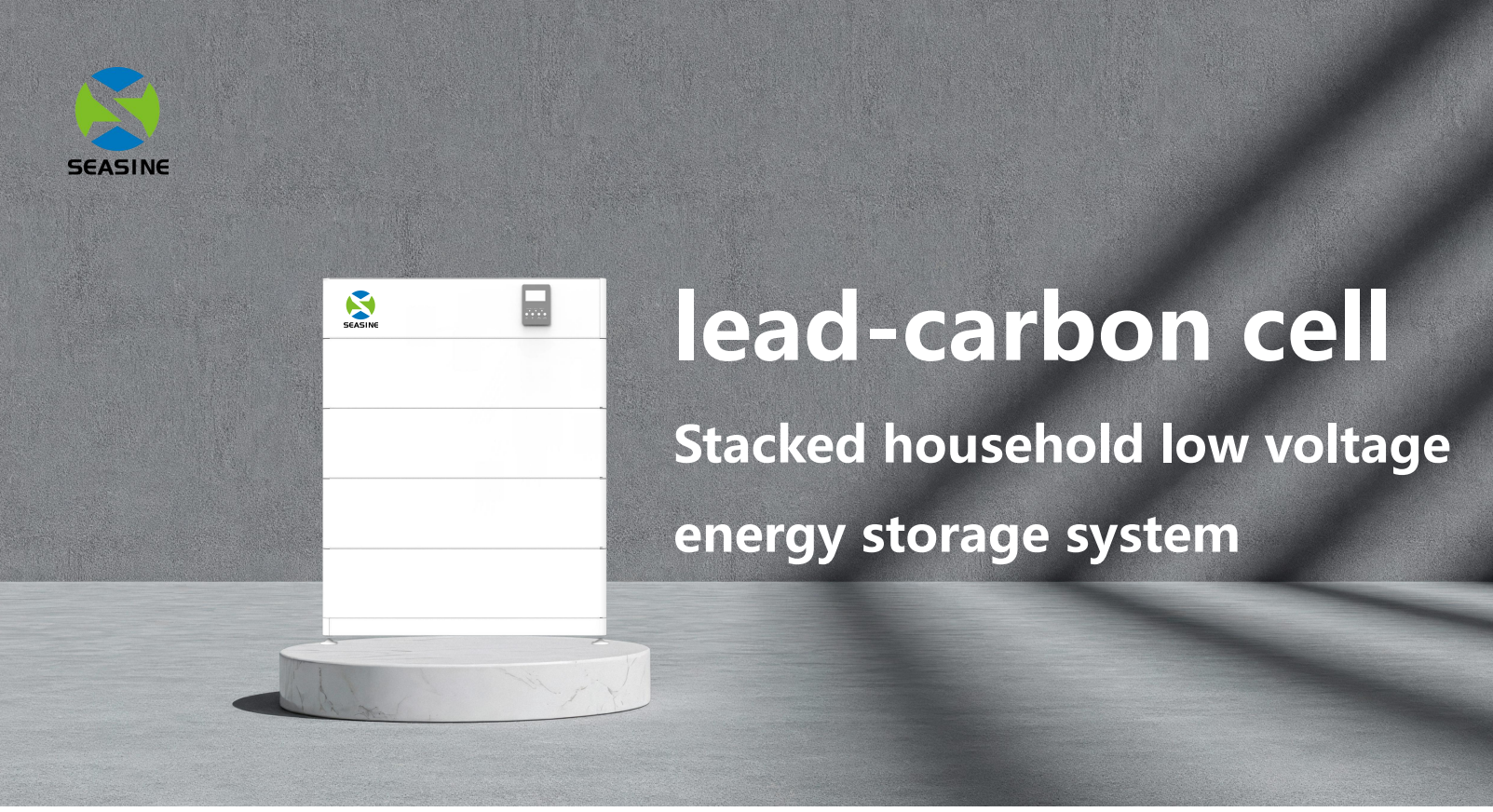


product presentation

Seasine Technologys stacked household lead-carbon low-voltage energy storage system is a specialized product designed for residential and small commercial-industrial users, suitable for applications such as power storage, backup power supply, and solar-storage microgrids. The system is built on lead-carbon batteries and consists of four battery packs stacked with a control box and base, featuring a battery balancing management system, inverter system, and protection electrical system.

Product Features

- **Stacked capacity:**
The scope of digital quantization expansion enhances intuitiveness.

- **commercial value :**
Lead material recovery rate>99%, lower life cycle KWH cost

- **High environmental protection:**
Materials are the most recyclable globally, meeting the needs of a circular economy.

- **longer life :**
The cycle life reaches 2000-4000 cycles at 70% discharge depth, which is 4~6 times that of conventional lead-acid batteries.

