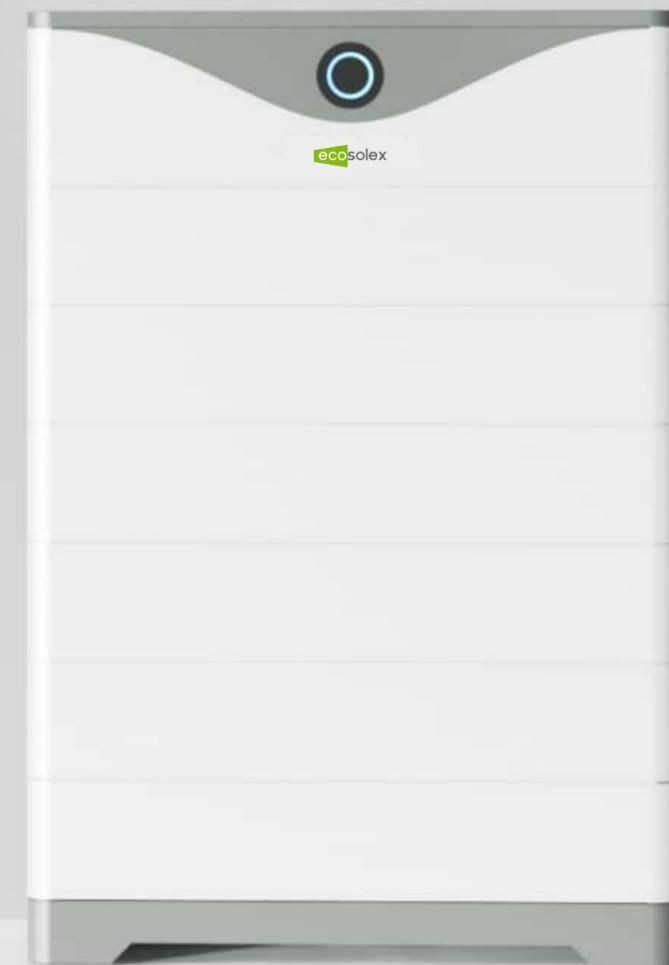




RS-SH Series Energy Storage Solutions



@Ecosolex

24/7 Customer Support Remote or On-site

E-mail: service-eu@ecosolex.com

www.ecosolex.com

System Solution

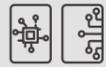


Integrated solutions for scenarios such as PV, energy storage and charging zero carbon parks and household green energy



Complete Units

- Inverters
- Backup power
- Portable energy solutions
- Household / Industrial energy storage
- Vehicle and marine power solution



Core Components

- Charging modules, cells, BMS, PCS, EMS

About Ecosolex

As a sub-brand of Shenzhen Topband Co., Ltd., Ecosolex leverages Topband's decades of technological excellence to deliver advanced photovoltaic, energy storage, and charging system solutions tailored for residential, commercial, and industrial applications. With over 2,000 research professionals and more than 3,200 patents, Ecosolex harnesses Topband's robust R&D capabilities to provide reliable, safe, and sustainable energy solutions that ensure significant returns on investment.

Our global footprint, encompassing 15 production and R&D bases and a team of over 9,300 professionals worldwide, enables Ecosolex to offer seamless, cutting-edge solutions baked by unparalleled expertise and support. Committed to innovation, quality, and customer satisfaction, Ecosolex stands at the forefront of the renewable energy industry, empowering our customers to achieve energy independence and contribute to a greener, more sustainable future.



