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LB-RESS-PB-EN-V1.0-202607



LEOCH RESIDENTIAL ENERGY STORAGE SOLUTIONS

Lithium Battery | All-In-One Ess | Solar Inverter

www.leoch.com



ABOUT LEOCH

Founded in 1999, LEOCH BATTERY (stock code: 00842.HK) is a leading provider of advanced battery power & energy management solutions, delivering reliable & efficient energy to industries, data centers, cities and infrastructure across the world.

Headquartered in Singapore, we operate 21 state-of-the-art manufacturing facilities and maintain a global network of 80+ service companies, serving clients in over 150 countries. Our team of 15,000 professionals, including 1,500+ R&D and technical experts, drives innovation and ensures the highest standards of quality and reliability.

Expertise in Battery Power & Smart Energy Solutions

At LEOCH, we deliver quality power solutions built to perform across industrial and commercial applications. Our expertise includes:

Battery Energy Storage Systems (BESS): Industrial, commercial, residential, grid-side, and renewable energy solutions.

Telecom & Data Centre Backup Power Solutions: Reliable & quality power for mission-critical network power, UPS and AI data center power applications.

Automotive Power Solutions: Start-stop, lighting and ignition batteries for ICE & EV cars, motorcycles, etc.

Motive Power Solutions: Golf cart, bicycle & tricycle, material handling and forklifts.

At LEOCH BATTERY, we are committed to innovation, reliability, and sustainability, ensuring that our clients and partners across the globe receive reliable and efficient power and smart energy solutions.



6

Research Institutions



21

Production Bases



20+

Years of Industrial Experience



60+

Standard Settings



1000+

Patents



1500+

R&D and Engineers

Large Scale Automated Production Line



Leoch manufacturing team has experience in large-scale lithium battery manufacturing and the ability of long-term stable product delivery. The company's lithium battery production line has achieved a high degree of automation and intelligence in production. By introducing a new EMS intelligent system and integrating data acquisition channels (RFID, PLC, IPC, PC, etc.) to cover the entire factory manufacturing site, it can ensure real-time, accurate, and comprehensive collection of big data, multi-dimensional protection of product stability, consistency, service, which helps customers establish safe and reliable energy storage systems.

Test Center

Since its establishment, Leoch testing and verification center has been operating strictly accordance with the requirements of CNAS. It has industry-leading testing and verification equipments and a high-level tester team, and has professional testing and verification capabilities for lithium battery products, including material testing, performance testing, and safety and reliability testing, which is able to ensure the quality of battery products is safe and reliable.

WHY CHOOSE US



Product Reliability

- Regional Adaptability: Compatible with grid voltages across global regions.
- Core advantages: intelligent O&M, easy maintenance and fast system deployment.
- Product Performance: Stable operation, high safety and durability, with strong environmental adaptability.



Standardized Manufacturing

- Intelligent Production Lines: High-efficiency production lines equipped with fully automatic equipment.
- Standardized Testing: Rigorous full-process testing to guarantee stable product performance.
- Quality Control: Full-chain quality supervision with strict factory exit standards.



Supporting Services

- Service Support: Deliver responsive, professional and efficient after-sales technical support.
- Customized Solutions: Provide one-on-one consultation and tailor exclusive system solutions.
- Warehousing Network: Manufacturing facilities in Vietnam, Malaysia, Mexico and India to ensure prompt delivery.

RESIDENTIAL ENERGY STORAGE SOLUTIONS

With the deepening of the low-carbon concept and the improvement of the economic benefits of energy storage; Residential energy storage systems are increasingly widely used. Based on a thorough understanding of market and industry trends, Leoch has developed household energy storage products that can flexibly adapt to multiple scenarios, making it easier and more efficient for users to use electricity.



