



GreensunSolar

**High Voltage** | Energy Storage System

**Stackable LiFePO4 Battery**

**GHS-100 | 51.2V 100Ah**



**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

#### **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 3-16 packs in series as one cluster, max 5 clusters in parallel

#### **Economical&Convenient**

- Stackable design for easy installation and maintenance

## Technical Data

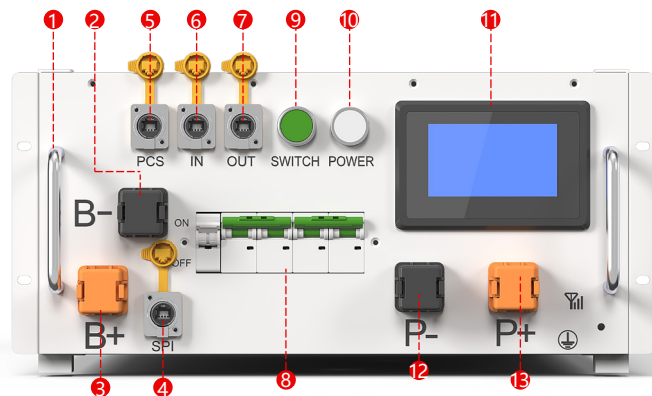
Battery Module Model		GHS-100					
Main Parameter							
Cell Chemistry		LiFePO4					
Module Energy (kWh)		5.12					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		100					
ITEM		GHS-100-E20	GHS-100-E25	GHS-100-E30	GHS-100-E35	GHS-100-E40	GHS-100-E46
Battery Module Qty In Series ( Optional )		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)		20.48	25.60	30.72	35.84	40.96	46.08
System Usable Energy (kWh) 90%		18.43	23.04	27.64	32.25	36.86	41.47
Charge/Discharge	Nominal	50A					
Current(A)	Peak Discharge	50A					
Other Parameter							
Thermal Management		Natural 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)		482*475*878	482*475*1035	482*475*1192	1000*475*721	1000*475*878	1000*475*878
Weight Approximate (kg)		183.2kg	224kg	264.8kg	305.6kg	346.4kg	387.2kg
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-100					
<b>Main Parameter</b>							
Cell Chemistry		LiFePO4					
Module Energy (kWh)		5.12					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		100					
ITEM		GHS-100-E51	GHS-100-E56	GHS-100-E61	GHS-100-66	GHS-100-E71	GHS-100-E76
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)		51.20	56.32	61.44	66.56	71.68	76.8
System Usable Energy (kWh) 90%		46.08	50.68	55.29	59.90	64.51	69.12
Charge/Discharge Current(A)	Nominal						50A
	Peak Discharge						50A
<b>Other Parameter</b>							
Thermal Management		Natural 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*475*1035	1000*475*1035	1000*475*1192	1500*475*878	1500*475*878	1500*475*1035
Weight Approximate (kg)		428kg	468.8kg	509.6kg	550.4kg	591.2kg	632kg
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					

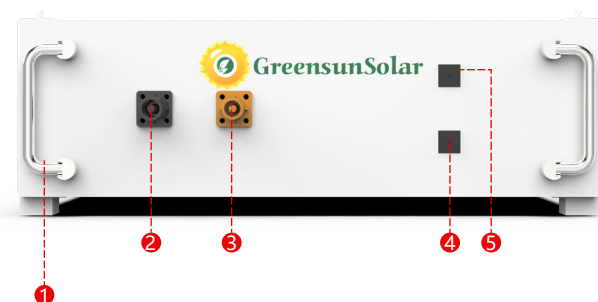
## System Components

Model	HVB-S-100
Name	High Voltage Control Box
Operating Voltage	200~1000Vdc
Nominal Charge/Discharge Current	50A
Operating Temperature	-20~60°C
Ingress Protection	IP20
AC Input Rating	220±10%VAC/2A
Details	500×558×210mm(W×D×H),23.8kg



