USER MANUAL

BSB-ESS-102.4V-100Ah-HV-Luxury

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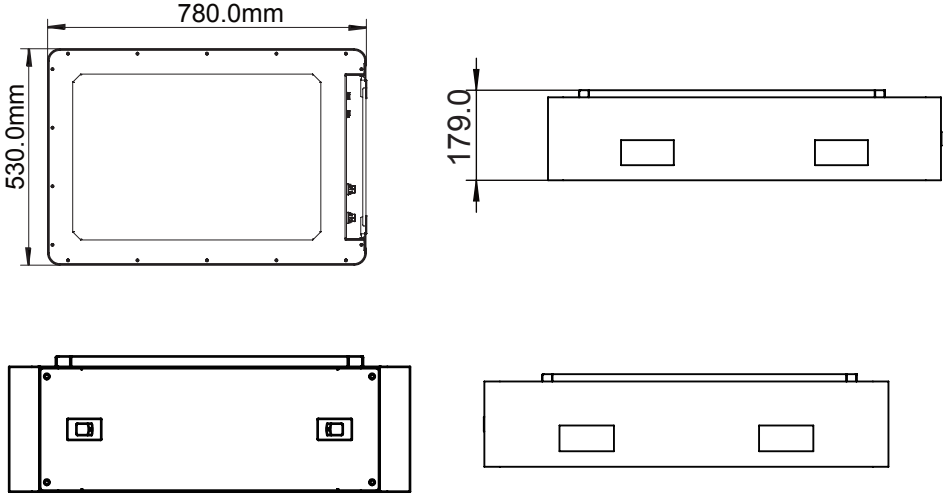
TECHNICAL DATA

note

Operating current derating according to cell

Voltage and battery temperature



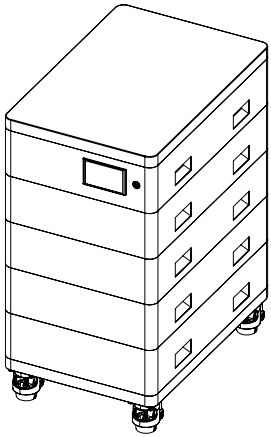
Power supply model	BSB-ESS-102.4V-100Ah-HV-Luxury	BSB-ESS-102.4V-100Ah-HV-Luxury Assembly
Nominal voltage	102.4V	204.8-614.4V
Nominal capacity	100Ah/10.24kWh	Max 61.44kwh
Charging protection voltage	113.6V	Max 750V
Discharge protection voltage	92.8V	185.6--556.8V
Recommended charging current	≤50A	≤50A
Maximum charging current	100A	100A
Recommended discharge current	≤50A	≤50A
Maximum discharge current	100A	100A
Battery cycle life	≥6000（25°C±2°C，0.5C charge-discharge，DOD ≥80%）	≥6000（25°C±2°C，0.5C charge-discharge，DOD ≥80%）
Communication mode	RS485/RS232/CAN	RS485/RS232/CAN
Charging temperature	0~55℃	0~55℃
Operating temperature	-20~55℃	-20~55℃
Battery weight	≈105Kg	≈456Kg
Battery size	530*780*179mm (可调整 adjustable)	530*780*1019mm (可调整 adjustable)
certification	MSDS、UN38.8	MSDS、UN38.8
Adaptable inverter (can customized)	CAN: 1:Deye 2:Luxupower 3:Solis 4:PYLON 5:Solax 6:MEGAREVO 7:KOYOE 8:G00DWE 9:AFORE 10:ATESS 11:SOFAR 12:INVT_BD 13:GROWATT	

*可根据需求定制，本产品最终解释权归本公司所有， 如有更改恕不另行通知

02

PRODUCT OVERVIEW

2.1 Brief introduction

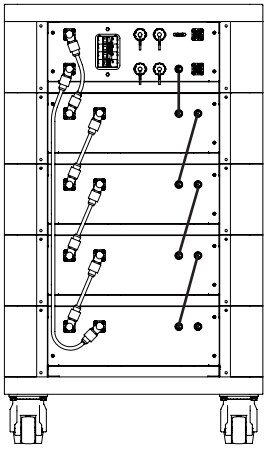


Product overview

This product is made of Iron(III) phosphate lithium battery cells in series， It is an advanced environmentally friendly household energy storage system，Fashionable design with high energy。 long service life， Easy to install and expand。

With rich battery management experience and advanced Energy storage，BSB-ESS-51.2V-100Ah Luxury Equipped with advanced intelligent Battery management system， The system adopts a modular design， ntegrating functions such as collection, monitoring, management, and communication，Achieved high-precision single voltage（10mv）/ Current collection ， Can simultaneously monitor the environment ， Temperature changes of battery cells and main heating devices。 Extending the lifespan of battery cells and devices ， Simultaneously equipped with intelligent charging balance ，SOC ， Power estimation， Data storage, charging current limiting protection module ， LED color light bar display ， Pre charging, RS232 communication, CAN communication, RS485 communication and other functions 。

2.2 Interface Introduction



2.2.1 Switch ON/OFF

1.SWITCH ON

When used， Connect the load or inverter end wires to the output end of the battery pack first B+/B-， After confirming the wiring is completed， Turn on the power switch of the battery pack， The battery pack begins to supply power to the load for use。