High-end villas



Residential areas



Nomadic farms

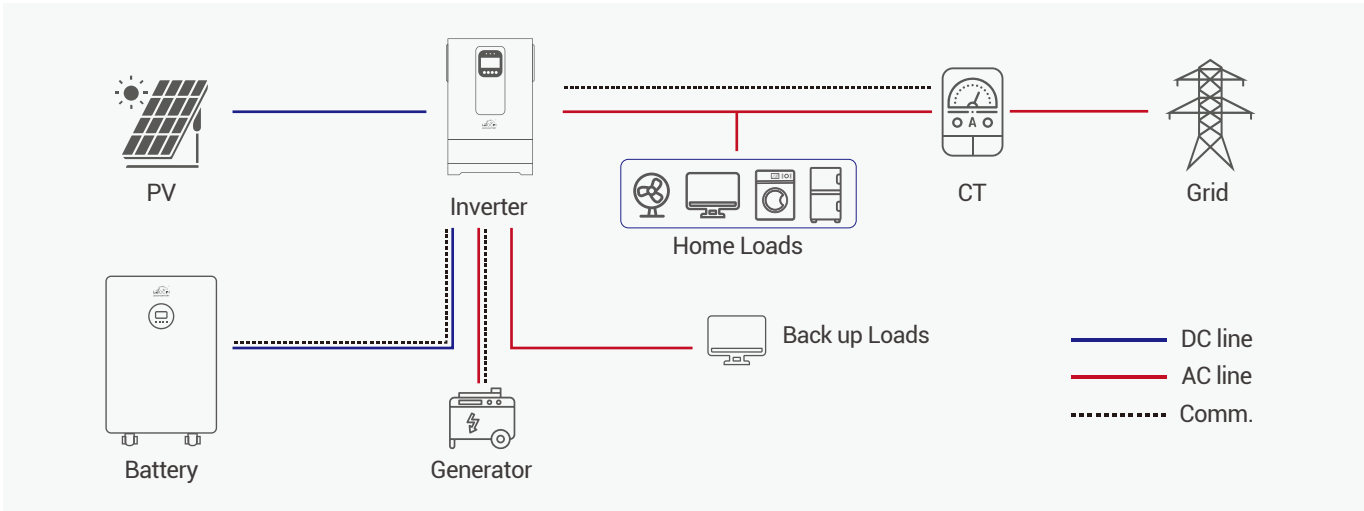


Islands



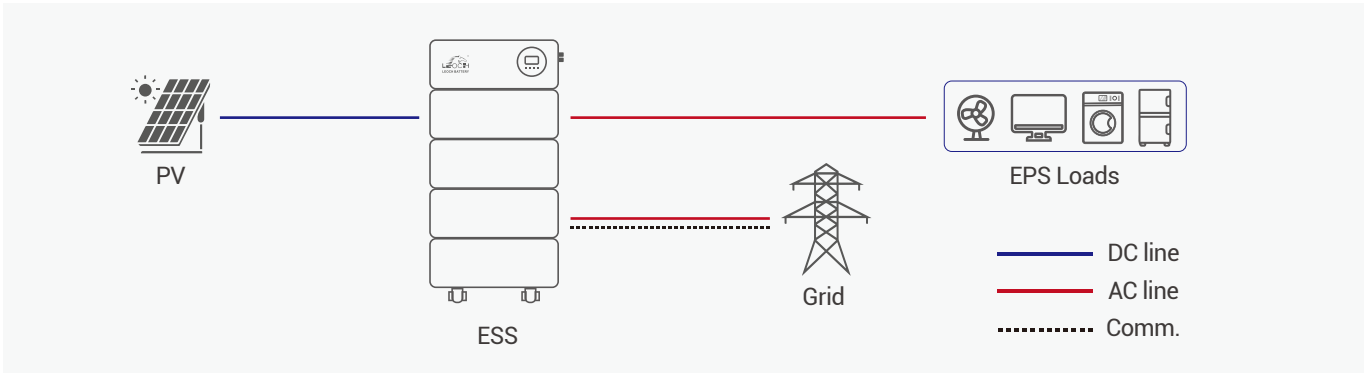
RESIDENTIAL ENERGY STORAGE

Integrated Inverter, Battery, Smart Loads & Backup - One Multi-Energy System



RESIDENTIAL OFF-GRID ENERGY STORAGE

Outages come, Always-on: Stable backup ready, Seamless switching



Compatible with Different Scenarios



Remote Areas



Emergency Power Outage



Peak-valley Arbitrage



Islands

MAKING A POWER-SELF-SUFFICIENT HOME

With the deepening of the low-carbon concept and the improvement of the economic benefits of energy storage; Residential energy storage systems are increasingly widely used. Based on a thorough understanding of market and industry trends, Leoch has developed household energy storage products that can flexibly adapt to multiple scenarios, making it easier and more efficient for users to use electricity.



Split Solution



ESS Solution



Residential Energy Storage Battery

Rack-mounted Standard Series



LR24-100



LR24-200



LR51.2-100



LR51.2-200



Saves Space, Fits Well at Home

The upright rack saves space, has a tidy design, and works in various home setups.



Worry-free Home Maintenance

Individual units can be taken apart easily, with smart remote monitoring, making home maintenance hassle-free and efficient.



Whole-House Compatibility

Works with solar storage, emergency backup, and multiple scenarios to cover home needs.



Flexible Modular Expansion

Flexible modular expansion, parallel connection for max. 15 units. Zero site modification needed, scalable on demand with zero waste.



Built-in Organized Wiring

Integrated wiring keeps cables neat and tidy, making home electricity use safe and worry-free.



