Energy Storage Products and System Solutions Provider

Solar energy storage products

System solutions

EPC services

Hunan Lenercom Technology Co., Ltd.

About us

Lenercom is a high-tech enterprise focusing on R&D, manufacture, sales and service in energy storage related products. Lenercom joint government, industrial alliances, research institutes, through independent innovation to promote Chinese new energy application innovation, and to create a global coverage of localized service network, continuously create value for customers.

Relying on rich resources of the solar energy storage industry chain and years of scientific research strength and project experience, the company's business has expanded to more than 30 countries and regions in Europe, America, Southeast Asia, Middle East, Africa and Latin America. The main products include power con-vert system (PCS), hybrid Inverter (MPS), photovoltaic inverter, containerized energy storage system (ESS), energy management system (EMS) and other products and system solutions. The products are used in off-grid, micro-grid, on grid and many other application fields, We provide more competitive, safer and reliable products and solutions for all kinds of household, industrial and commercial users, and continue to create more value for customers.

Our Business

Industrial and commercial energy storage

30kW-500kW

Enhance economic value for industrial and commercial users, energy saving and environmental protection, electricity demand, dynamic expansion and on-off grid applications

Household energy storage

2kW-10kW

Solve the problems of power failure and no electricity for home users, peak and valley arbitrage, save electricity charges and provide emergency power supply.

Portable outdoor power supply

251.6Wh-1280Wh

Intelligent compatibility, free switching of DC and AC;Easy to operate and easy to use for emergency.

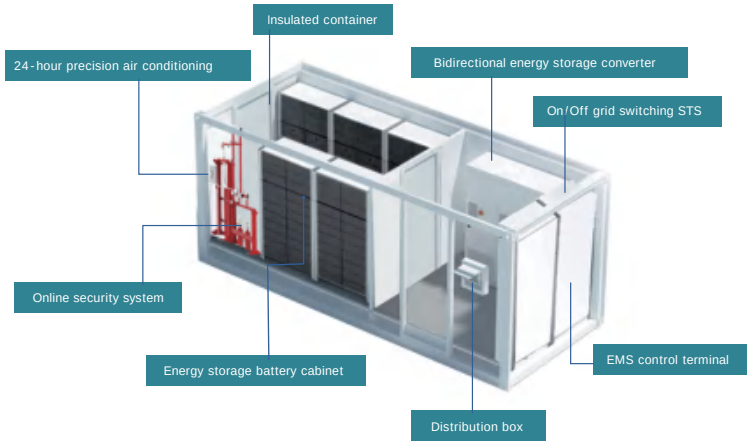
Industrial and Commercial Energy Storage System Solutions

Single box battery storage capacity: 0.5-2.5MWh, power: 0.5-2.5MW.
(A single 40-feet container).

Core advantages

- Advanced lithium iron battery
  High rate charge and discharge, high energy density, long cycle life.
- Container design
  The standardized design of the container is adopted, the system integration is high, and it can be quickly installed and put into operation.
- Real Time Monitoring
  Wind, PV and storage combined monitoring, intelligent control and management, real-time monitoring of system status on-site and remotely.

System characteristic



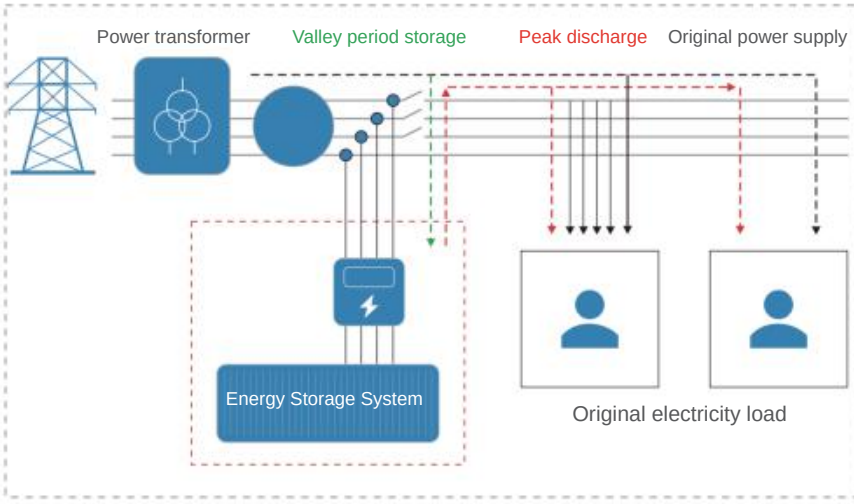
Breakthroughs in 7 core technologies:

- Micro power control
- On/Off grid switching control
- Energy storage SOC automatic maintenance
- Anti-reverse power control
- Power distribution control
- Off-grid energy balance control
- Black start control

Application scenario I | Peak and valley arbitrage

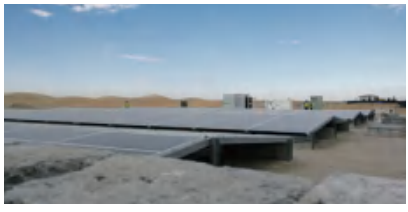
Compared with commercial and residential electricity loads, large-scale industrial users are more equipped with energy storage construction conditions. Specific conditions include:

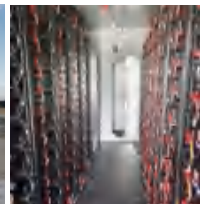
- Industrial users have large daily electricity consumption;
- Power load is heavy during peak time of electricity price (daytime), while power load is low during trough time of electricity price (late night);
- During the trough time of electricity price, there is a certain surplus capacity of user transformers.



