

GOODWE



Quick Installation Guide

Rechargeable Li-ion Battery System

Lynx Home D Series

(LX D5.0-10)

V1.0-2023-09-14

General Disclaimer

- The information in this user manual is subject to change due to product updates or other reasons. This guide cannot replace the product labels or the safety precautions in the user manual unless otherwise specified. All descriptions in the manual are for guidance only.
- Read the Quick Installation Guide carefully before installation. Please refer to the User Manual for more information.
- All operations should be performed by trained and knowledgeable technicians who are familiar with local standards and safety regulations.
- Check the deliverables for correct model, complete contents, and intact appearance. Contact after-sales service for help if necessary.
- Use insulating tools and wear personal protective equipment when operating the equipment to ensure personal safety. Wear anti-static gloves, cloths, and wrist strips when touching electronic devices to protect the inverter from damage.
- Strictly follow the installation, operation, and configuration instructions in this guide and user manual. The manufacturer shall not be liable for equipment damage or personal injury if you do not follow the instructions. For more warranty details, please visit <https://en.goodwe.com/warranty>.

Safety Disclaimer

Instructions during Installation

- The battery system is a high voltage system. High voltage exists when the equipment is running. Please keep it power off before any operations to avoid danger. Strictly follow all safety precautions outlined in this manual and safety labels on the equipment during the operation.
- The inverter used with the battery shall be approved by the inverter manufacturer. The approved inverter list can be obtained through the official website.
- Do not disassemble, modify, or replace any part of the battery without official authorization from the manufacturer. Otherwise, it may cause electrical shock or damages to the equipment for which the manufacturer shall not be held responsible.
- Do not hit, pull, drag, squeeze or step on the equipment or put the battery into fire. Otherwise, the battery will be exploded.
- Do not place the battery in a high temperature environment. Make sure that there is no heat source near the battery and no direct sunlight. When the ambient temperature exceeds 60 °C, it will cause a fire.
- Do not use the battery module if it is defective, broken, or damaged. Damaged battery modules may leak electrolyte.
- To protect the battery pack and its components from damage during transportation, please ensure that the transportation personnel are professionally trained. All operations during the transportation have to be recorded. The equipment shall be kept in balance, thus avoiding falling down.

- Consider the weight of the equipment before moving it. Assign enough personnel to move the equipment to avoid personal injury.
- Contact after-sale service immediately if the battery is not able to be started. Otherwise, the battery might be damaged permanently.
- Do not move the battery system when the battery is working. Contact the after-sales service center to replace or add batteries.

Emergency Measures

Battery Electrolyte Leakage

If the battery module leaks electrolyte, avoid contact with leaking liquids or gases. The electrolyte is corrosive and contact may cause skin irritation and chemical burns. If you accidentally come into contact with a leaking substance, do the following:

- **Inhalation:** Evacuate from the contaminated area and seek immediate medical assistance.
- **Eye contact:** Rinse with water for at least 15 minutes and seek medical assistance immediately.
- **Skin contact:** Wash the contact area thoroughly with soap and water and seek immediate medical assistance.
- **Ingestion:** Induce vomiting, and seek immediate medical assistance.

Fire

- The battery may explode when the battery system temperature exceeds 150°C. Poisonous and hazardous gas may be released if the battery is on fire.
- In the event of a fire, please make sure that the carbon dioxide extinguisher or Novac1230 or FM-200 is nearby.
- The fire cannot be put out by ABC dry powder extinguisher. Firefighters are required to wear full protective clothing and self-contained breathing apparatus.

Label Description

	Potential risks exist. Wear proper Personnel Protective Equipment before any operations.		Keep the equipment away from open flame or ignition source.
	HIGH VOLTAGE HAZARD High voltage exists when operating the equipment, make sure that the security device is powered off.		Keep the equipment away from children.
	Operate the equipment properly to avoid explosion danger.		The equipment shall not be disposed of as domestic waste. Dispose of it according to local laws and regulations, or send it back to the equipment manufacturer.
	The equipment contains corrosive electrolytes. In case of a leak in the equipment, avoid contact the leaked liquid or gas.		Recycle regeneration mark.
	Batteries contain flammable materials, beware of fire.		TUV Mark.
	Read through the user manual before any operations.		CE Mark.
	Pay attention to wearing PPE during installation, operation and maintaining of the equipment.		RCM Mark.
	Grounding point.	-	-

Check Before Power ON

No.	Check Item
1	The product is firmly installed at a clean place that is well-ventilated and easy-to operate.
2	The PE, power cables, communication cables and termination resistor is connected correctly and securely.
3	Cable ties are intact, routed properly and evenly.
4	Unused ports and terminals are sealed.

EU Declaration of Conformity

GoodWe Technologies Co., Ltd. hereby declares that the equipment without wireless communication modules sold in the European market meets the requirements of the following directives:

- Electromagnetic compatibility Directive 2014/30/EU (EMC)
- Electrical Apparatus Low Voltage Directive 2014/35/EU (LVD)
- Battery Directive 2006/66/EC and Amending Directive 2013/56/EU
- Waste Electrical and Electronic Equipment 2012/19/EU
- Registration, Evaluation, Authorization and Restriction of Chemicals (EC) No 1907/2006 (REACH)
- Battery Directive 2006/66/EC

You can download the EU Declaration of Conformity on the official website:

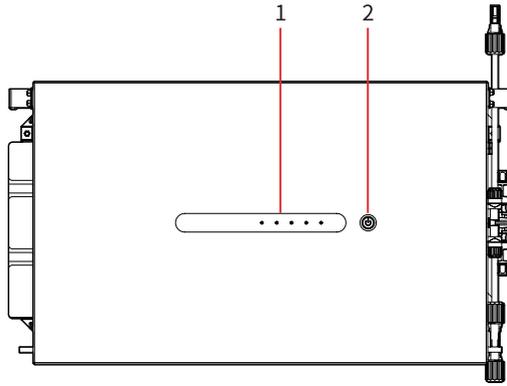
<https://en.goodwe.com>.