Peak Shaving



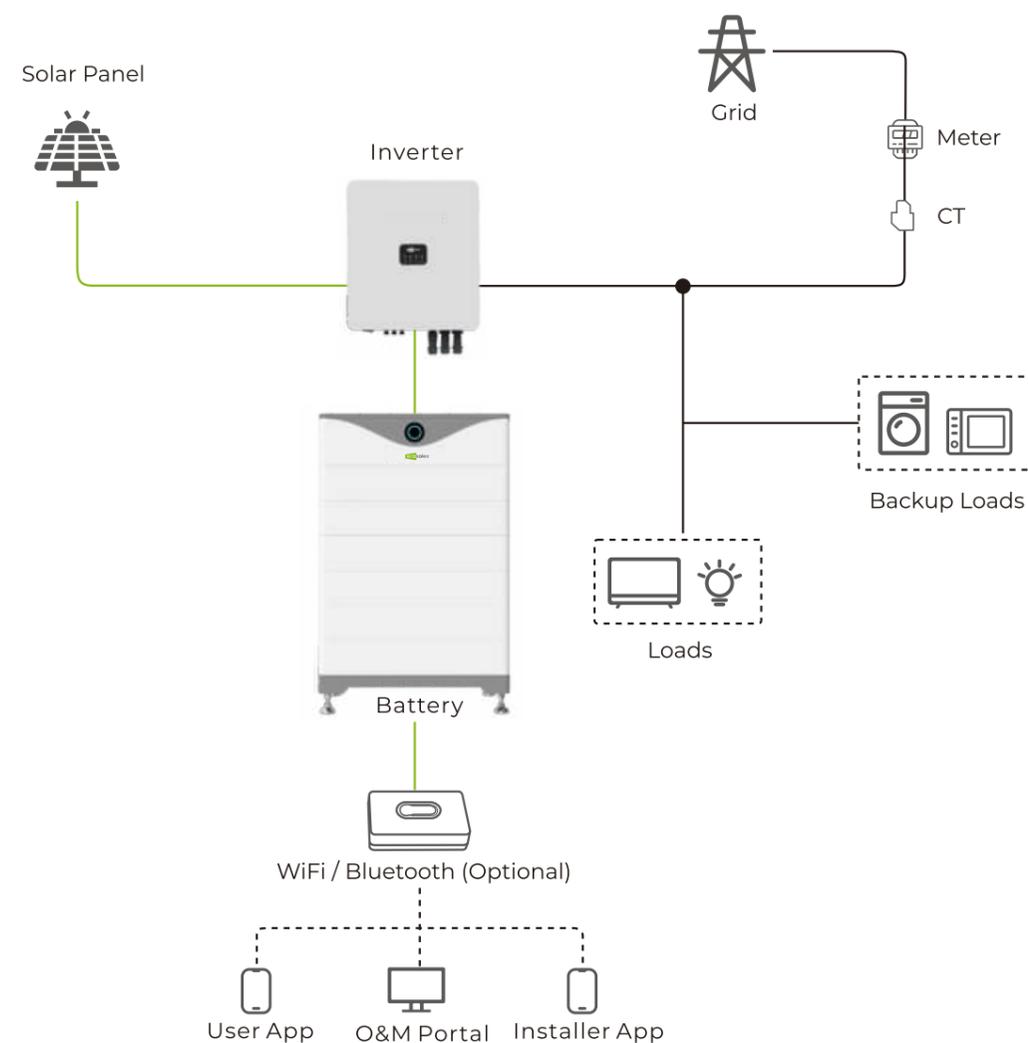
Self-Powered Home



24/7 Backup

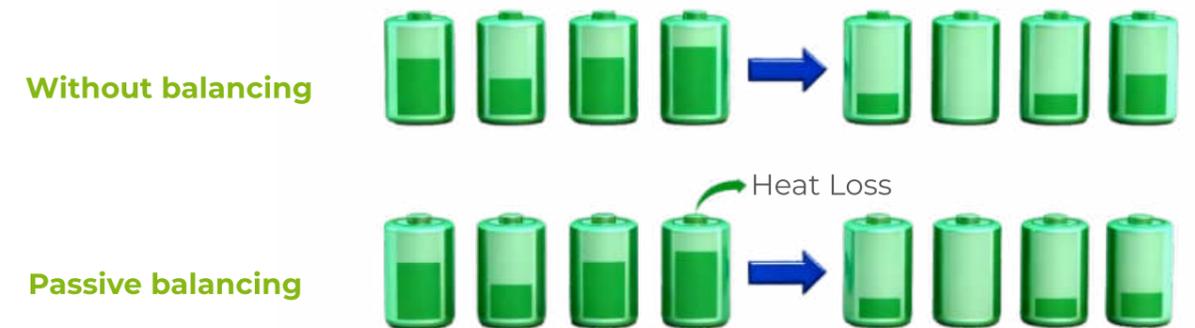
Residential ESS Solutions

- Residential energy system makes green energy 24/7 available.
- Store daytime energy from photovoltaic and make it available at any time.
- Peak shaving and valley filling, intelligent purchase or sale of electricity from the power grid, save electric bills and earn money.
- Rural areas that the power grid hardly covers can have stable and cheap electricity from PV systems by using ESS.



Why do batteries need balancing?

Because inconsistencies affect the performance of the battery pack. Battery cells connected in series follow the barrel effect: in a battery pack system connected in series, the overall capacity of the system is determined by the cell with the smallest capacity.



