hybrid Plants with Storage | Independent Shared Storage Stations | Microgrid Systems

Zero-Carbon Terminals

Zero-Carbon Smart RV

Standard 8m / 9m Terrace Edition / 11m / 13m

Inspur Zero-Carbon Smart RV incorporates innovative PET eco-materials, integrated photovoltaic storage systems, and intelligent control systems, complemented by a digital management platform. Through solar-storage equipment and management platforms for power replenishment and energy management, it significantly enhances energy efficiency, reduces energy costs at campsites and similar venues, achieving cost savings and carbon emission reduction.

Product Highlights

- Complete Smart Device Suite: Features whole-house automation including voice control systems, intelligent lighting, smart locks, automated curtains, and multi-sensor arrays
- Multi-Scenario Digital Platform: Integrates guest control systems, big data analytics, digital commerce, and solar-storage management with remote control, early warning, emergency response, and promotional capabilities
- Innovative PET Eco-Materials: Non-toxic, thermal-insulated, corrosion/fire-resistant, waterproof, and fully recyclable
- Solar-Storage System: On-board photovoltaic generation enables self-sufficient green energy usage with intelligent storage for optimized power allocation and cost reduction

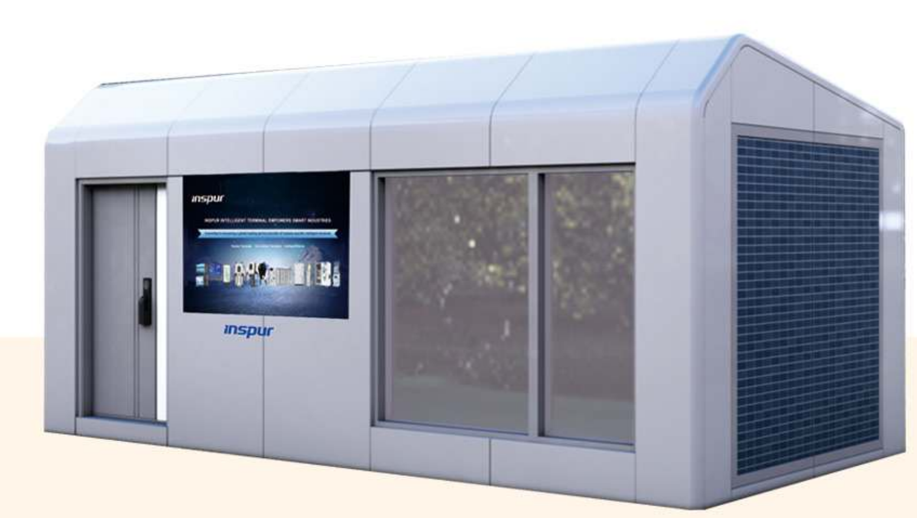
Application

All-Weather Outdoor Applications | Mountainous Terrains | Lakeside Environments | Coastal Beachfronts

New Energy Container

7m/12m

New Energy Contanier integrates photovoltaic panels to enable self-powering capabilities, eliminating the need for traditional grid connection through disruptive construction. These systems provide off-grid electricity for monitoring and surveillance equipment, while maintaining connectivity for real-time monitoring, data collection, and emergency alert functions.



Product Highlights

- Eco-Friendly Enclosure Materials: Non-toxic construction meeting residential health standards
- Off-Grid Operational Capability: Self-sustaining operation for flexible scenario deployment
- Whole-House IoT Connectivity: Smart devices support diverse living and emergency scenarios

Application

Fully Off-Grid Scenarios: Disaster Relief Command Centers | Emergency Response Stations | Visitor Rest Areas

Zero-Carbon Terminals

Smart Inverter

Inspur smart inverter can provide a wide range of choices and accurately match diverse needs. The products are divided into product series according to power gradient, adapted to different modes and voltage characteristics of off-grid and on-grid, covering three core scenarios of household, industrial and commercial, and large-scale energy storage power stations, providing efficient and stable power conversion solutions for various users.