LED Indicator

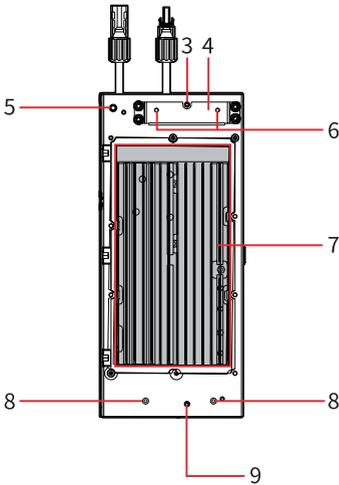
Indicator	Status	Description	
		Green light ON: The battery is running.	
		Green light slowly blinks: The battery is in standby mode.	
		Red light ON: A fault has occurred.	
		Red light slowly blinks: The battery is alarming.	
		Light OFF: The battery is not started.	
 Green light ON		SOC < 5%	The maximum SOC indicator flashes once/s.
		5% ≤ SOC < 25%	
		25% ≤ SOC < 50%	
		50% ≤ SOC < 75%	
		75% ≤ SOC < 95%	
		95% ≤ SOC ≤ 100%	

Parts

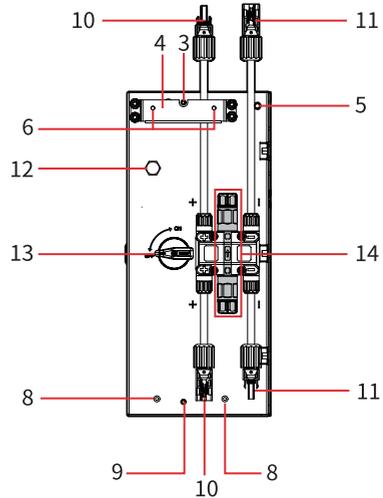
Front View



Left View



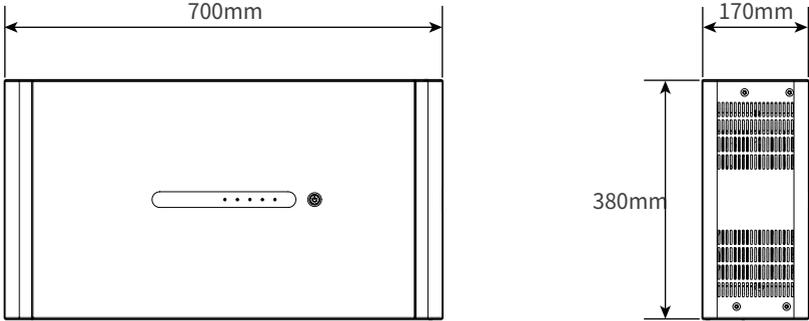
Right View



- | | | |
|--------------------------|--|--|
| 1. Battery SOC indicator | 2. Multi-functional button indicator light | 3. Battery-to-battery fixing hole or ground-ing port |
| 4. Handle | 5. Battery-to-wall fixing hole | 6. Side protective cover fixing hole |
| 7. Heat sink | 8. Side protective cover fixing hole | 9. Fixing hole between batteries |

- 10. Battery positive electrode connector
- 11. Battery negative electrode connector
- 12. Ventilation valve
- 13. Battery Power Switch
- 14. Communication connection port

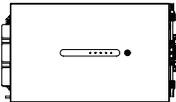
Dimensions

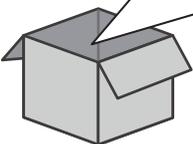


03 Battery System Installation

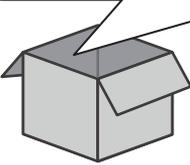
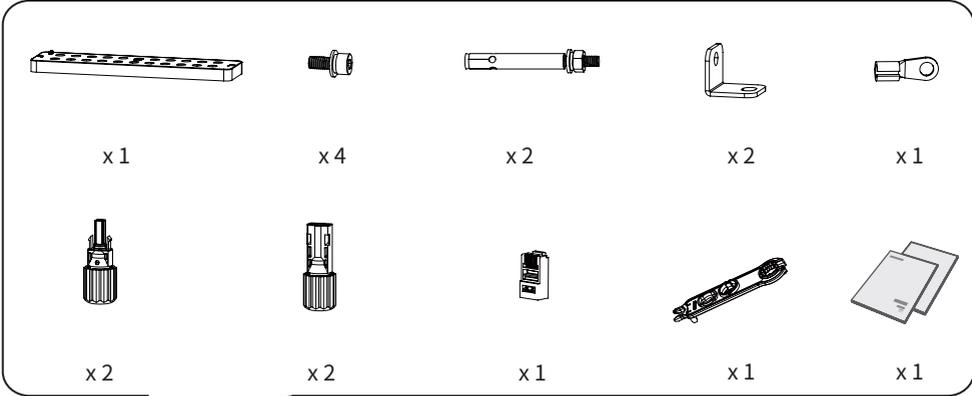
Deliverables

Battery

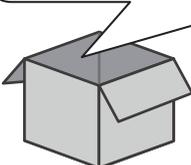
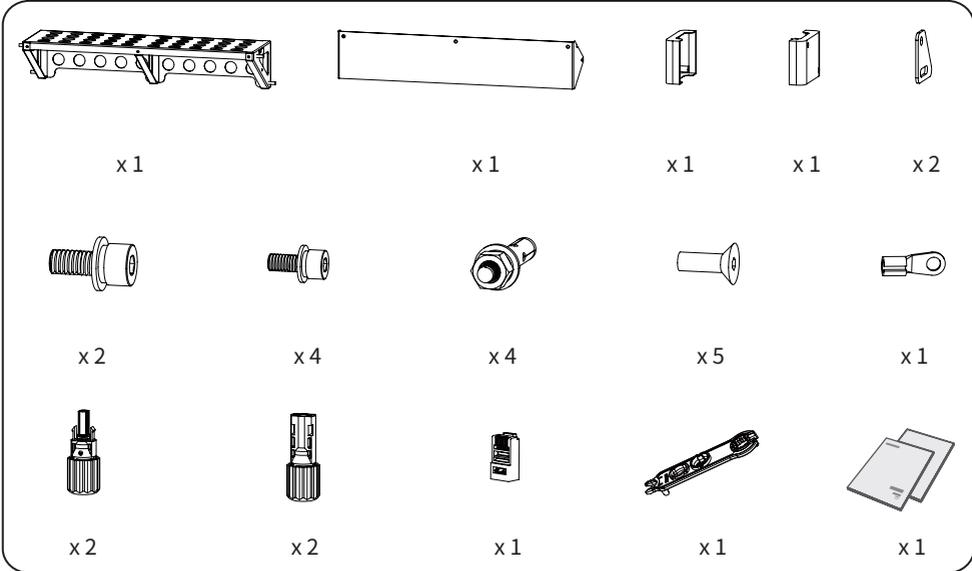
				