Active Balancing:

The RE-SH series battery utilizes an active balancing charge and discharge mode. Among multiple cells in series, energy from cells with higher voltage is transferred to those with lower voltage through algorithms utilizing energy storage components. This process discharges the higher-voltage cells and uses the released energy to charge the lower-voltage ones, focusing on energy transfer rather than dissipation.

Compared to passive balancing, which dissipates electrical energy as heat, active balancing significantly slows cell aging and battery pack degradation, maintaining 100% usable battery capacity.

RS-SH Series



- ▶ **5.12kWh**
Each battery energy capacity(kWh)
- ▶ **2~6**
Batteries stackable for each stack
- ▶ **10.24~30.72kWh**
Energy capacity range for each stack
- ▶ **204.8~614.4V**
Nominal voltage



The RS-SH series battery is designed for residential application and works as a storage unit in the photovoltaic system. It could be operated in both on-grid, backup and off-grid modes with compatible inverters. It could be used in both outdoor and indoor scenarios.

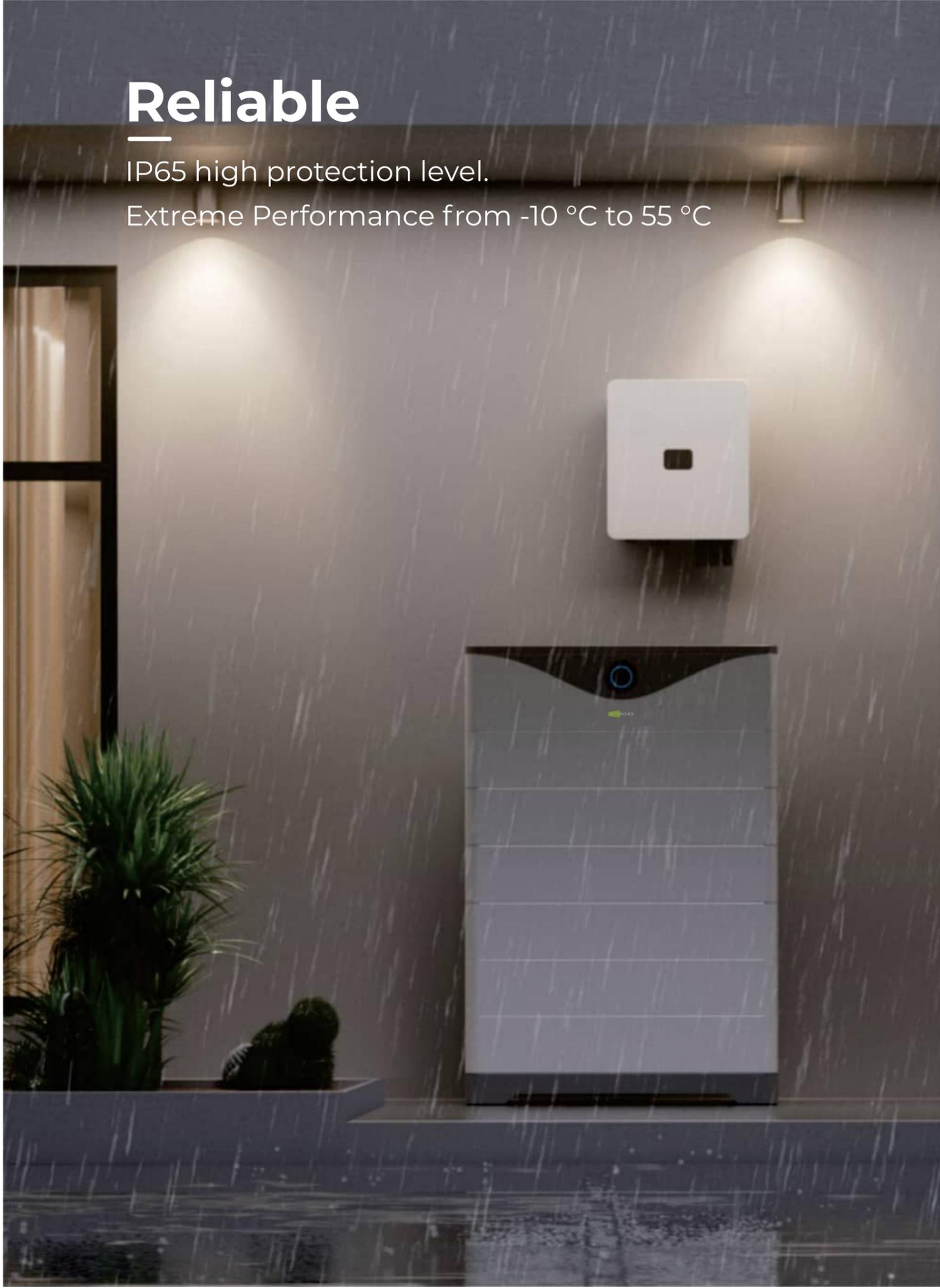


HV Control box	x1	x1	x1	x1	x1
Battery modules	x2(Min)	x3	x4	x5	x6(Max)
Battery energy (kWh)	10.24	15.36	20.48	25.60	30.72

