



GreensunSolar

# HV Stackable Battery System

GHS-200



**ESS** Energy storage systems have been proven to be "extremely lucrative" for commercial and industrial (C&I) field.

## Safe and Reliable

- LiFePO4 Batteries with safety performance and long cycle life
- Intelligent BMS
- Support aerosol fire extinguishing
- Support up to 140A current output

## High-Efficiency Use

- Low self-discharge up to 6 months, no memory effect

## Support Wifi&Upgrade

- Wi-Fi module, real-time data monitoring
- Support USB upgrade, remote upgrade

## Intelligent BMS

- Multi protection functions including over-discharge, over-charge, over-current and over-high or low temperature
- Automatically manage charge and discharge state and balance current and voltage of each cell

## Flexible Expansion

- Support 3-15 packs in series as one cluster, max 10 clusters in parallel

## Economical&Convenient

- Rack Type, less footprint, lower cost, higher spaceutilization
- Stackable design for easy installation and maintenance

## Technical Data

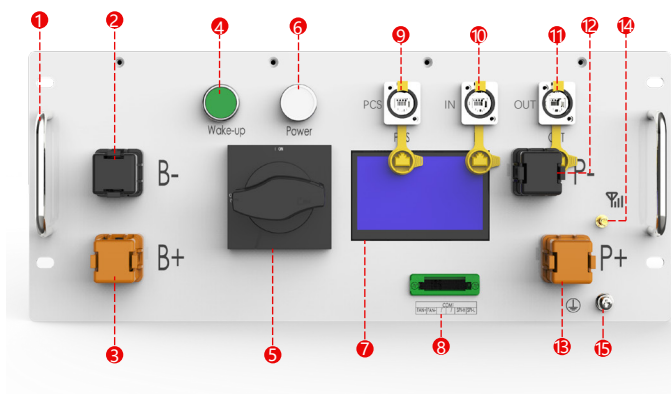
Battery Module Model		GHS-200					
<b>Main Parameter</b>							
Cell Chemistry		LiFePO4					
Module Energy (kWh)		10.24					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		200					
ITEM		GHS-200-E40	GHS-200-E50	GHS-200-E60	GHS-200-E70	GHS-200-E80	GHS-200-E90
Battery Module Qty In Series ( Optional )		4	5	6	7	8	9
System Nominal Voltage (V)		204.8	256.0	307.2	358.4	409.6	460.8
System Operating Voltage (V)		179V~227V	224V~284V	269V~341V	314V~398V	358V~454V	403V~511V
System Energy (kWh)		40.96	51.20	61.44	71.68	81.92	92.16
System Usable Energy (kWh) 90%		36.86	46.08	55.29	64.51	73.72	82.94
Charge/Discharge Current(A)	Nominal						100A
	Peak Discharge						100A
<b>Other Parameter</b>							
Thermal Management		Smart fan cooling					
LCD Display		SOC/ Voltage/Tem/Time/Fault Code					
Working Temperature (°C)		Charge:0~55/Discharge :-20-55					
Status Indicator		Wake Up/Power light					
Communication Port		CAN/RS485					
Humidity		5%~85%RH					
Altitude		≤2000m					
IP Rating of Enclosure		IP20					
Dimension (W*D*H, mm)		478*685*1367	478*685*1645	478*685*1923	1000*685*1112	1000*685*1367	1000*685*1390
Weight Approximate (kg)		388kg	485kg	582kg	679kg	776kg	873kg
Installation Location		Rack Mounting					
Storage Temperature (°C)		0~35°C					
Recommend Depth of Discharge		90%					
Cycle Life		25±2°C, 0.5C/0.5C, DOD80%≥6000					
Warranty		10 years					
Certification		CE/UN38.3/MSDS					