x 1	x 1	x 1	x 2	x 2
				
x 8	x 4	x 2	x 2	



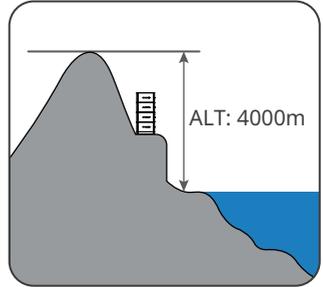
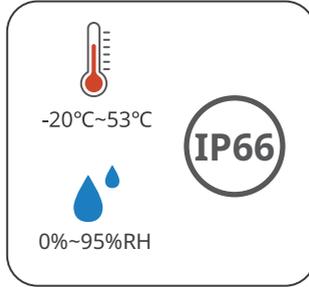
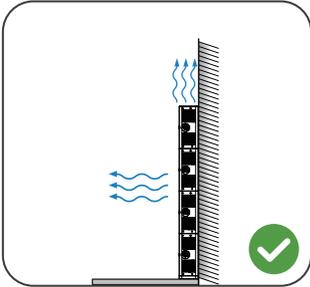
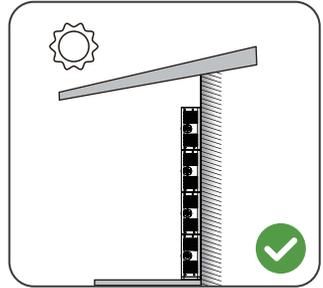
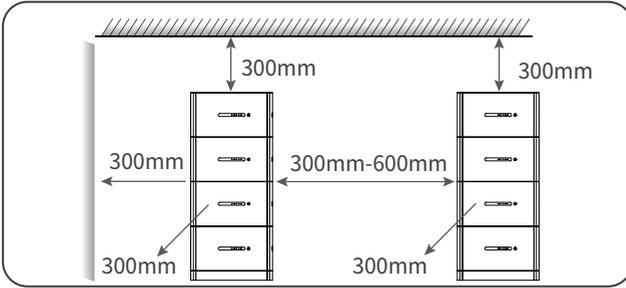
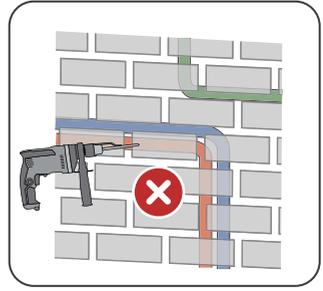
Base (optional)



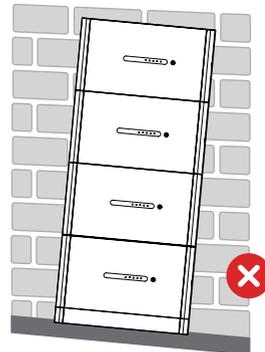
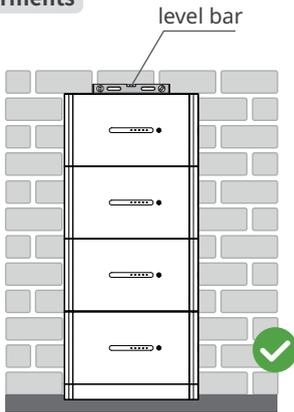
Wall-mount rack (optional)