Reliable

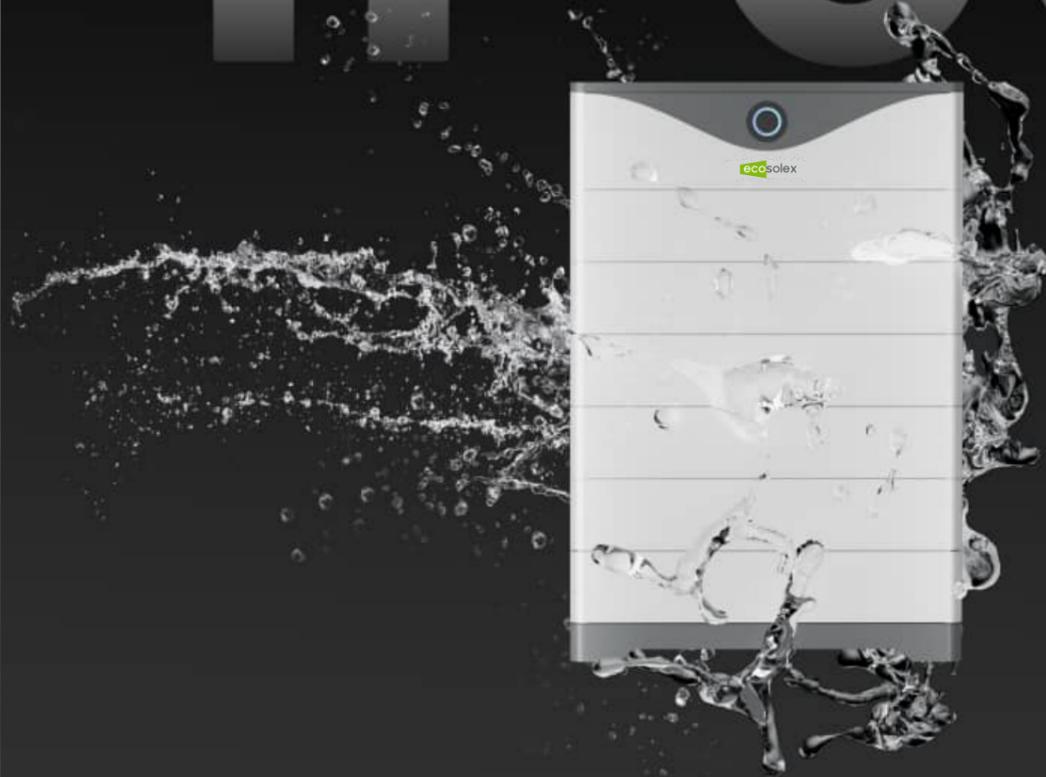
IP65 high protection level.

Extreme Performance from -10 °C to 55 °C



The RS-SH series is reliable and durable, performing consistently in heavy rains, sandstorms, and other harsh conditions. This versatility ensures year-round performance while delivering green energy for homes and supporting robust outdoor operations.