## Technical Data

Battery Module Model		GHS-200					
<b>Main Parameter</b>							
Cell Chemistry		LiFePO4					
Module Energy (kWh)		10.24					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		200					
ITEM		GHS-200-E100	GHS-200-E110	GHS-200-E120	GHS-200-130	GHS-200-E140	GHS-200-E150
Battery Module Qty In Series ( Optional )		10	11	12	13	14	15
System Nominal Voltage (V)		512.0	563.2	614.4	665.6	716.8	768.0
System Operating Voltage (V)		448V~568V	493V~625V	538V~682V	582V~738V	627V~795V	672V~852V
System Energy (kWh)		102.40	112.64	122.88	133.12	143.36	153.60
System Usable Energy (kWh) 90%		92.16	101.37	110.59	119.80	129.02	138.24
Charge/Discharge Current(A)	Nominal						100A
	Peak Discharge						100A
<b>Other Parameter</b>							
Thermal Management		Smart fan cooling					
LCD Display		SOC/ Voltage/Tem/Time/Fault Code					
Working Temperature (°C)		Charge:0~55/Discharge :-20-55					
Status Indicator		Wake Up/Power light					
Communication Port		CAN/RS485					
Humidity		5%~85%RH					
Altitude		≤2000m					
IP Rating of Enclosure		IP20					
Dimension (W*D*H, mm)		1000*685*1645	1000*685*1668	1000*685*1923	1500*685*1645	1500*685*1645	1500*685*1645
Weight Approximate (kg)		970kg	1067kg	1164kg	1261kg	1358kg	1455kg
Installation Location		Rack Mounting					
Storage Temperature (°C)		0~35°C					
Recommend Depth of Discharge		90%					
Cycle Life		25±2°C, 0.5C/0.5C, DOD80%≥6000					
Warranty		10 years					
Certification		CE/UN38.3/MSDS					

# System Components

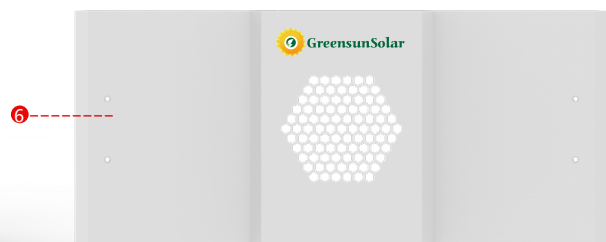
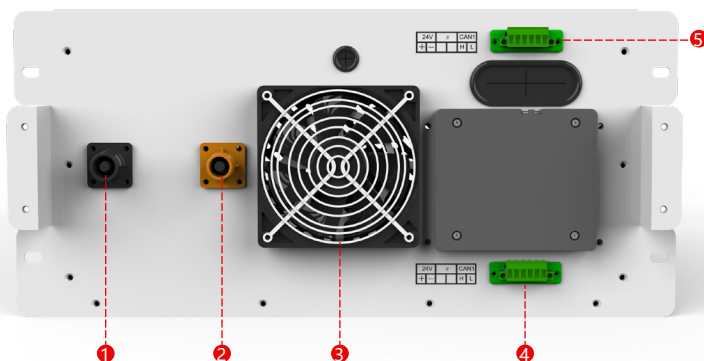
Model	HVB-S-200
Name	High Voltage Control Box
Operating Voltage	200~1000Vdc
Nominal Charge/Discharge Current	100A
Operating Temperature	-20~60°C
Ingress Protection	IP20
AC Input Rating	220±10%VAC/2A
Details	557×255×500mm(W×H×D),25kg



- ① Handle
- ② B-: Battery common negative connection position (Black)
- ③ B+: Battery common positive connection position (Orange)