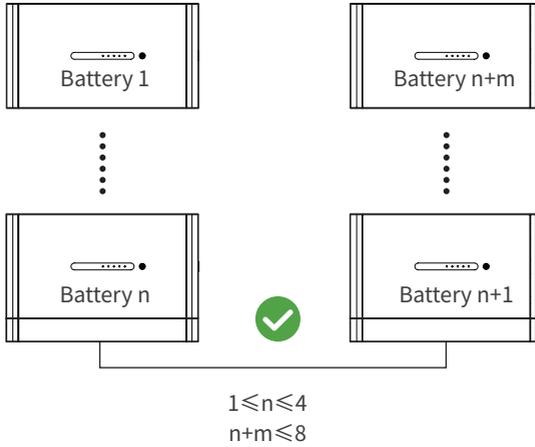
Space Requirements



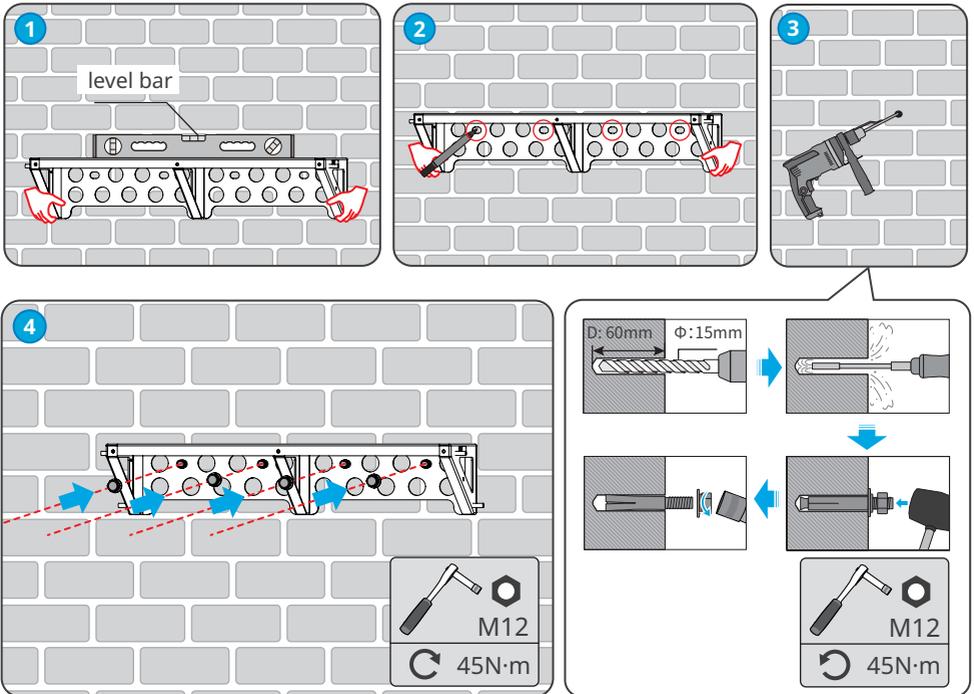
Angle Requirements



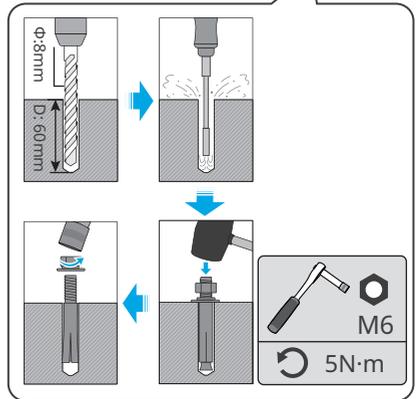
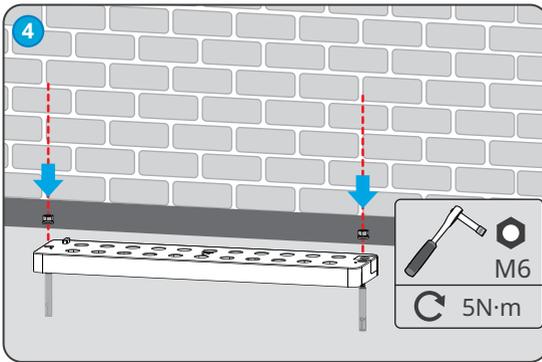
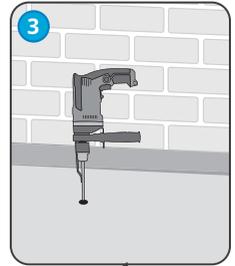
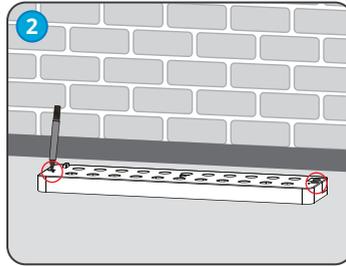
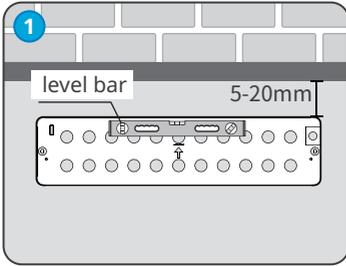
Battery Quantity Requirements



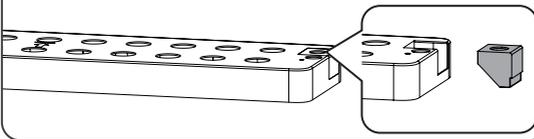
Install Wall-mount Rack (Optional)



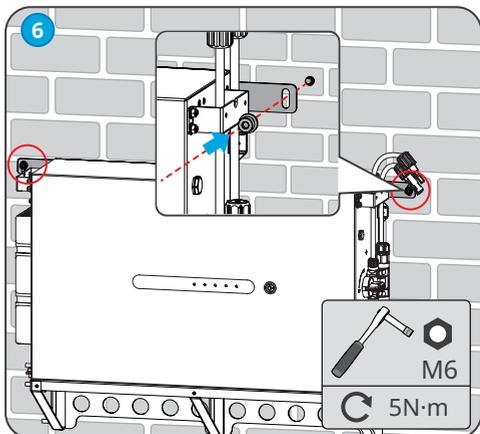
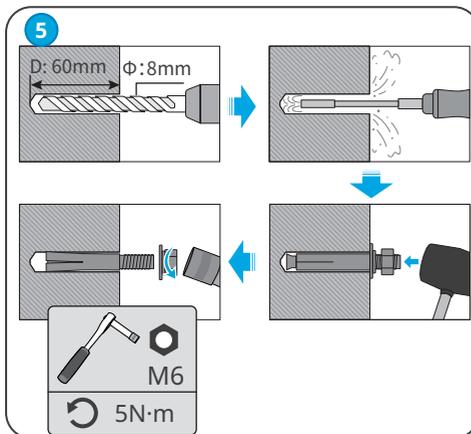
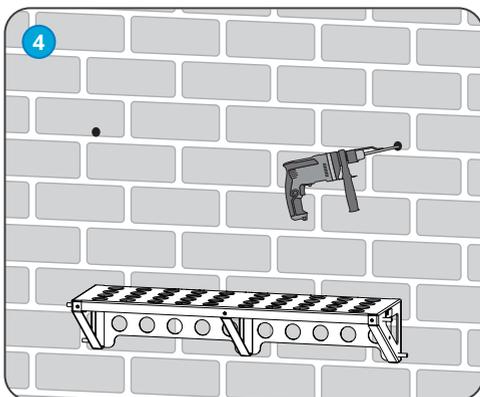
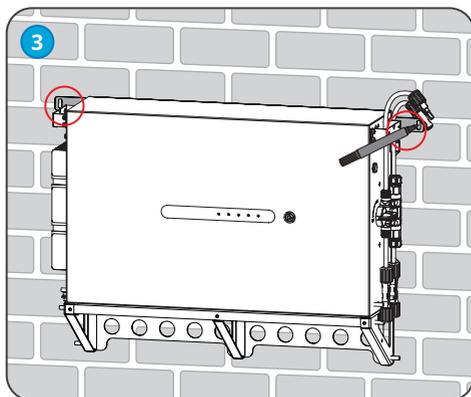
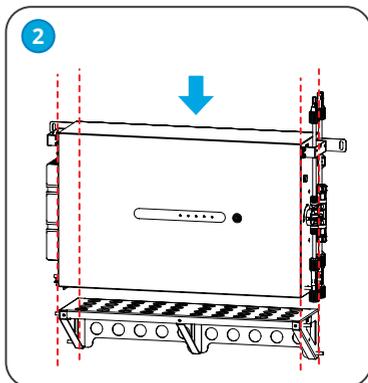
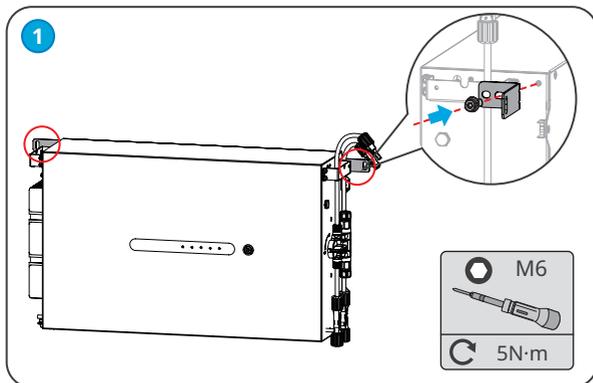
Install Base (Optional)



5 (Optional) Multiple sets of batteries installation scenarios only.