Product Highlights

- High-Efficiency Power Generation
- Safe and Reliable
- Intelligent O&M
- Up to 99% Maximum Efficiency
- Full IV Curve Scanning
- Nighttime SVG
- Cost-Effective
- Multi-Channel MPPT Design

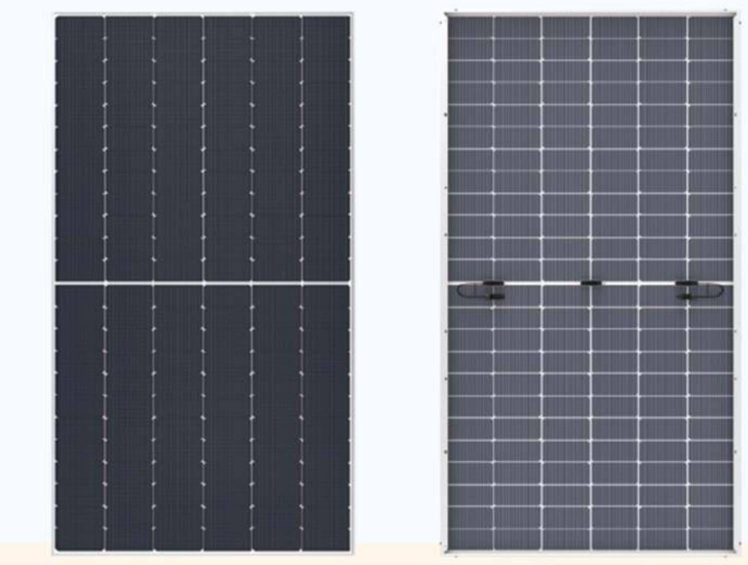
Application

Residential Rooftop Systems | Industrial PV Installations | Utility-Scale Solar Plants

Zero-Carbon Terminals

PV Module

PV modules are used to generate electricity and provide clean energy for household, commercial and industrial scenarios. We provide a variety of high-quality PV products - including N-type PV panel, pliable PV panel, PV glass, etc. to meet the diversified needs of customers. Mature production processes and significant long-term stability provide reliable, cost-effective solutions for a variety of PV applications.



Product Highlights

- Efficiency: High power output
- Reliability: Realiable performance in various conditions
- Cost-Saving: Effectively reduce cost incurred in power generation
- Adaptability: Can adapt to different scenes

Application

Residential Rooftops | Commercial Complexes | Hospital & Campus Facilities | Utility-Scale Power Plants

PV Panel Bracket System

The photovoltaic bracket system is used to install and support photovoltaic modules. Inspur has developed a variety of cost-effective brackets that can adapt to different terrains and environments, and the brackets can also be customized according to customer's needs. In addition, Inspur also provides solutions in the fields of tracking brackets, carport brackets, agricultural shed brackets, and fishery photovoltaic complementary pile foundation brackets.

Product Highlights

- Robust structure, adaptable to various climates
- Easy installation and high flexibility
- Strong terrain adaptability, supporting personalized customization
- Enhance land value, generate revenue
- Stable quality and longer service life
- Flexible lighting, efficient power generation