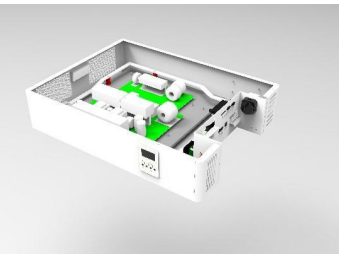
- **insurance :**
The electrolyte is dilute sulfuric acid solution, which has no risk of thermal runaway and is non-flammable and non-explosive under extreme conditions.

- **Scenes:**
It demonstrates excellent low-temperature performance (70% capacity retention at-40℃), making it ideal for distributed energy storage, microgrids, and remote areas.

Email: shixing@seasine.com.cn Address: Building 12, Phase I, Innovation and Entrepreneurship Industrial Park, Hailun Road, Taizhou City, Jiangsu Province, China

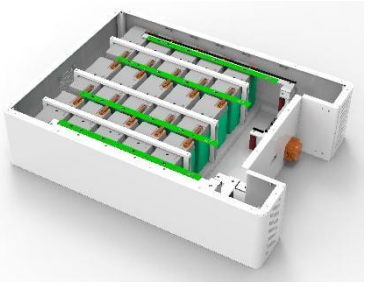
system parameter

project name	parameter
product model	Stacked Household Lead-Carbon Low Voltage Energy Storage System
DC side parameters	
single cell	lead-carbon battery (PbC) 4V50Ah
rated capacity	250Ah
rated energy	12kWh
rated voltage	48V
voltage range	42.0V~58.8V
AC input parameter	
Input format	L+N+PE
rated input voltage	220/230/240VAC
voltage range	90~280VAC±3V (APL mode) / 170~280VAC±3V (UPS mode)
frequency range	50Hz/60Hz
Maximum mains charging current	150A
photovoltaic parameters	
PV charging method	twin channel MPPT
Maximum input power of PV	2*5500W
The range of input voltage for the PTT	90~500Vdc
Maximum PV input voltage	500Vdc
Maximum PV input current	18A/18A
Maximum PV charging current	150A
AC off-grid output	
Rated power – Battery inverter	11000W
Rated power – Photovoltaic inverter	12000W
output voltage	220/230/240VAC+5%
output frequency	50/60Hz±0.1%
Switch time (optional)	10ms for computer devices, 20ms for household appliances
System specifications	
cooling-down method	forced air cooling
equilibrium method	passive balance @1.25A
Number of parallel machines	≤4
system weight	564kg
System size	812.5×616×1020mm
Maximum working altitude	4000m (1000m or more will be marked)
Installation environment	indoor
levels of protection	IP20
way to install	Land (Standard)
relative humidity of work	RH5%~95%
display mode	LCD、 WEB、 APP
satisfying criteria	EN-IEC 60335-1、 EN EC60335-2-29、EC 62109-1、 UN38.3

project name	parameter	graphic
DC side parameters		
rated voltage	48V	
Constant voltage charging (adjustable)	58.8V	
Floating charge voltage (adjustable)	55.2V	
AC input parameter		
Input format	L+N+PE	
rated input voltage	220/230/240V	
voltage range	90-280VAC±3V (APL mode) / 170-280VAC±3V (UPS mode)	
frequency range	50Hz/60Hz	
Maximum mains charging current	150A	
photovoltaic parameters		
PV charging method	twin channel MPPT	
Maximum input power of PV	2*5500W	
The range of input voltage for the PTT	90~500V	
Maximum PV input voltage	500V	
Maximum PV input current	18A/18A	
Maximum PV charging current	150A	
AC off-grid output		
Rated power – Battery inverter	11000W	
Rated power – Photovoltaic inverter	12000W	
output voltage	220/230/240VAC+5%	
output frequency	50/60Hz±0.1%	
Switch time (optional)	10ms for computer devices, 20ms for household appliances	
overload capacity	Battery mode: 11S@105%~150% load; 2s@150%~200% load; 400ms@>200% load	
underlying parameter		
show	LCD	
joggle	RS232, RS485, dry contact, etc.	
system weight	38.5kg	
System size	812.5×616×170mm	

cell parameter

project name	parameter	graphic
rated capacity	250Ah	
rated voltage	12V	
operating voltage range	10.8V~14.4V	
rated energy	3kWh	
serial mode	3S5P	
charge temperature	0~40℃	
discharge temperature	-15~45℃	
Recommended charging current	0.5C 10 A	
Recommended discharge current	0.1~0.50C 10 A	
weight	125kg	
size	812.5×616×200mm	



Email: shixing@seasine.com.cn Address: Building 12, Phase I, Innovation and Entrepreneurship Industrial Park, Hailun Road, Taizhou City, Jiangsu Province, China