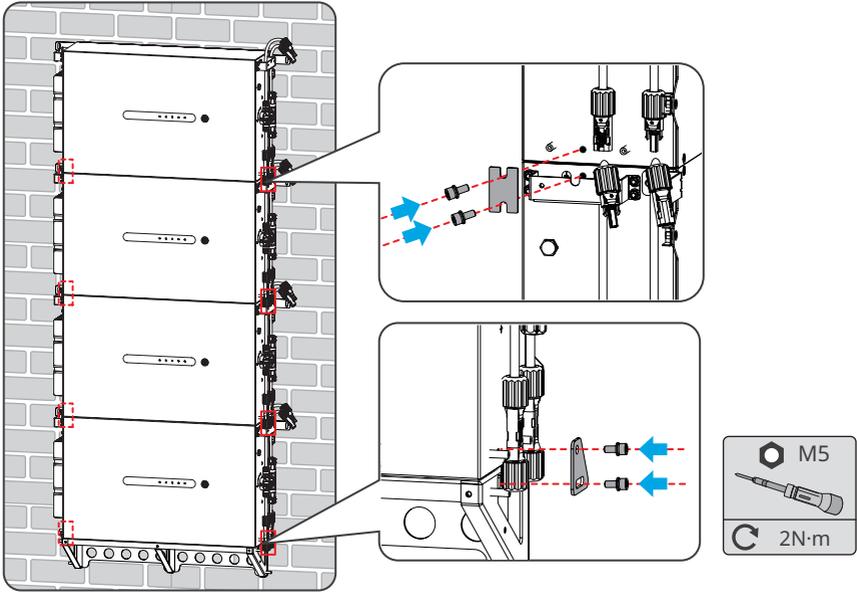


Install Battery Pack

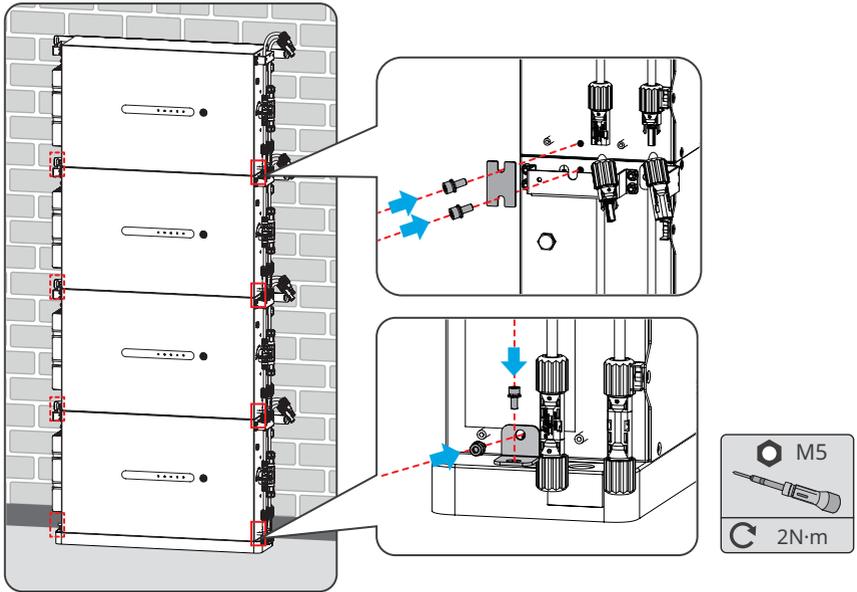


7

Wall-mount installation

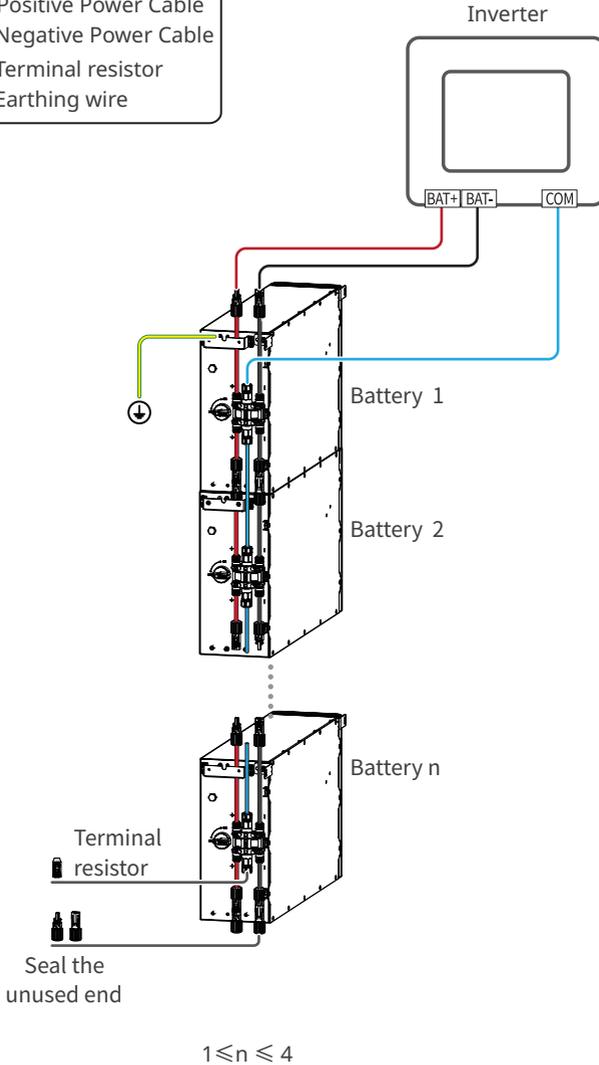
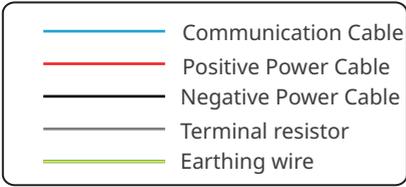


