

SKANBATT



SB-HV series

The high-voltage rack is a residential energy storage system composed of high-voltage packs, which can store the electrical energy converted from renewable energy sources such as solar energy and wind energy. With lower losses and higher efficiency, the high-voltage rack can better adapt to the demands of high-power output.

SAFE & RELIABLE

- High safety LiFePO4 battery
- Cell compliance with IEC62619, UL1973, UL9540A, UN38.3, RoHS

FLEXIBLE

- Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance
- Two battery racks optional, which support 8 battery modules and 12 battery modules in parallel respectively

SCALABILITY

- Supports 3 to 12 battery modules in series per string
- Up to 8 strings in parallel

ULTRA PERFORMANCE

- More than 6000 cycles
- Self-developed BMS/ Cell/ Pack to ensure high quality

COMPATIBILITY

- Compatible with most hybrid/battery inverters in self consumption, back-up and off-grid applications

INTELLEGENCE

- It has protection functions including over-discharge, over-charge, over-current and BMS can balance the consistency of battery cells

◎ Parameters

Model	SB-HV series														
	153100A	204100A	256100A	307100A	358100A	409100A	460100A	512100A	563100A	614100A					
Number of battery modules	3(Min)	4	5	6	7	8	9	10	11	12					
Nominal voltage	153.6V	204.8V	256V	307.2V	358.4V	409.6V	460.8V	512V	563.2V	614.4V					
Manage battery energy	15.36kWh	20.48kWh	25.6kWh	30.72kWh	35.84kWh	40.96kWh	46.08kWh	51.2kWh	56.32kWh	61.44kWh					
Operation voltage range	139.2~175.2V	185.6~233.6V	232~292V	278.4~350.4V	324.8~408.8V	371.2~467.2V	417.6~525.6V	464~58.4V	510.4~642.4V	556.8V~700.8V					
Module nominal voltage	51.2V														
Module energy	5.12kWh														
Manage battery capacity	100Ah														
Recommend charging current	50A														
Max. charging current	100A														
Recommend discharging current	50A														
Max. discharging current	100A														
Communication to inverter	RS485 / CAN														
Display	LED indicator, LCD display (Optional)														
Rating	IP20														
Cycle life	≥6000 Cycles @25°C @60%EOL @0.2C charge & 0.5C discharge, 80% DOD														
Module dimension(W*D*H)	442*460*133mm														
Battery module weight	≈45kg														
Dimension(W*D*H)	546*584*1560mm					546*584*2121mm									
Operation temperature range	Charge 0~50°C (32~122°F), Discharge -10~55°C (14~131°F)														
Relative humidity	5%~90%, No condensation														
Install altitude	≤4000m														
Installation	Rack mounted														

System Components

High voltage battery cluster control box conforming to Europe standard

Operating voltage	120Vdc ~ 750Vdc
Nominal charge/discharge current	100A
Max. charge/discharge current	125A
Operating temperature range	-20~60°C
Ingress protection	IP20
Dimension (W*D*H)	440*498*177.8mm
Weight	≈15.5kg



High voltage battery cluster control box conforming to North American standard

Operating voltage	120Vdc ~ 750Vdc
Nominal charge/discharge current	100A
Max. charge/discharge current	125A
Operating temperature range	-20~60°C
Ingress protection	IP20
Dimension (W*D*H)	440*570*200mm
Weight	≈17kg



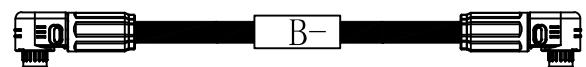
High voltage box standard configuration



- 1800mm Positive power cable (for control box)



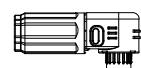
- Battery and control box communication cable (1850mm)



- 35mm Negative power cable (for control box)



- Battery and control box communication cable (205mm)



- Positive terminal

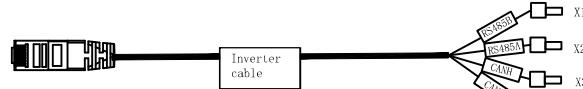


- Negative terminal

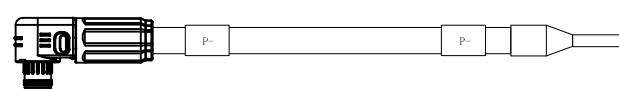
High voltage box selective configuration



- Positive power cable to inverter



- Communication cable to inverter



- Negative power cable to inverter



- LCD display



- Emergency stop button

System Components

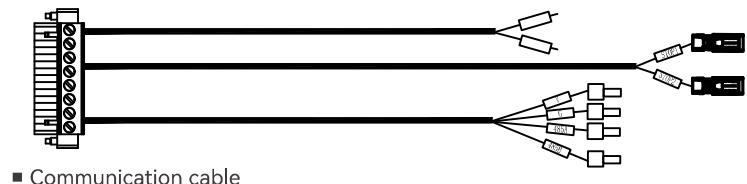
5.12kWh battery module

Battery type LiFePO4(LFP)

Nominal voltage	51.2Vdc
Rated capacity	100Ah
Rated energy	5.12kWh
Nominal charge/discharge current	100A
Peak. discharge current	125A
Charge temperature	0~50°C
Discharge temperature	-10°C ~ 50°C
Ingress protection	IP20
Dimension (W*D*H)	440*498*133mm
Weight	≈45kg



■ Power cable between batteries



■ Communication cable



Standard 19inch rack, can install 12 pcs batteries and 1 pcs high voltage battery cluster control box



Standard 19inch rack, can install 8 pcs batteries and 1 pcs high voltage battery cluster control box