Highly Compatible

Standard racks compatible with multiple brands, making it very adaptable for home use.

Residential Energy Storage Battery (Rack-mounted)



Model	LR24-100	LR24-200	LR51.2-100	LR51.2-200
Rated Capacity (5HR)	100 Ah	200 Ah	100 Ah	200Ah
Nominal Voltage	25.6V	25.6V	51.2V	51.2V
Rated Energy	2.56kWh	5.12kWh	5.12kWh	10.24kWh
Discharge Cut-off Voltage	21.6V	21.6V	43.2V	43.2V
Maximum Charge Voltage	28.8V	28.8V	57.6V	57.6V
Max. Charge/Discharge Current	100A	100A	100A	150A
Weight	Approx. 26 Kg	Approx. 43 Kg	Approx. 43 Kg	Approx. 82 Kg
Dimensions (W*D*H) mm	442 *350 *177	442 *450 *177	442 *431 *177	442 *550 *244
Display Fuction	With LCD display screen			
Communication Interface	RS485, RS232, CAN			
Number of Parallel Connections	Up to 15 units			
Design Life	More than 15 years			
Cycle Life	More than 6000 cycles @80% DOD			
Ingress Protection	IP31			
Case Material	SPCC			
Operation Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C; Storage: -20 to +60°C			
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun			

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Extended Optional Features

The battery comes with a standard visual display for real-time operational data viewing. **Bluetooth** and **Wi-Fi** communication modules are available as optional extras to expand smart interconnection, real-time monitoring and other functions.

*Installation does not alter the battery's appearance or dimensions.

Residential Energy Storage Battery

Wall-mounted Standard Series



Wall-Mounted, Space-Saving

Wall-mounted design sticks to the wall and doesn't take up floor space, keeping things neat and simple for any home setting.

Smart Monitoring

Modules are easy to install and remove, and remote smart monitoring helps quickly troubleshoot any issues.

Whole-House Compatibility

Compatible with solar energy storage and backup power, meeting all kinds of home needs.

Modular Design, Easy Expansion

Wall-mounted modular design for parallel expansion, max. 15 sets in parallel. No wiring rework, flexible energy storage capacity scaling.

Integrated Wiring, Safe and Neat

Built-in hidden wiring keeps cables tidy, safe, and stylish for your home.

Universal Compatibility

Standard specifications that work with mainstream devices, fitting various home energy storage setups.

Residential Energy Storage Battery (Wall-mounted)



Model	LW25.6-100	LW25.6-200	LW51.2-100	LW51.2-200
Rated Capacity (5HR)	100 Ah	200Ah	100Ah	200Ah
Nominal Voltage	25.6V	25.6V	51.2V	51.2V
Rated Energy	2.56kWh	5.12kWh	5.12kWh	10.24kWh
Discharge Cut-off Voltage	21.6V	21.6V	43.2V	43.2V
Maximum Charge Voltage	29.2V	29.2V	58.4V	58.4V
Max. Charge/Discharge Current	50A/100A	100A/100A	100A/100A	100A/100A
Weight	Approx. 29 Kg	Approx. 52 Kg	Approx. 50 Kg	Approx. 94 Kg
Dimensions (W*D*H) mm	375 *500*165	510 *400 *240	450 *500 *140	500 *620 *245
Display Fuction	With LCD display screen			
Communication Interface	RS485, RS232, CAN			
Number of Parallel Connections	Up to 15 units			
Design Life	More than 15 years			
Cycle Life	More than 6000 cycles @80% DOD			
Ingress Protection	IP31			
Case Material	SPCC			
Operation Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C; Storage: -20 to +60°C			
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun			

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Extended Optional Features

The battery comes with a standard visual display for real-time operational data viewing. **Bluetooth** and **Wi-Fi** communication modules are available as optional extras to expand smart interconnection, real-time monitoring and other functions.

*Installation does not alter the battery's appearance or dimensions.

Residential Energy Storage Battery

Value Series



Cost-Effective & Space-Saving

Minimal lightweight look with optimized cost and competitive price; wall-hung to save space for all home styles.

Smart Remote Monitoring

Easy module assembly & disassembly; remote fast fault detection reduces long-term service costs.

Whole-House Compatibility

Dual functions of solar storage and emergency backup to satisfy all household power needs.

Modular Structure

Supports up to 15 parallel units without reworking wiring; flexible capacity for better budget control.

Integrated Concealed Wiring

Simplified hidden cable layout cuts accessory costs while keeping wiring neat and safe.

Universal Compatibility

Compatible with mainstream inverters on the market for more cost-effective system matching.