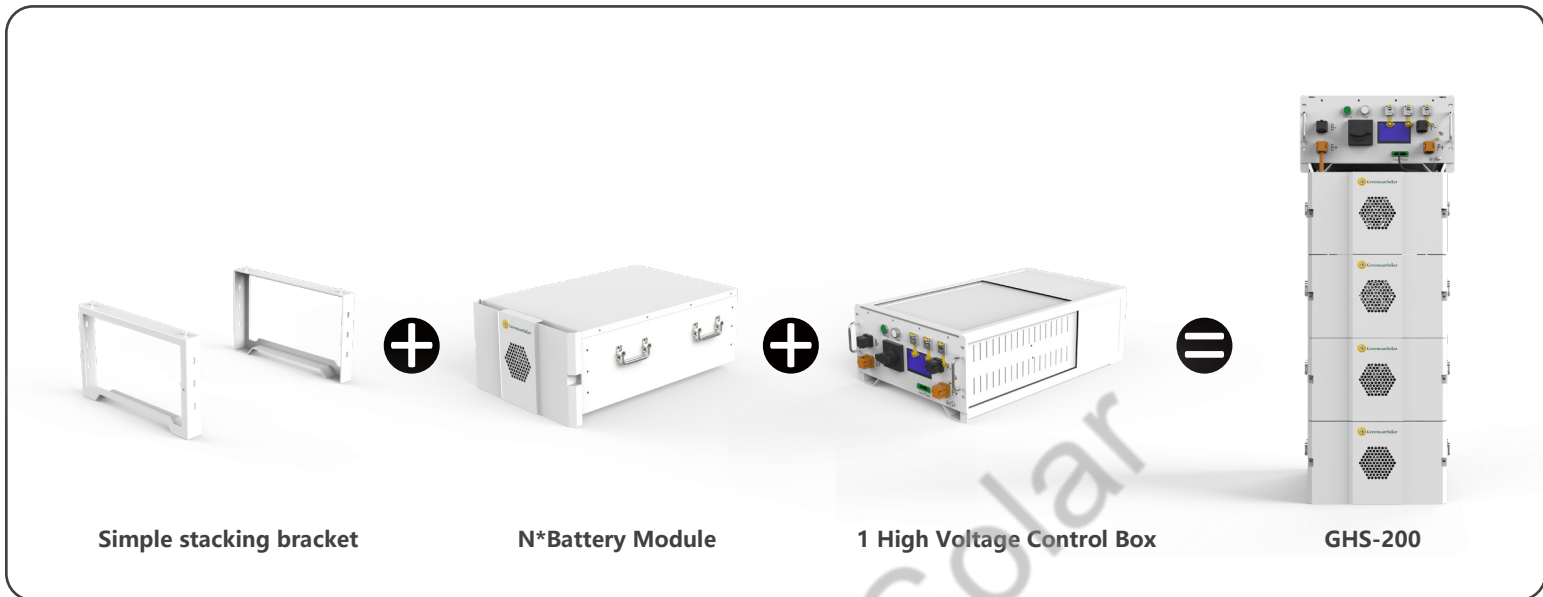
- ④ Wake-up Switch
- ⑤ On/Off Switch
- ⑥ Power Indicator
- ⑦ Battery Screen: Display battery SOC, Voltage, Current and Temperature, Time, Fault code
- ⑧ Providing 24VDC power for the cooling fan and Communicative connection with the first battery module
- ⑨ PCS Communication Port: Connect with PCS/Inverter
- ⑩ IN Port for parallel
- ⑪ Out Port for parallel
- ⑫ Connection Position Of PCS Negative Pole (Black)
- ⑬ Connection Position Of PCS Positive Pole (Orange)
- ⑭ Wireless Antenna
- ⑮ Connection to the battery rack and the ground point

Model	GHS-200
Name	Battery Module
Nominal Capacity	200Ah
Nominal Energy	10.24kWh
Nominal Voltage	51.2Vdc
Nominal Charge/Discharge Current	100A
Ingress Protection	IP20
Operating Temperature(Charge)	0~55°C
Operating Temperature(Discharge)	-20~55°C
Storage Temperature	0~35°C
Details	478×278×685mm(W×H×D),97kg



- ① B-: Battery module negative pole (black)
- ② B+: Battery module positive pole (orange)
- ③ Fan: Ventilation and heat dissipation
- ④⑤ Connection position of battery module communication and power supply output
- ⑥ Dust guard/dust guard

## System Components



## All-in-one Energy & Device Management Platform

**REAL-TIME EQUIPMENT MONITORING**



The image displays several smartphone screens showing the management platform interface. The main screen shows 'UDAN-057A' with a battery level of 20.3% and a 'Charging...' status. Other screens show detailed device information, including cumulative charge/discharge, peak power, and time-based graphs for charging and discharging.

Display the data details of the current device, and view the battery, charging and discharging power, and charging and discharging time data separately, and support time filtering.

## Schematic Diagram



GHS-200-E40

GHS-200-E50

GHS-200-E60

GHS-200-E70

GHS-200-E80



GHS-200-E90

GHS-200-E100

GHS-200-E110

GHS-200-E120



GHS-200-E130

GHS-200-E140

GHS-200-E150