Based on cloud-based load forecasting, we provide you with energy storage solutions to reduce the maximum demand electricity bill through peak and valley arbitrage and save basic electricity bills.

Application scenario II | On/Off Grid and pure Off-Grid





It is very suitable to establish an independent PV(wind) + diesel + ESS micro-grid to supply the power to the users in remote areas, where there is lack of traditional power grid coverage, but with abundant of solar or wind energy.

Hybrid Inverter

Model: LC-HI-30KH3、LC-HI-50KH3、
LC-HI-100KH3、LC-HI-150KH3、
LC-HI-250KH3、LC-HI-500KH3

Flexible

- Multiple working modes can be set flexibly
  Flexible support for lithium batteries and lead-acid batteries
  The PV controller can be expanded to facilitate flexible configuration of photovoltaic capacity

Convenient

- Integrated solution, supporting simultaneous access of load, battery, power grid, diesel generator and PV Integrated EMS function, safe and stable power supply, maximum utilization of new energy.
  Seamless switching between on-grid and off-grid states, uninterrupted load supply.

Modular PCS

Model: LC-PCS-50K、LC-PCS-100K、
LC-PCS150K、LC-PCS-200K、
LC-PCS-300K

Leading design

- Modular design, easy expansion and maintenance
- Independent design of air duct, good heat dissipation environment

Leading technology

- Support multiple battery input, effectively improve battery cycle life
- High frequency switching, low current ripple and high voltage quality
- Support parallel system can be expanded to MW level

High value

- Built-in EMS function to reduce customer investment costs

Residential Energy-Storage Solutions

Provide you with customized solar power system solutions according to your household electricity needs.

Lenercom ESS

Output power: 2kW 、4kW、5kW、10kW

Battery capacity: 4.4kWh - 35.2kWh

- Integrated design of inverters with the battery
- Smart energy management system EMS
- Special color customized
- Modular Stacked design
- IP65 Protection

CE IEC UN38.3

1. New energy (wind power, photovoltaics, etc.) as intermittent power supplly is widespread worldwide, which will cause power interruptions.
2. Economic benefits brought by the peak-to-valley price difference and photovoltaic energy storage subsidy policies.
3. Diesel power generation is not environmentally , the cost of electricity is high, and continuous investment is large.
4. Power grids in remote areas are difficult to cover, creating an isolated and off-grid power environment.

Solution diagram

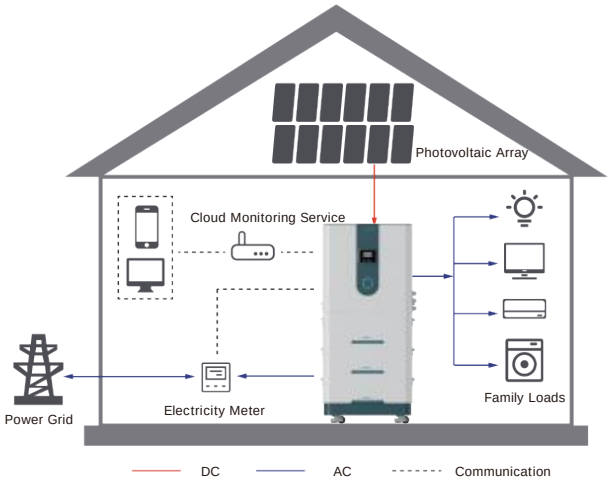
* Lenercom ESS wons the Gold Medal in the product design category of the Muse Design Awards (2021).
* MUSE is one of the most influential international awards in the field of creative design, organized by the International Design Awards Association (IAA).

Residential Energy Storage System

The intelligent small energy storage system is combined with advanced LiFe-PO4 lithium batteries, hybrid inverters, energy management systems, and photovoltaic module systems, which is suitable for household energy storage, farms, and other applications.

System composition

Hybrid Inverter（Lenercom ESS）/hybrid inverter+battery, PV modules, software management.



System characteristic

Advanced lithium iron battery

Using advanced LiFePO4 battery technology, with high rate charge and discharge, high energy density, long cycle life.

High performance hybrid inverter

High efficiency, high reliability, multiple safety protection, accurate tracking of solar energy.

Modular design

Flexible configuration capacity, light-weight design, simple installation and convenient maintenance.