Residential Energy Storage Battery (Value Series)



Model	LW25.6-100	LW51.2-100	LW51.2-200	LF51.2-314
Rated Capacity (5HR)	100 Ah	100 Ah	200 Ah	314 Ah
Nominal Voltage	25.6 V	51.2V	51.2V	51.2V
Rated Energy	2.56 kWh	5.12kWh	10.24kWh	16.07 kWh
Discharge Cut-off Voltage	21.6 V	43.2V	43.2V	43.2 V
Maximum Charge Voltage	29.2 V	58.4V	58.4V	58.4 V
Max. Charge/Discharge Current	50/100A	100A	100A	160A
Weight	Approx. 29 Kg	Approx. 46 Kg	Approx. 94 kg	Approx.117.8 Kg
Dimensions (W*D*H) mm	450 *400 *150	400 *560 *150	520 *900 *150	540*240*700
Fuction	SOC LED & Bluetooth & WiFi			
Communication Interface	RS485, CAN			
Number of Parallel Connections	Up to 15 units			
Design Life	More than 15 years			
Cycle Life	More than 6000 cycles @80% DOD			
Ingress Protection	IP30			IP31
Case Material	SPCC			
Operation Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C; Storage: -20 to +60°C			
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun			

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Residential Energy Storage Battery

New Glass Panel Series



Simple and versatile

Sleek, minimalist design that fits homes, shops, and offices, blending well with both equipment and decor.



Scratch and impact resistant

Tempered glass protection against impacts and scratches, staying like new even after long use.



Easy to Clean & Maintain

Smooth surface wipes clean easily, easier to maintain than metal or plastic cases.



Responsive touch

Clear and transparent, showing status at a glance, with quick touch response.



Dense & Moisture-proof

Glass is dense and non-absorbent, no mold or fading in humid environments.



Flexible Installation

Wall-mounted for space saving, floor-standing for stable performance. Modular expandable design supports up to 15 units in parallel, compatible with all house types and installation spaces.

Residential Energy Storage Battery (New Glass Panel Series)



Model	LW51.2-100	LW51.2-200	LF51.2-314
Rated Capacity (5HR)	100 Ah	200 Ah	314 Ah
Nominal Voltage	51.2V	51.2V	51.2V
Rated Energy	5.12kWh	10.24kWh	16.07kWh
Discharge Cut-off Voltage	43.2V	43.2V	43.2V
Maximum Charge Voltage	58.4V	58.4V	58.4V
Max. Charge/Discharge Current	50A/100A	100A/100A	150A/200A
Weight	Approx. 48 Kg	Approx. 95 kg	Approx. 122 kg
Dimensions (W*D*H) mm	590 *420 *150	620 *465 *260	450*260*880
Fuction	SOC LED & Bluetooth & WiFi		
Communication Interface	RS485, CAN		
Number of Parallel Connections	Up to 15 units		
Design Life	More than 15 years		
Cycle Life	More than 6000 cycles @80% DOD		
Ingress Protection	IP31		
Case Material	SPCC		
Operation Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C; Storage: -20 to +60°C		
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun		

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Residential Energy Storage Battery

IP65 Series



Outdoor Direct Installation
No need for a canopy cabinet, can be installed directly on exterior walls, floors, or photovoltaic courtyards, saving on construction costs.

Low Maintenance
Sealed, triple-protection structure; components resist corrosion and moisture, long-lasting and rarely need repairs.

Multiple Assembly Options
Compatible with wall-mount or floor-standing installation, same protection level for different setups.

Weather-resistant & Reliable
Waterproof, moisture-proof, dust-proof, and salt-spray resistant; low failure rate even in coastal or industrial areas.

Flexible Placement
Modular expandable design, max. 15 units in parallel. Unrestricted by indoor space, ideal for residential PV, off-grid and outdoor energy storage scenarios.

High Safety Redundancy
Strong protection against water ingress and short circuits, safer than indoor models in rainy and humid environments.

Residential Energy Storage Battery (IP65 Series)



Model	LW51.2-100	LW51.2-200	LF51.2-314
Rated Capacity (5HR)	100 Ah	200 Ah	314 Ah
Nominal Voltage	51.2V	51.2V	51.2V
Rated Energy	5.12kWh	10.24 kWh	16.07 kWh
Discharge Cut-off Voltage	43.2 V	43.2 V	43.2 V
Maximum Charge Voltage	58.4 V	58.4 V	58.4 V
Max. Charge/Discharge Current	50/100A	100/100 A	150/200A
Weight	Approx. 50 Kg	Approx. 94 Kg	Approx.118 Kg
Dimensions (W*D*H) mm	500*173*620	520*245*650	590*270*750
Fuction	SOC LED & Bluetooth & WiFi		
Communication Interface	RS485, RS232, CAN		
Number of Parallel Connections	Up to 15 units		
Design Life	More than 15 years		
Cycle Life	More than 6000 cycles @80% DOD		
Ingress Protection	IP65		
Case Material	SPCC		
Operation Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C; Storage: -20 to +60°C		
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun		

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Residential Energy Storage Battery

Floor-mounted Standard Series



Flexible Placement

Comes with quiet universal wheels for easy moving and repositioning, making it hassle-free to place anywhere at home.