IP65



Fear no storm, guarding every watt of power

Max.240kWh

Support 8 units in parallel

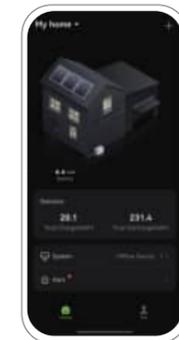
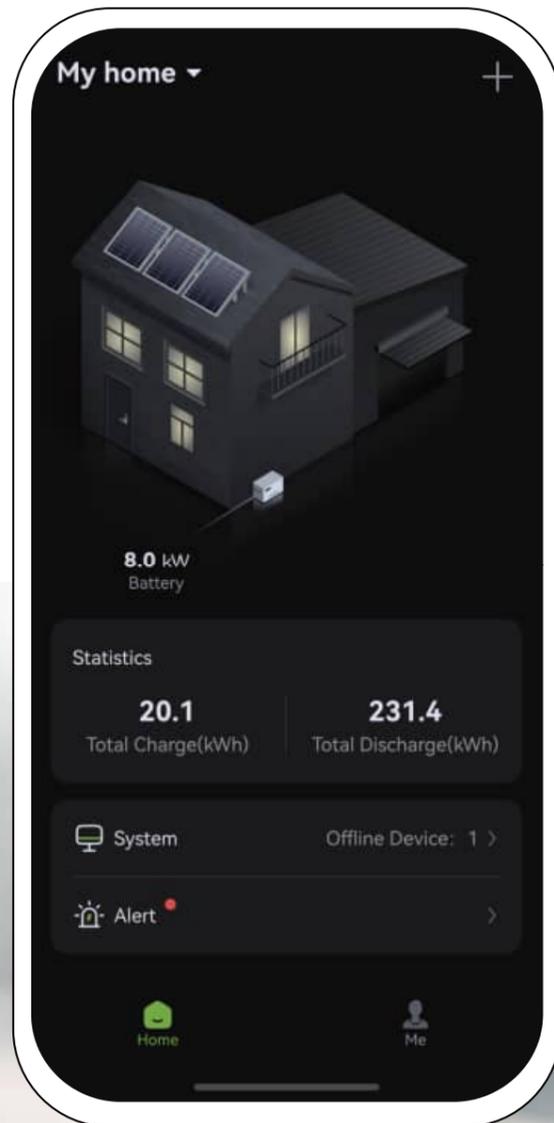


Massive Capacity — Modular Design for Flexible, On-Demand Expansion

E-Power Go App



Exercise full control over your energy usage. The portal makes energy management easy — allowing you to monitor, manage, and analyse your system in the cloud.



Power station



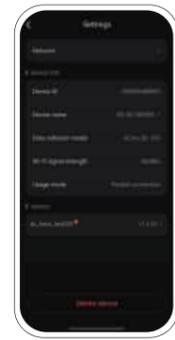
Battery station



Data Viewing



Data Viewing



Remote Upgrade



PC terminal



Android Users



iPhone Users



RS-SH Series

- High safety LiFePO4 battery
- Modular design, stackable installation
- IP65 high protection level
- Real-time app monitoring and remote upgrade
- BMS provide protection functions



Parameters

Model	RS-SH20550D	RS-SH30750D	RS-SH41050D	RS-SH51250D	RS-SH61450D
Number of battery modules	2(min)	3	4	5	6(max)
Nominal voltage	204.8V	307.2V	409.6V	512V	614.4V
Manage battery capacity	50Ah	50Ah	50Ah	50Ah	50Ah
Manage battery energy	10.24kWh	15.36kWh	20.48kWh	25.60kWh	30.72kWh
Operation voltage range	172.8V~233.6V	259.2V~ 350.4V	345.6V~467.2V	432V~560V	518.4V~672V
Max. charge current	50A				
Max. discharge current	50A				
Communication to Inverter	CAN				
APP	Support APP monitoring				
Protection rating	IP65				
Module dimension (W*D*H)	Battery module: 770*445*140mm, Control box: 770*445*210mm, Base: 770*445*80mm				
Dimension (W*D*H)	770*445*570mm	770*445*710mm	770*445*850mm	770*445*990mm	770*445*1130mm
Weight	140.5kg	195.5kg	250.5kg	305.5kg	360.5kg
Parallel connection	Support Max. 8 in parallel				
Cycle life	6000 Cycles @25°C @70%EOL @0.2C charge & 0.5C discharge, 90% DOD				
Relative humidity	5%~90%				
Cell type	Lithium-iron phosphate (LiFePO ₄)				
Operating temperature	0~50°C (32~122°F) -10~55°C (14~131°F)				
Install altitude	≤4000m				
Design life	15 years				
Installation	Stack mounted				



- Extend battery life and reduce wear
- Effectively balance battery voltage and improve battery performance
- Low energy consumption, low heat generation, reliable and safe

Global Service Network



● Headquarter

● Production Bases / R&D Centers

Cutting-edge technology

With a number of invention patents, a strong R & D team casting safe and efficient energy storage products.

Rich industry experience

After more than ten years of exploration and development in the lithium industry, we have rich project experience and industry resources.

Fast after-sales response

Adhering to the service concept of solving problems for customers, we solve after-sales problems for customers with a quick response service mechanism.

Training service

Provide smart PV solutions and product training for agents and partners, including hands-on training.

Warranty service

Free remote technical support and support service and spare parts service during the warranty period.



2000+

R&D staff



3200+

Patent applications



9.28%

Percentage invested in R&D



21.5%

R&D staff to total staff