Application

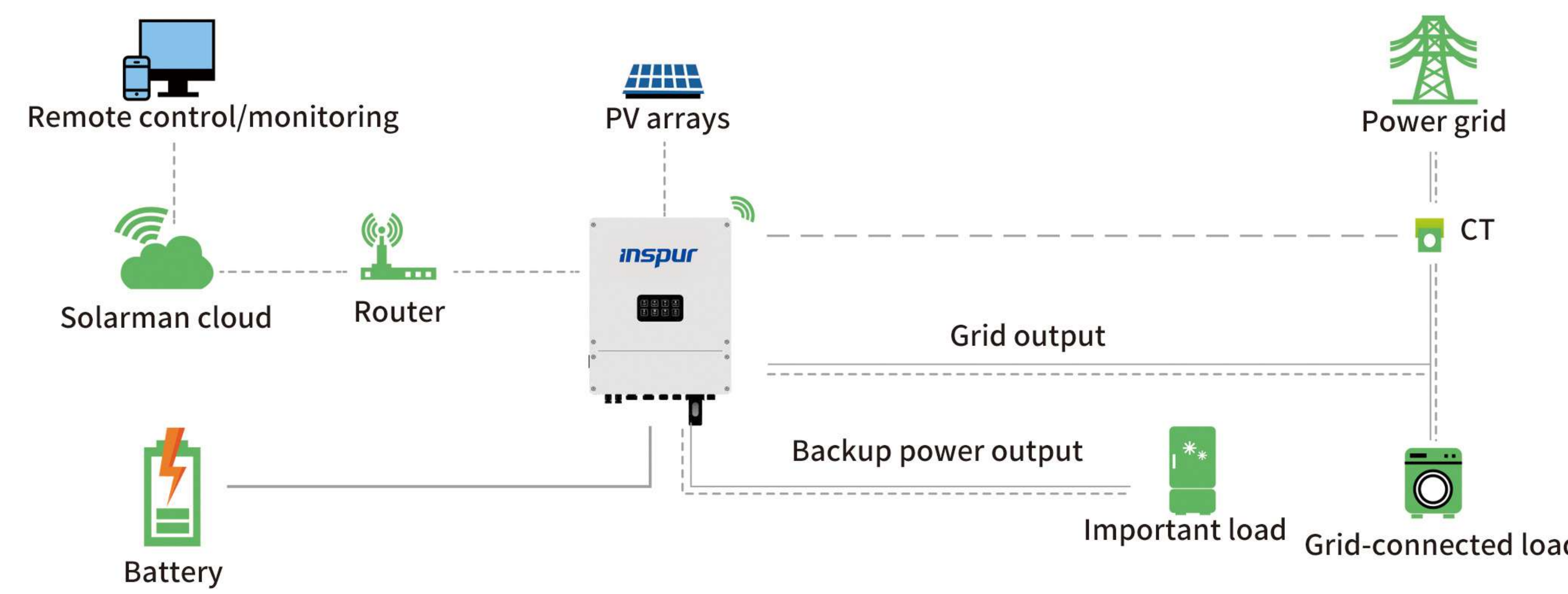
Commercial & Utility-Scale PV Plants

This is the Inspur Residential Solar Panel and Energy Storage System. This system includes solar panels, inverter and battery, which can power your home with green electricity. The working mode can automatically shift according to weather condition and power consumption, ensuring a stable and efficient power supply while minimizing your electricity bills.