2.SWITCH OFF

After use， Turn off the load and inverter switches first， Then turn off the battery pack switch

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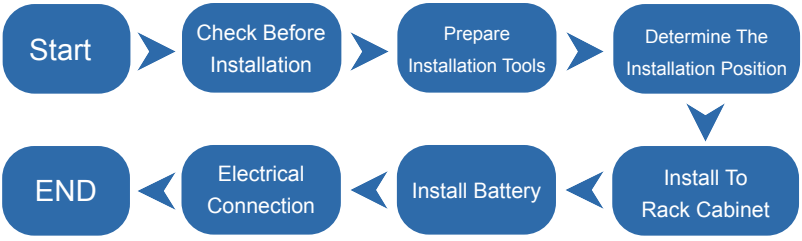
INSTALLATION GUIDE

-In stallation flow chart-



3.1 Checking Before Installation

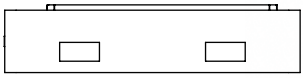
3.1.1 Checking Outer Packing Materials

Packing materials and components may be damaged during transportation.Therefore,check the outer packing materials for damage,such as holes and cracks.If any damage is found,do not unpack the battery and contact the dealer as soon as possible.You are advised to remove the packing materials within 24 hours before installing the battery.

3.1.2 Cheeking Deliverables

After unpacking the battery,check whether deliverables are intact and complete.If any damage is found or any component is missed,contact the dealer.

The below table shows the components and mechanical parts that should be delivered.



NO	Picture	Quan ty	Descrip on
1		1PCS	Main control box
2		4PCS	Battery
3		1PCS	Top cover and base
4		1PCS	Shipment report
5		1PCS	Manual
6		1PCS	485 Communica on cable
7		1PCS	Cer ficate
8		1PCS	Label

3.2 Tools

Model	Tools		
Installation	 Knife	 Measuring tape	 Socket wrench (10/16mm)
	 Rubber mallet	 Cross Screwdriver	 Percussion drill (12mm)
Protection	 ESDgloves	 Safety goggles	 Anti -dust respirator
	 Safety shoes		

3.3 Installation requirements

3.3.1 Installation environment requirements

*Install the battery in the indoor environment.

*Place battery in secure location away from children and animals.

*Do not place the battery near any heat sources and avoid sparks.

*Do not expose the battery to moisture or liquids.

*Do not expose the battery to direct sunlight.

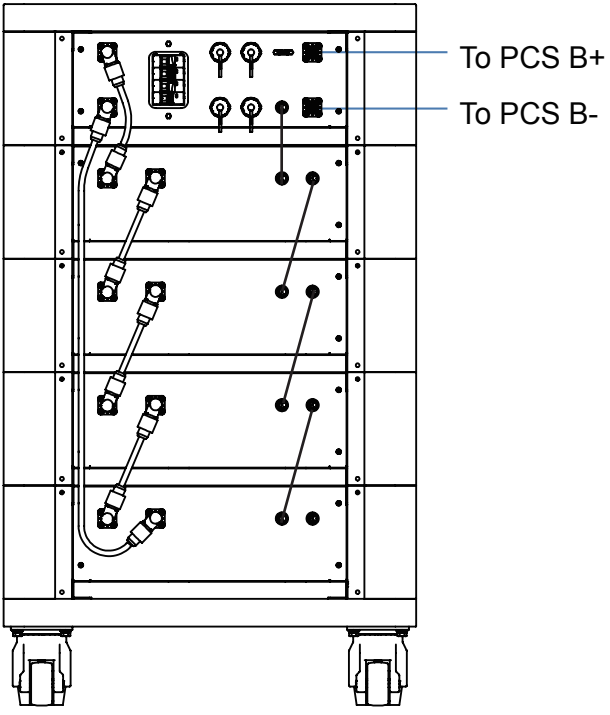
3.3.2 Installation carrier requirements

*Only mount battery on fire resistant building.Do not install batteries on flammable buildings.

*Battery is quite heavy,make sure the wall/ground can meet the load bearing requirements.

STEP 1

Connect power cable



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MAINTENANCE

4.1 Recharge Requirements During Normal Storage

Battery should be stored in an environment with temperature range between -10℃~+45℃,and maintained regularly according to following table with 0.5C(25A) current till 40% SOC after long storage time.

Recharge Requirements During Normal Storage

Storage Environment Temperature	Relative Humidity of Storage Environment	Storage Time	SOC
Below -10℃	/	prohibit	/
-10~25 ℃	5%~70%	≤12 months	30%≤SOC≤60%
25~35 ℃	5%~70%	≤6 months	30%≤SOC≤60%
35~45 ℃	5%~70%	≤3 months	30%≤SOC≤60%
Above 45℃	/	prohibit	/

4.2 Recharge Requirements When Over Discharged

Over discharged（90%DOD）battery should be recharged according to following table,otherwise over discharged battery will be damaged.

Recharge Requirements During Normal Storage

Storage Environment Temperature	Storage Time	Note
-10~25 ℃	≤ 15 days	Battery Pack disconnected from PCS
-25~35 ℃	≤ 7 days	
-35~45 ℃	≤ 12 hours	Battery Pack connected to PCS