



GreensunSolar



Rack Type HV Battery System

GHR-314

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

Economical&Convenient

- Rack Type, less footprint, lower cost, higher spaceutilization
- Embedded designed module for quick installation and easy maintenance

Technical Data

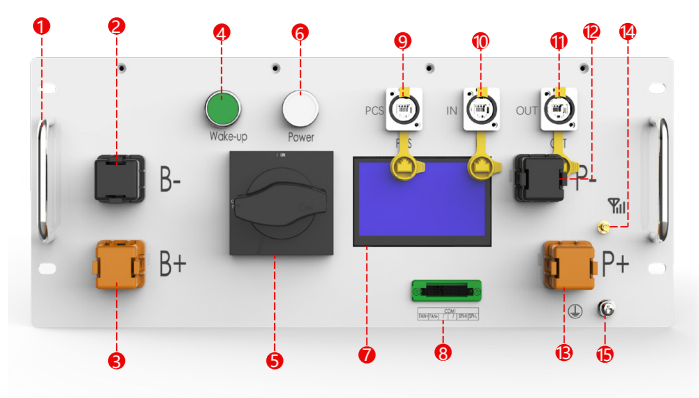
Battery Module Model		GHR-314					
Main Parameter							
Cell Chemistry		LiFePO4					
Module Energy (kWh)		16.076					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		314					
ITEM		GHR-314-E64	GHR-314-E80	GHR-314-E96	GHR-314-E112	GHR-314-E128	GHR-314-E144
Battery Module Qty In Series (Optional)		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)		64.31	80.39	96.46	112.53	128.61	144.69
System Usable Energy (kWh) 90%		57.88	72.35	86.81	101.28	115.75	130.22
Charge/Discharge	Nominal	157A					
Current(A)	Peak Discharge	157A					
Other Parameter							
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)		582*838*1480	582*838*1736	582*838*1992	582*838*2248	1184*838*1480	1184*838*1480
Weight Approximate (kg)		534kg	655kg	779kg	903kg	1037kg	1151kg
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		GHR-314					
Main Parameter							
Cell Chemistry		LiFePO4					
Module Energy (kWh)		16.076					
Module Nominal Voltage (V)		51.2					
Module Capacity (Ah)		314					
ITEM		GHR-314-E160	GHR-314-E176	GHR-314-E192	GHR-314-209	GHR-314-E225	GHR-314-E241
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)		160.76	176.84	192.92	209.00	225.08	241.15
System Usable Energy (kWh) 90%		144.69	159.16	173.63	188.10	202.57	217.03
Charge/Discharge	Nominal	157A					
Current(A)	Peak Discharge	157A					
Other Parameter							
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)		1184*838*1480	1184*838*1736	1184*838*1992	1184*838*1992	1184*838*2248	1184*838*2248
Weight Approximate (kg)		1285kg	1400kg	1533kg	1647kg	1781kg	1895kg
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

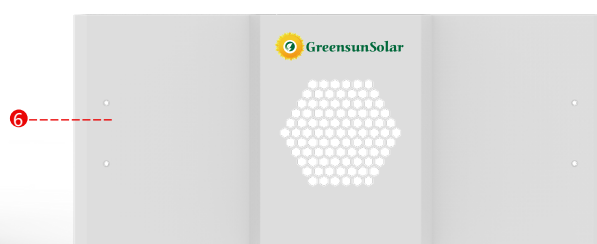
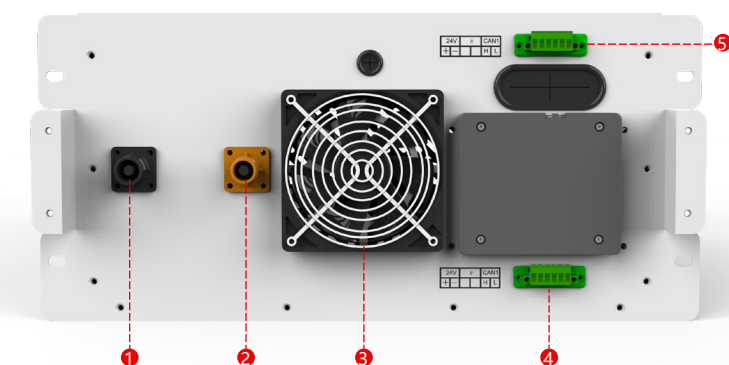
Model	HVB-R-314
Name	High Voltage Control Box
Operating Voltage	200~1000Vdc
Nominal Charge/Discharge Current	157A
Operating Temperature	-20~60°C
Ingress Protection	IP20
AC Input Rating	220±10%VAC/2A
Details	502×210×460mm(W×H×D),25kg