Modular Design, Easy Expansion

Floor-mounted modular design for parallel expansion, max. 15 sets in parallel. No wiring rework, flexible energy storage capacity scaling.



Touchscreen Control

High-definition touchscreen for intuitive control, paired with remote monitoring for efficient and worry-free troubleshooting.



Large-capacity Energy Storage

Powerful large-capacity storage ensures reliable performance even under load.



Multi-scenario Compatibility

Works with solar storage and backup power during outages, fully meeting your home energy storage needs.



High Compatibility

Uses standard household specs, compatible with mainstream devices, fitting various energy storage systems.

Residential Energy Storage Battery (Floor-mounted)



Model	LF51.2-300	LF51.2-400	LF51.2-600
Rated Capacity (5HR)	300 Ah	400 Ah	600 Ah
Nominal Voltage	51.2V	51.2V	51.2V
Rated Energy	15.36 kWh	20.48 kWh	30.72 kWh
Discharge Cut-off Voltage	43.2 V	43.2 V	43.2 V
Maximum Charge Voltage	58.4 V	58.4 V	58.4 V
Max. Charge/Discharge Current	100/200 A	200/200 A	200/200 A
Weight	Approx. 118 Kg	Approx. 173 Kg	Approx. 243 Kg
Dimensions (W*D*H) mm	390*256.5*882	540 *280 *940	680*280 *940
Display Fuction	LCD Display & Bluetooth & WiFi		
Communication Interface	RS485, RS232, CAN		
Number of Parallel Connections	Up to 15 units		
Design Life	More than 15 years		
Cycle Life	More than 6000 cycles @80% DOD		
Ingress Protection	IP31		
Case Material	SPCC		
Operation Temperature	Charging: 0 to +45°C; Discharging: -10 to +55°C; Storage: -20 to +60°C		
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun		

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Residential Energy Storage Battery

Low Voltage & Stackable Standard Series



Flexible Expansion

Stack layer by layer on demand; capacity and power adjustable freely. Expandable from 5 kWh to 60 kWh, up to 12 parallel modules, maximizing flexibility for all usage scenarios.



Easy to Install and Move

Moderate individual weight, can be handled by one person without special tools, makes installation quick and easy.



Convenient Maintenance

Modules can be detached individually, so one malfunctioning unit can be repaired or replaced without affecting the whole system.



Efficient Use of Space

Vertical stacking saves floor space, more compact than spreading things out, can even fit in small apartments or tight storage rooms.



Variety of Combinations

Can be used alone, placed in a single layer, stacked in multiple layers, or arranged in multiple rows to fit different layouts.



Cost Control

Modular purchasing allows for phased investment, lowering the upfront buying cost.

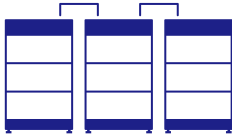
Residential Energy Storage Battery (Low Voltage & Stackable)



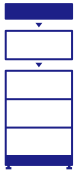
Flexible, Efficient, Simple



Plug Connection
No Additional Wiring
Required



5-60kWh
Tailored Sizing for
Each Application



Extend Anytime
Easily Adapts to
New Requirements



High Power
Power for Every
Application

Model	SOL-5L-B	SOL-10L-B	SOL-15L-B	SOL-20L-B
External Structure				
Rated Capacity/Ah	100	200	300	400
Overall Size /mm	680 *429 *320	680 *429 *540	680 *429 *750	680 *429 *970
Weight /Kg	65±1	115±1	165±1	215±1
Combination Method (single battery pack)	16S1P			
Nominal Voltage/V	51.2			
Limited Discharge Voltage /V	43.2			
Limited Charging Voltage /V	57.6			
Internal Resistance (single battery pack)	≤20mΩ			
Max Continuous Charging current/A	100			
Max Continuous Discharging Current/A	100			
Operation Temperature Range	Charge:0~50°C; Discharge: -10~50°C			
Storage Temperature Range	- 20~+60°C, Recommend: ≤60 ±25% RH storage humidity			
Single Module Size/weight	680*429*215mm / 50Kg±1Kg			
Compatible Inverters	PYLON, Sacolar, Growatt, Sofar, Voltronic, LUX, Schneider, Afore, Sinexcel, Sorotec, GoodWe, KSTAR, Srne, Must, Megarevo, Sol-Ark, INVT, Aiswei, TBB, SAKO, Solis, Victron, SMK, BlueSun			

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Residential Energy Storage System

Low Voltage & Stackable All in one



One-stop & Ready-to-use

Battery and inverter system combined, no need to select an extra inverter for purchasing or installation—just install and use, greatly simplifying the setup process.