Ground installation

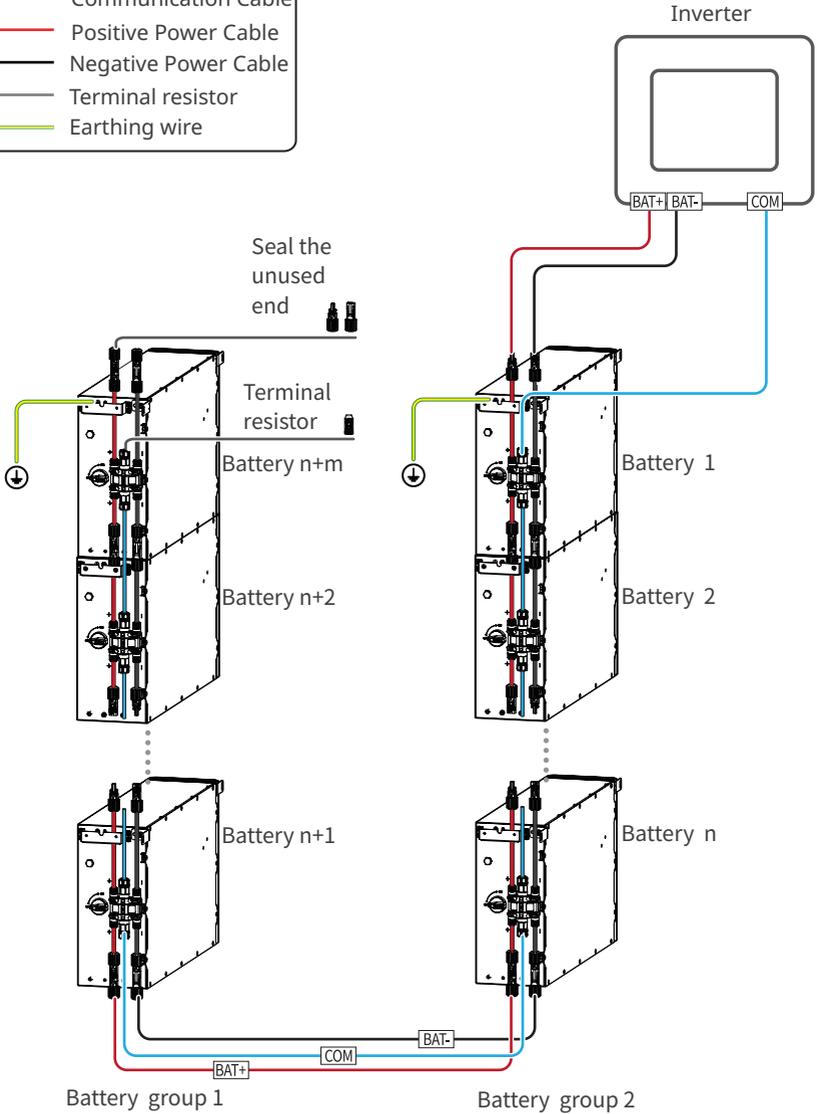
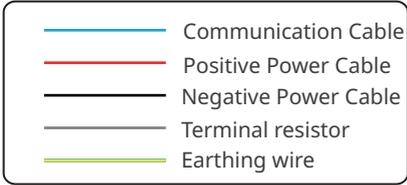


04 Electrical Connection

Single battery group

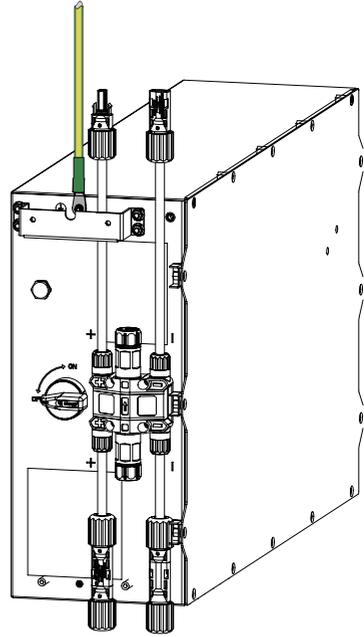
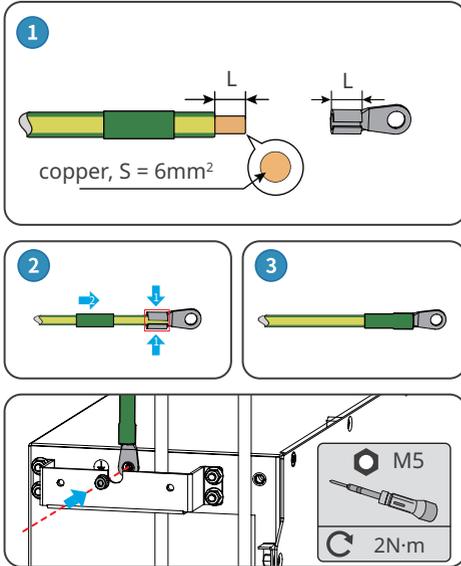


Two battery groups



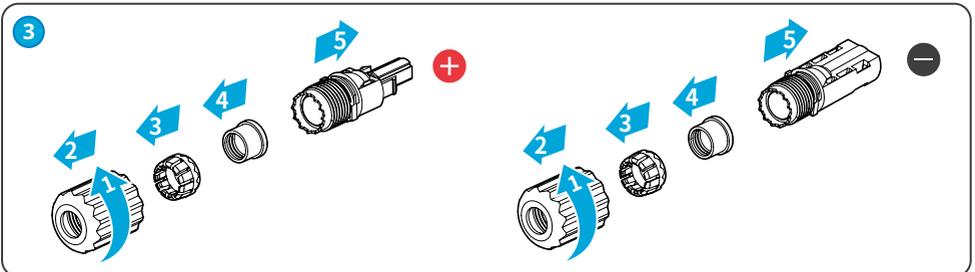
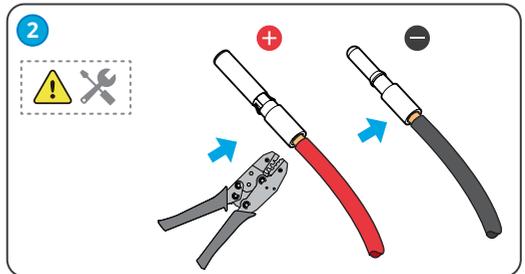
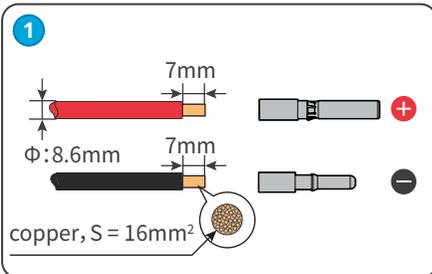
$$1 \leq n \leq 4, n+m \leq 8$$