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

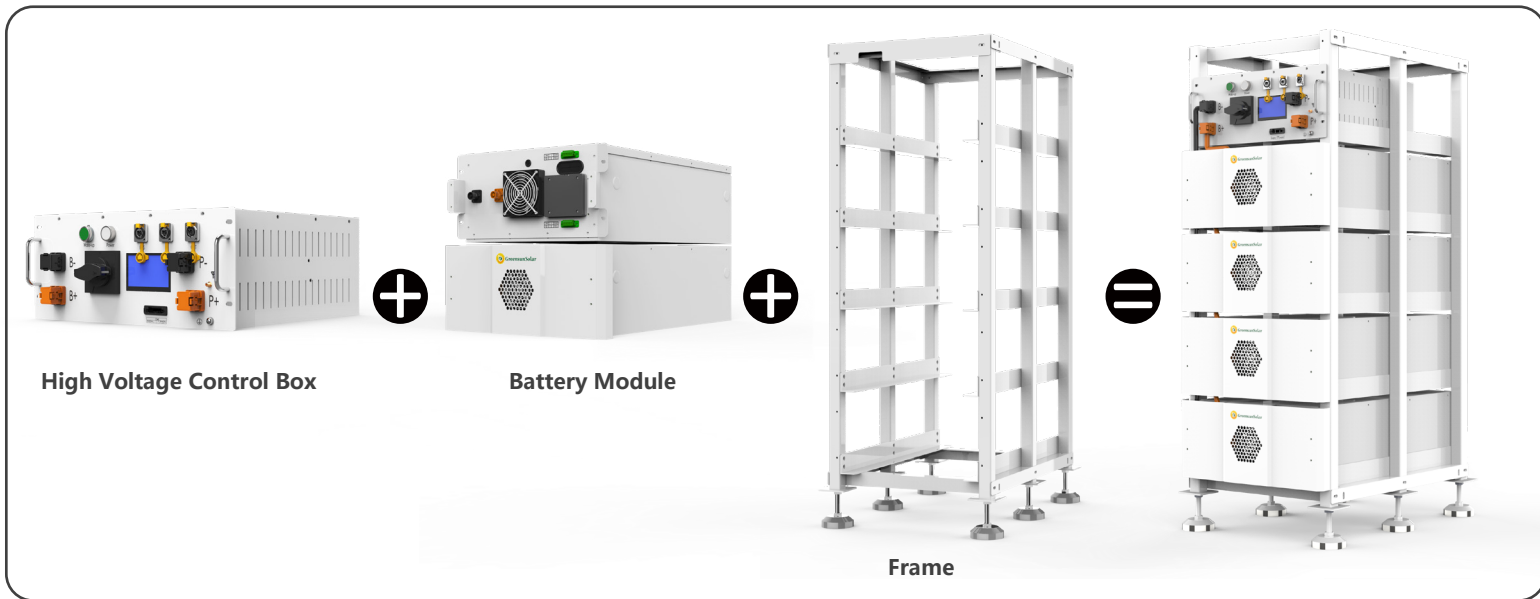
- ④ Wake-up Switch
- ⑤ On/Off Switch
- ⑥ Power Indicator
- ⑦ Battery Screen: Display battery SOC, Voltage, Current and Temperature, Time, Fault code
- ⑧ Providing 24VDC power for the cooling fan and Communicative connection with the first battery module
- ⑨ PCS Communication Port: Connect with PCS/Inverter
- 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	GHR-314
Name	Battery Module
Nominal Capacity	314Ah
Nominal Energy	16.078kWh
Nominal Voltage	51.2Vdc
Nominal Charge/Discharge Current	157A
Ingress Protection	IP20
Operating Temperature(Charge)	0~55°C
Operating Temperature(Discharge)	-20~55°C
Storage Temperature	0~35°C
Details	532×233×801mm(W×H×D),114kg



- 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