Space-saving, Free Layout

Vertical stacking takes up little floor space, can be placed against walls or in corners, suitable for homes, shops, or small server rooms.

Strong System Stability

The whole system is calibrated as a unit, with deep hardware and software matching. Compared to separate devices, it offers better compatibility and stable operation.

Flexible and Efficient Expansion

Stack layer by layer on demand; capacity and power adjustable freely. Expandable from 5 kWh to 60 kWh, up to 12 parallel modules, maximizing flexibility for all usage scenarios.

Easy Installation

Comes pre-assembled, no complicated wiring or equipment adjustments needed. One person can handle moving, stacking, and connecting the power, keeping the installation short.

Hassle-free Maintenance

Unified control panel with fault alerts; each unit can be serviced individually, so troubleshooting or replacing parts doesn't affect the rest of the system.

Residential Energy Storage System (Low Voltage & Stackable)



Flexible, Efficient, Simple

Plug Connection
No Additional Wiring
Required

5-60kWh
Tailored Sizing for
Each Application

Extend Anytime
Easily Adapts to
New Requirements

High Power
Power for Every
Application

Model	SOL-10-5.6LS	SOL-15-5.6LS	SOL-20-5.6LS
System Structure			
Battery Model	SOL-51.2/100-L (*2)	SOL-51.2/100-L (*3)	SOL-51.2/100-L (*4)
Rated Capacity/Ah	200	300	400
Overall Size /mm	680*429*750	680*429*980	680*429*1185
Weight /Kg	135±1	185±1	235±1
Nominal Voltage/V	51.2		
Limited Discharge Voltage /V	43.2		
Limited Charging Voltage /V	57.6		
Internal Resistance(single battery pack)	≤20mΩ		
Max Continuous Charging Current /A	100		
Max Continuous Discharging Current /A	100		
Operation Temperature Range	Charge:0~50°C; Discharge: -10~50°C		
Storage Temperature Range	- 20~+60°C, Recommend: ≤60±25% RH storage humidity		
Single Module Size/weight	680*429*215mm / 50Kg±1Kg		
Inverter	SOL-6KL-S		
Rated Power	6000W		
Maximum PV Array Open Circuit voltage	500VDC		
MPPT Voltage Range	120-450V		
Nomial Output Voltage	220/230/240VAC		
Output Voltage Range	184-265VAC		
Nominal Output Current	25.5A /24.3A /23.3A		
Efficiency	Up to 93.5%		
Grid Output Voltage Range	120-280VAC		
Grid Frequency	50/60Hz (Auto Sensing)		
Maximum AC Charge Current	120A		
Maximum Solar Charge Current	120A		
Nominal DC Voltage	48VDC		

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Residential Energy Storage System

Low Voltage & Stackable All in one US Series



One-stop & Ready-to-use

Battery and inverter system combined, no need to select an extra inverter for purchasing or installation—just install and use, greatly simplifying the setup process.



Space-saving, Free Layout

Vertical stacking takes up little floor space, can be placed against walls or in corners, suitable for homes, shops, or small server rooms.



Strong System Stability

The whole system is calibrated as a unit, with deep hardware and software matching. Compared to separate devices, it offers better compatibility and stable operation.



Flexible and Efficient Expansion

Stack layer by layer on demand; capacity and power adjustable freely. Expandable from 10 kWh to 30 kWh, up to 3 parallel modules, maximizing flexibility for all usage scenarios.



Easy Installation

Comes pre-assembled, no complicated wiring or equipment adjustments needed.



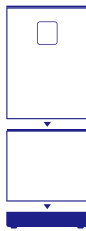
Hassle-free Maintenance

Unified control panel with fault alerts; each unit can be serviced individually, so troubleshooting or replacing parts doesn't affect the rest of the system.