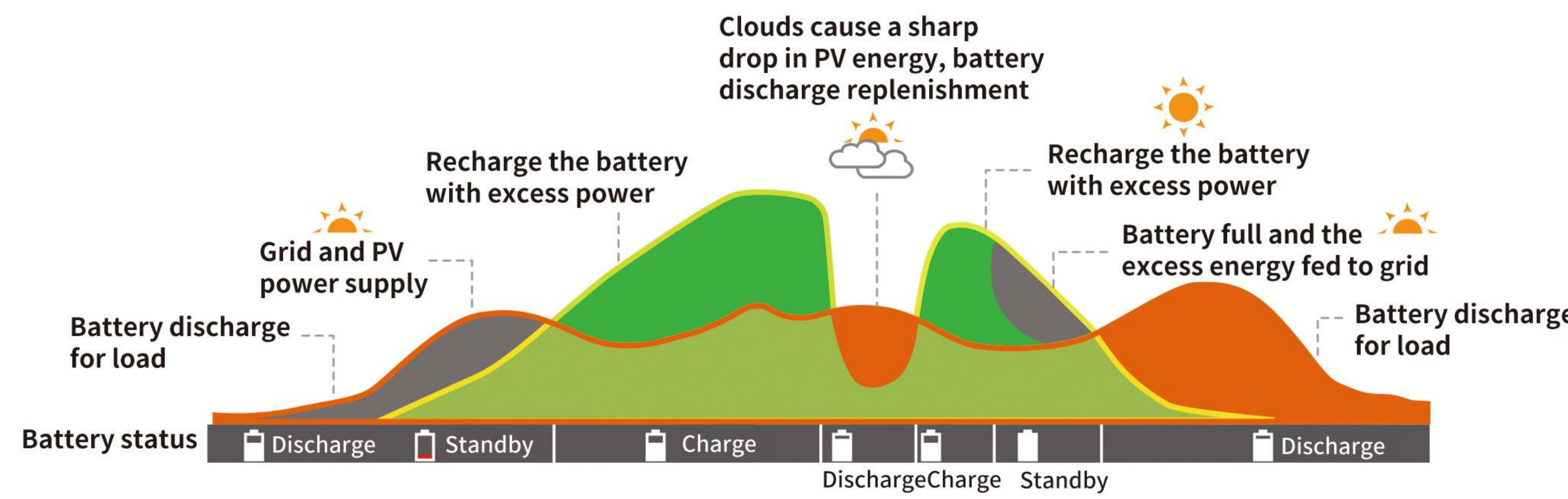
Inspur Residential Solar Panel and Energy Storage System

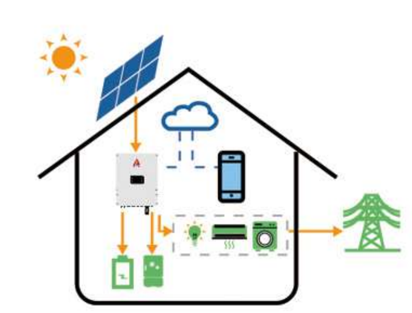
Zero-Carbon Terminals

System Connection Diagram



Working Mode



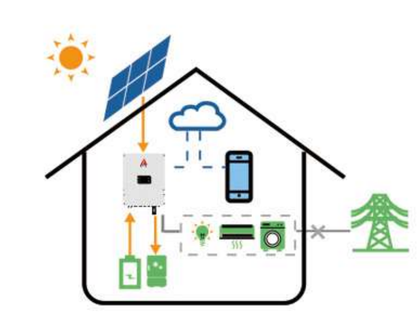


Self-use mode(With PV)

Energy generated by PV panels will be firstly used for local load, the remaining energy used to charge batteries, the rest power fed to the grid.

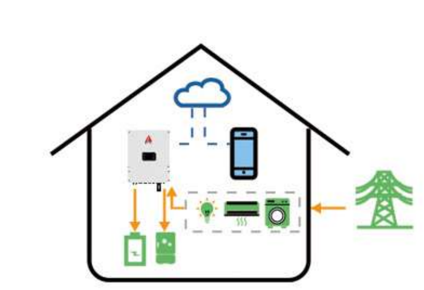
Self-use mode(Without PV)

When PV can not generate power, the energy stored in the battery will firstly support local load.When battery energy is exhausted, the grid will supply power to load at the same time.



Back-up

When grid fails, the system automatically switchs to back-up mode. The load can be supported by PV and battery.



Economic mode

The grid can charge the battery. Charging time and power are adjustable.

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Application Cases

Super charging service station **Shandong Province Highway Service Area**

Project

200MW/400MWh Independent Energy Storage Power Station

Location

Rizhao City,Shandong Province

Project

4.45MW Warehouse Roof PV System

Location

Shandong Inzone Logistics Park

Zero-Carbon Terminals

Application Cases

Charging Station with Solar Panel and Battery **Xintai City,Shandong Province**

Project

Zero-carbon Logistics Park Solution

Location

Suzhou City,Jiangsu Province

Project

Zero-carbon Factory Solution

Location

Rizhao City,Shandong Province