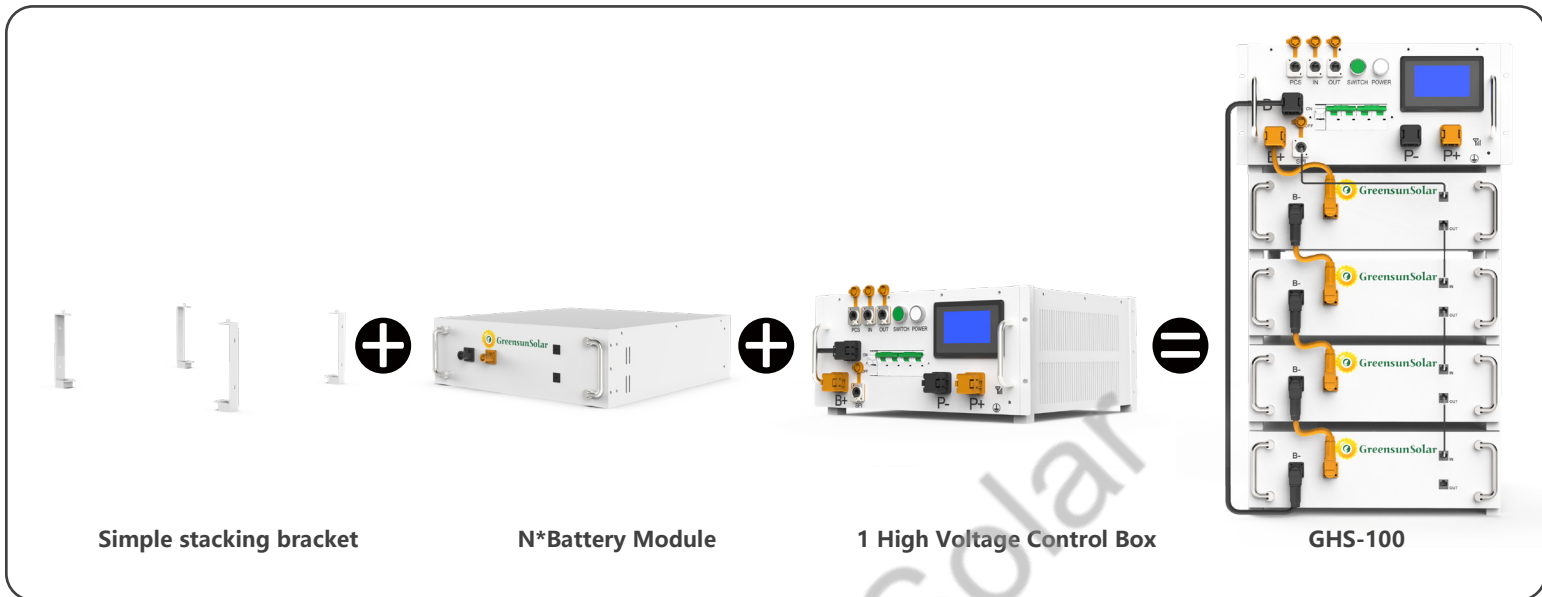
- ① Handle
- ② B-: Battery common negative connection position (Black)
- ③ B+: Battery common positive connection position (Orange)
- ④ Communicative connection with the first battery module
- ⑤ PCS Communication Port: Connect with PCS/Inverter
- ⑥ IN Port for parallel
- ⑦ Out Port for parallel
- ⑧ On/Off Switch
- ⑨ Wake-up Switch
- ⑩ Power Indicator
- ⑪ Battery Screen: Display battery SOC, Voltage, Current and Temperature, Time, Fault code
- ⑫ Connection Position Of PCS Negative Pole (Black)
- ⑬ Connection Position Of PCS Positive Pole (Orange)

Model	GHS-100
Name	Battery Module
Nominal Capacity	100Ah
Nominal Energy	5.12kWh
Nominal Voltage	51.2Vdc
Nominal Charge/Discharge Current	50A
Ingress Protection	IP20
Operating Temperature(Charge)	0~55°C
Operating Temperature(Discharge)	-20~55°C
Storage Temperature	0-35°C
Details	482×475×157mm(W×D×H),40.8kg



- ① Handle
- ② B-: Battery module negative pole (black)
- ③ B+: Battery module positive pole (orange)
- ④⑤ Connection position of battery module communication

## System Components



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

**REAL-TIME EQUIPMENT MONITORING**



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.