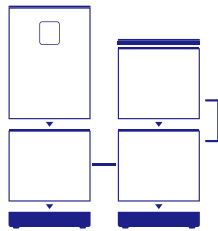
Residential Energy Storage System (Low Voltage & Stackable)



Flexible, Efficient, Simple



Host Integration
Inverter & Battery



10-30kWh Extend Anytime
Easily Adapts to New Requirements



High Power
Operation in High Power

Model	HS-ESS1010-US	HS-ESS1020-US	HS-ESS1030-US
System Structure			
Battery Model	SOL-51.2200-W-A (*1)	SOL-51.2200-W-A (*2)	SOL-51.2200-W-A (*3)
Rated Capacity/Ah	200	400	600
Nominal Voltage/V	51.2		
Voltage Tange	43.2~58.4VDC		
Max Continuous Current /A	100		
Cell Type	LFP		
Parallel Connection	Up to 3 modules(30kWh)		
Communication Interface	RS485, CAN		
Protection Level	IP65		
Operation Efficiency	95%		
Single Module Size(W*D*H)/weight	600*280*518mm; 80Kg±1Kg		
Inverter	INV-10kW-US		
Rated Power	10KW		
Maximum PV Array Open Circuit voltage	500VDC		
MPPT Voltage Range	120-500V		
Nomial Output Voltage	120/240(Split phase), 240 (Single phase)		
Output Voltage Range	90~138VAC, 180~265VAC		
Nominal Output Current	25.5A /24.4A /23.3A		
Efficiency	Up to 95%		
Grid Frequency	50/60Hz (Auto Sensing)		
Maximum AC Charge Current	100A		
Maximum Solar Charge Current	100A		
Nominal DC Voltage	48VDC		
Inverter Size(W*D*H)/weight	600*280*815mm; Approx. 65kg		
System Dimension(W*D*H)	600*280*1410mm		

*This list only indicates that our battery is compatible with these inverter brands, which does not imply that they have been officially approved by the inverter manufacturers.

Residential Energy Storage Battery

High Voltage & Stackable Standard Series



Flexible Expansion

Modular stacking structure enables on-demand voltage elevation for higher total battery energy, adapting to diversified energy storage needs at every stage.



High Efficiency

Uses a high-voltage series architecture, eliminating the need for DC/DC boost converters, reducing energy loss, and boosting system efficiency.



Highly Adaptable

Supports a wide temperature range, has good dust and water resistance, and can be flexibly installed indoors or in semi-outdoor environments.



Space-Saving

Stacking installation is simple and quick, with a compact overall structure that takes up less space compared to traditional solutions.



Safe and Durable

Equipped with lithium iron phosphate cells and an intelligent BMS for double protection, with a cycle life of over 6000 times and more than 10 years of use.



Smart Management

Built-in BMS monitors cell status in real time, and the touch display screen lets you check the battery status instantly, making maintenance easy and convenient.

Residential Energy Storage Battery (High Voltage & Stackable)



Flexible, Efficient, Simple



Plug Connection
No Additional Wiring Required



Extend Anytime
Easily Adapts to New Requirements



High Power
Power for Every Application

Model	SOL-20H-B	SOL-25H-B	SOL-30H-B
External Structure			
Usable Energy	20.5kWh	25.6kWh	30.7kWh
System Configuration	4 battery packs and 1 HV box	5 battery packs and 1 HV box	6 battery packs and 1 HV box
Cell Type	Prismatic (LiFePO ₄)	Prismatic (LiFePO ₄)	Prismatic (LiFePO ₄)
Nominal Voltage	205V	256V	307V
Operation Voltage Range	179.2V~233.6V	224V~292V	268.8V~350.4V
Nominal Discharge/Charge Current	50A	50A	50A
Weight	Approx.230Kg	Approx.280Kg	Approx.330Kg
Dimensions(W*D*H)mm	680 * 425 * 860	680 * 425 * 1035	680 * 425 * 1210
Operation Temperature Range	Charge:0~50°C; Discharge: -10~50°C		
Communication Interface	RS485, CAN		
Ingress Protection	IP55		
Round-Trip Efficiency	94%		
Applications	Energy storage system/Power backup		
Compatible Inverters	PYLON, Growatt, Sofar, GoodWe, Deye, GINLONG, Megarevo, Sinexcel, Luxpowertek		

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Residential Energy Storage System

High Voltage & Stackable All in one



Highly Integrated, Space-Saving

Combines the inverter, battery, BMS, and more into one unit, with an all-in-one design that takes up less space.



Easy Installation

Stackable modular design, no complex wiring needed, making installation and future expansion simple.



Long Service Life

Uses lithium iron phosphate cells, with a cycle life of over 6000 times and a protection level of IP55.



High Load Capacity

3-phase output compatible, powers high-power equipment & 3-phase loads, supports 100% unbalanced load operation.



Flexible Expansion

Supports battery module series expansion, allowing you to adjust capacity according to your needs.



Intelligent Management

Supports remote monitoring and can achieve fast seamless on/off-grid switching (<20ms).