Key technology

- DC-DC converter soft switching technology
- On/off-grid seamless switching control technology
- Intelligent energy management and monitoring technology
- Parallel control strategy of multiple machines without communication

Energy Management System (EMS)

The company's self-developed intelligent management system cloud platform aims at the current abandonment of wind and solar, unstable load, and peak-to-valley spreads. By optimizing energy storage control, distributed power output, and load input and withdrawal, it achieves different economically and efficiently. Application scenarios (generation side, grid side, user side) and energy management and control under different operation modes.

Large-scale energy storage monitoring

Smart power generation, smart energy storage, smart power usage, smart grid dispatch, smart energy market, smart management and services; real-time big data analysis.

Household energy storage monitoring

Online monitoring of energy storage system operating data, and remote setting of various functions; photovoltaic power generation forecasting, load forecasting, maximizing user benefits; online diagnosis, remote dispatching, cluster control, incremental distribution network, electric power transaction, district energy system; adapt to IoT(Internet of Things).

Multi-function
Portable Power Station

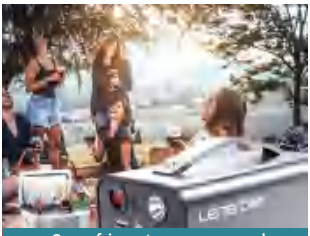
Silvery

Red

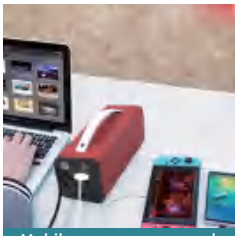
Grey

UAV power supply

Jump starter



Car refrigerator power supply



Mobile game power supply

Jump starter

Charge at least once every 4 months

Use original power adapter

Avoid extreme temperatures

Avoid extreme temperatures

Do not disassemble

Do not disassemble

Product Specifications

Product Model	LC-P180	QC 3.0	5V/3A 9V/2A
Battery Type	Chargeable Li-iron battery	Rated Power	180W
Rated Battery Energy	251.6Wh (3.7V/68000mAh)	Size	190*90*115mm
Input Charging Power	CC/CV 15V/2A	Weight	1460g
AC Inverter Output	220V~50Hz 180W	Working Environment Temperature	-20°C~60°C
DC Output	9V~12V/15A MAX	Working Environment Humidity	5%~90%
USB Output	5V/2A	Storage Temperature	-10°C ~55°C

执行标准：GB 31241-2014 GB/T 18287-2000

Multifunctional
solar emergency light

Model:LC-L2

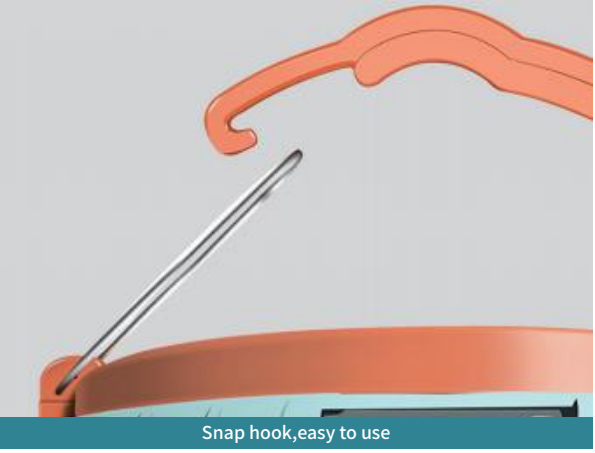
Black-Gold
Remote control optional

Orange-Blue
Remote control optional

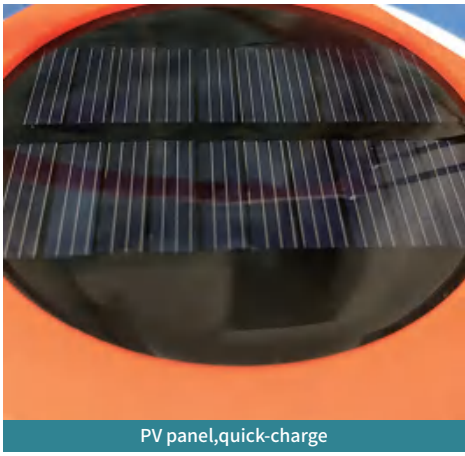
Mini model

8 features, You will love it!

- Matrix lampwick
- solar charging
- Longer Endurance
- Phone charger
- Multifunctional hook
- Large capacity lithium battery
- Waterproof
- Multi-use



Snap hook,easy to use



PV panel,quick-charge

waterproof,good for outdoors

PC lampshade,high transparency

Battery indicator

Lenercom

Energize the World

Hunan Lenercom Technology Co., Ltd.

+86 0731-89576599 +86 181 0841 3339

sales@lenercom.com https://www.lenercom.com

Floor 12, building B1, Lugu science and technology innovation and entrepreneurship Park, Changsha City, Hunan Province