

# 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

## SCALABILITY

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

## COMPATIBILITY

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

## 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

## ULTRA PERFORMANCE

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

## INTELLEGECE

- 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

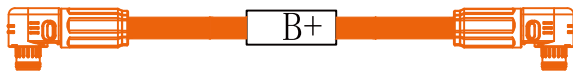


### High voltage battery cluster control box conforming to North American standard

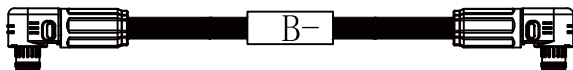
Operating voltage	120Vdc ~ 750Vdc
Nominal charge/discharge current	100A
Max. charge/discharge current	125A
Operating temperature range	-20~60°C
Ingress protection	IP20
Dimension (W*D*H)	440*570*200mm
Weight	≈17kg



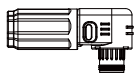
### High voltage box standard configuration



- 1800mm Positive power cable (for control box)



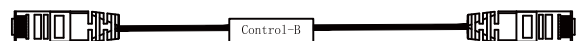
- 35mm Negative power cable (for control box)



- Positive terminal



- Battery and control box communication cable (1850mm)



- Battery and control box communication cable (205mm)

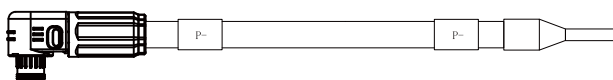


- Negative terminal

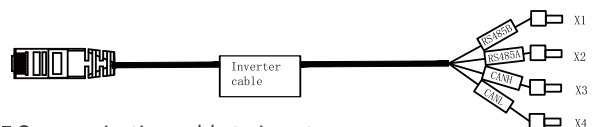
### High voltage box selective configuration



- Positive power cable to inverter



- Negative power cable to inverter



- Communication cable to inverter



- LCD display

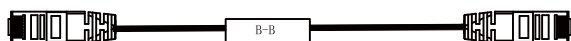


- Emergency stop button

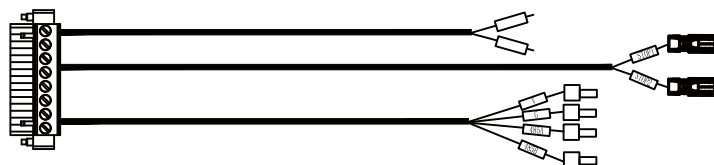
## System Components

### 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, caninstall 12 pcs batteries and 1 pcs high voltage battery cluster control box



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