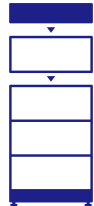
Residential Energy Storage System (High Voltage & Stackable)



Flexible, Efficient, Simple



Plug Connection
No Additional Wiring Required



Extend Anytime
Easily Adapts to New Requirements



High Power
Power for Every Application

Model	SOL-20-10HT	SOL-25-10HT	SOL-30-10HT
System structure			
Battery Model	SOL-51.2100-L (*4)	SOL-51.2100-L (*5)	SOL-51.2100-L (*6)
Usable Energy	20.45kWh	25.6kWh	30.72kWh
System Configuration	4 battery packs and 1 Inverter box	5 battery packs and 1 Inverter box	6 battery packs and 1 Inverter box
Cell Type	Prismatic(LiFePO ₄)	Prismatic(LiFePO ₄)	Prismatic(LiFePO ₄)
Nominal Voltage	204.8V	256V	307.2V
Operation Voltage Range	179.2V~233.6V	224V~292V	268.8V~350.4V
Weight	Approx.260Kg	Approx.300Kg	Approx.350Kg
Dimensions(W*D*H)mm	680*429*1250	680*429*1470	680*429*1680
Nominal Discharge/Charge Current	50A		
OperationTemperature Range	Charge:0~50°C; Discharge: -10~50°C		
Communication Interface	RS485, CAN		
Ingress Protection	IP55		
Round-Trip Efficiency	94%		
Applications	Energy storage system / Power backup		
Inverter	SOL10KH-T		
Maximum PVInput Power	15kW		
Rated PV Input Voltage	620V		
MPPT Operating Voltage Range	200-950V		
MPPT Quantity	2		
Maximum PV Input Current	15A/15A		
Rated AC Output Power (to Gird)	10kW		
Nominal Input Voltage	3L/N/PE; 220/380V; 230/400V; 240/415V		
Input Frequency	50/60Hz		
Maximum Output Current to Grid	16.5A		
Battery Voltage Range	135-750V		
Max. Battery Charge/Discharge Current	25A/25A		
Rated Output Power to Load	10kW		
Rated Output Voltage to Load	3L/N/PE; 220/380V; 230/400V; 240/415V		
Maximum Output Current to Load	16.5A		

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Off-Grid Energy Storage Inverter

ZLS Standard Series



BMS BMS Communication Port

Enables reliable communication with lithium battery BMS for safer and smarter battery management.

User-Friendly LCD Design

The intuitive HMI LCD allows users to easily configure settings and monitor system status.

Adjustable Charging Current

Adjustable charging current supports different battery capacities and helps extend battery lifespan.

Built-In WiFi Monitoring

Built-in WiFi allows users to monitor system performance remotely via a mobile app.

Wide PV Input Voltage

Up to 500VDC maximum voltage for flexible solar panel configuration.

Battery Independent Design

Operates without a battery when solar or grid power is available, offering flexible system setup.

Off-Grid Energy Storage Inverter



Model	MKS-LW3K5-ZLS	MKS-LW6K2-ZLS	MKS-LW12K-ZLS
Rated Power	3500W	6200W	12000W
Input			
Voltage	230Vac	230Vac	230Vac
Frequency Range	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Output			
AC Voltage Regulation(Batt. mode)	230Vac ±5%	230Vac ±5%	230Vac±5%
Surge Power	7KVA	12.4KVA	24KVA
Efficiency (Peak)	94%		
Transfer Time	10ms typical (UPS); 20ms typical (Appliances)		
Waveform	Pure Sine Wave		
Battery			
Battery Voltage	24Vdc(Nominal DC Input Voltage)	48Vdc(Nominal DC Input Voltage)	48Vdc(Nominal DC Input Voltage)
Battery Type	Lead acid/Lithium	Lead acid/Lithium	Lead acid/Lithium
DC Voltage Range	20~30Vdc	40~60Vdc	40~60Vdc
Solar Charger & AC Charger			
Solar Charger Type	MPPT	MPPT	MPPT
Maximum PV Array Open Circuit Voltage	500Vdc	500Vdc	500Vdc
Maximum PV Array Power	4000W	6000W	9000W*2
MPPT Range @ Operating Voltage	60Vdc~450Vdc	90Vdc~450Vdc	90Vdc~450Vdc
Maximum Solar Charge Current	100A	100A	150A
Maximum AC Charge Current	80A	80A	150A
Maximum Charge Current	100A	100A	150A
General Parameters			
Weight(kg)	6.2	8.2	19.5
Size D*W*H(mm)	358*295*105	456*280*115	611*378*135
Degree of Protection	IP20		
Humidity	5% to 95% Relative Humidity (Non-condensing)		
Operating Temperature	-10°C to 55°C (>45°C Reduced operation)		

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