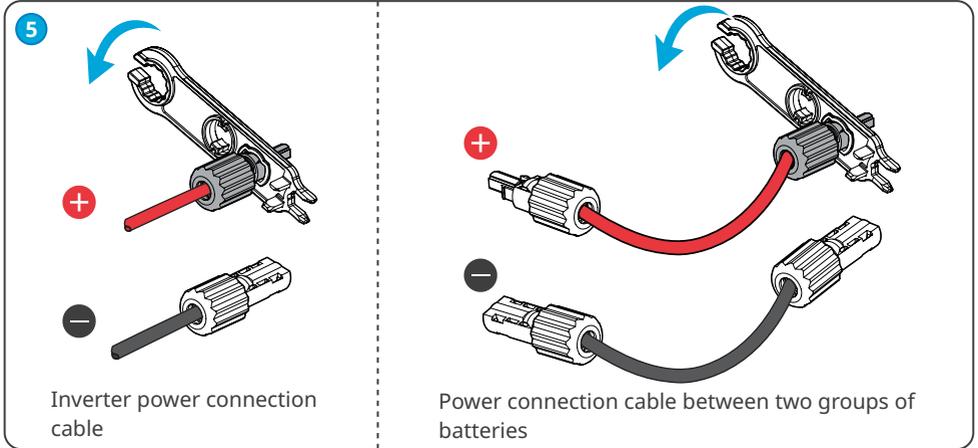
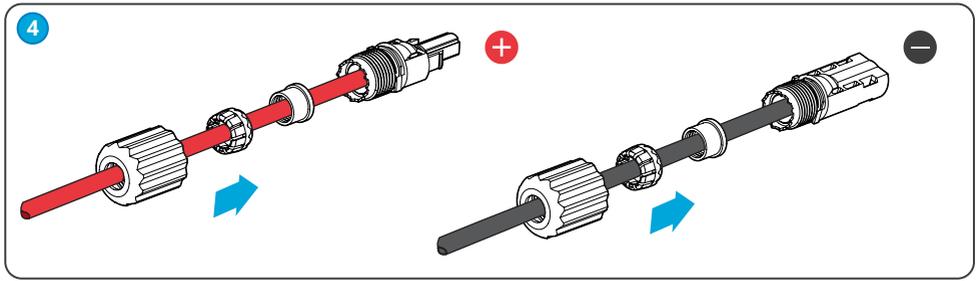
PE Cable



Power Cable

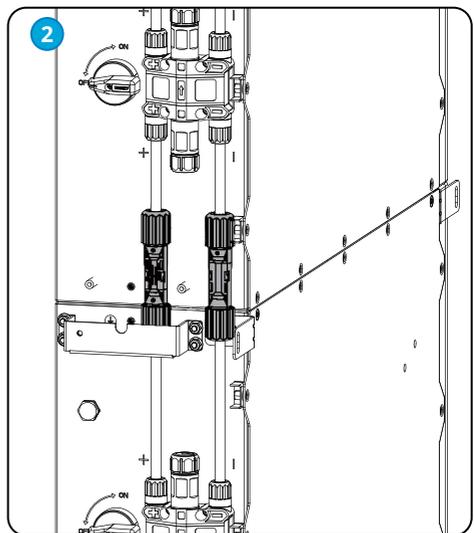
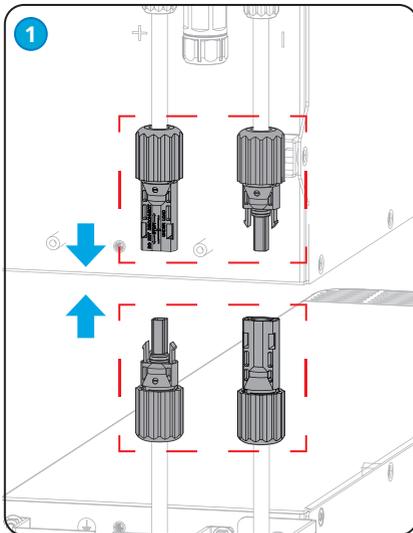
Crimping power cable



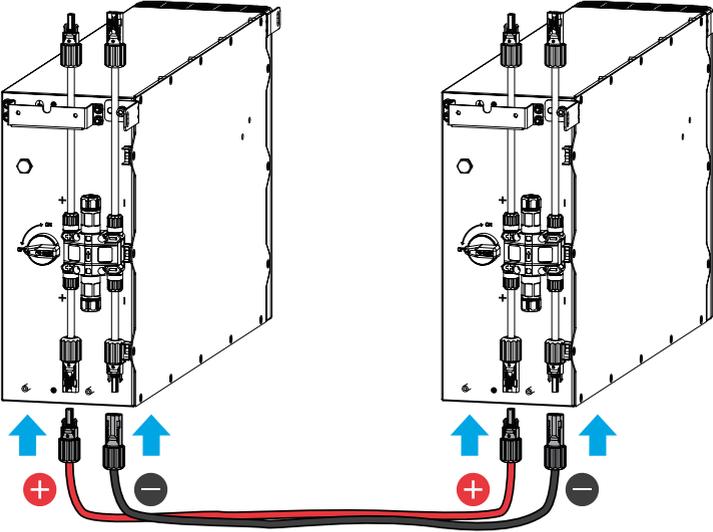


Connecting the Power Cable

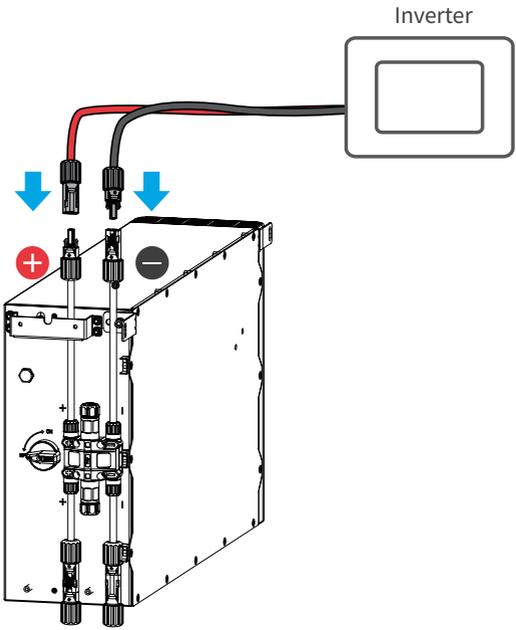
Connecting power cables between a group of batteries



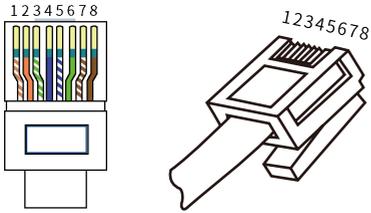
Connecting power cables between multiple groups of batteries



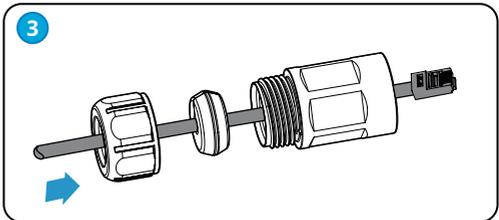
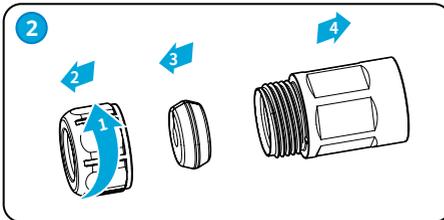
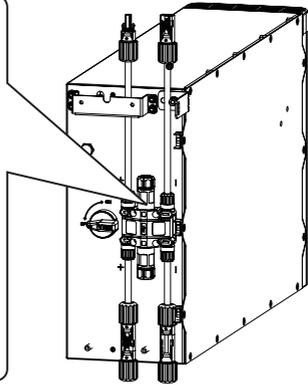
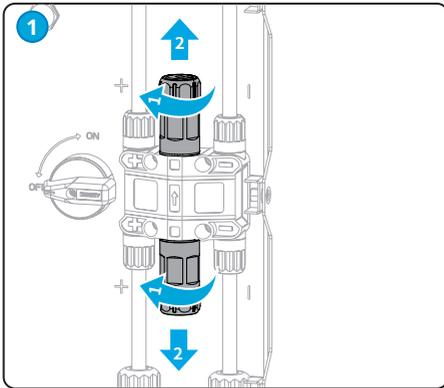
Connecting power cables between batteries and inverter



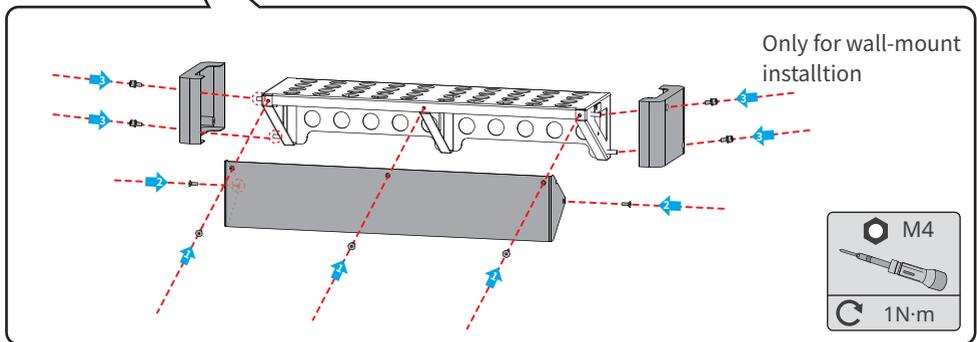
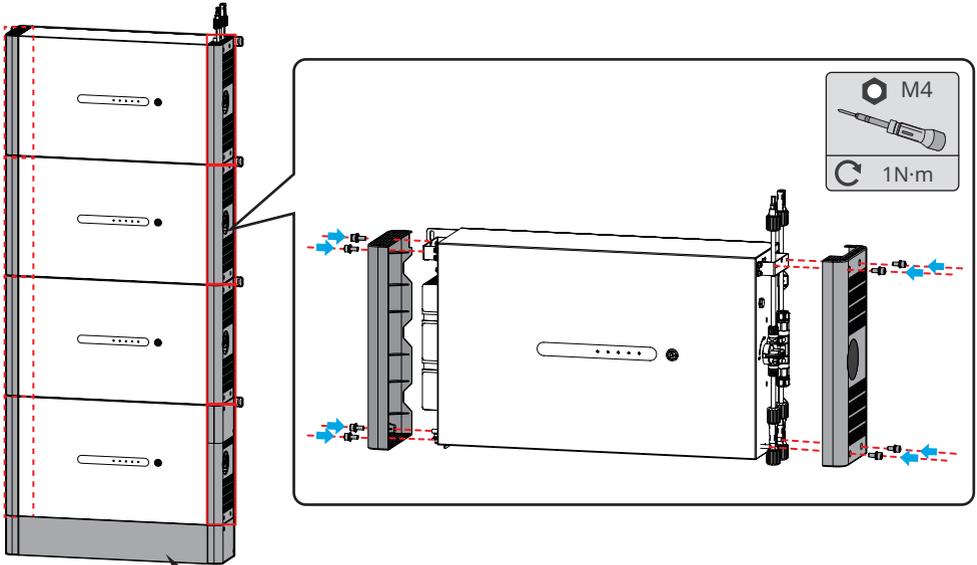
Communication Cable



PIN	Color	Definition
1	Orange and White	RS485A
2	Orange	RS485B
4	Blue	CAN_H
5	Blue and White	CAN_L
3,6,7,8	Green and white , green, brown and white, brown	-



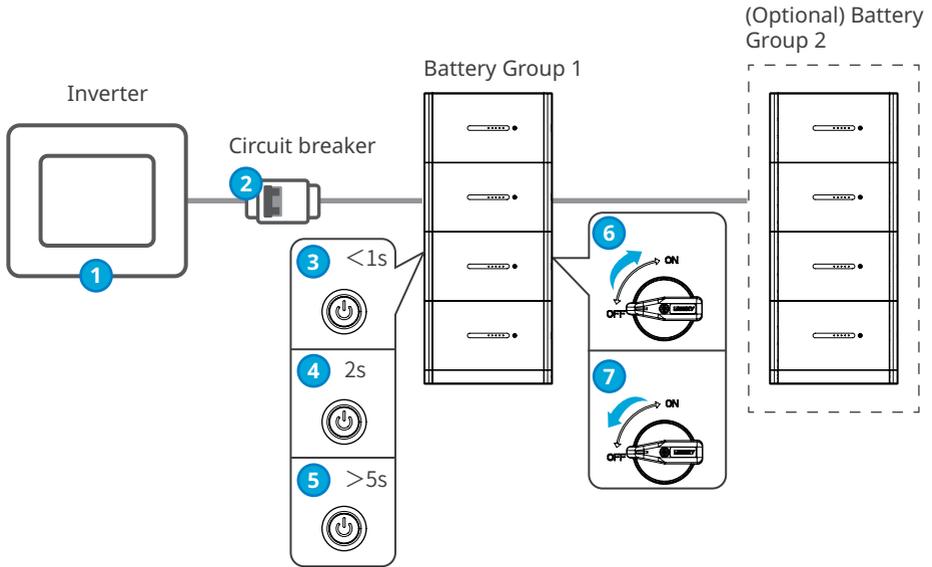
Installing protective cover



05 Power ON and OFF

NOTICE

Circuit breakers between inverter and battery shall be installed in accordance with local laws and regulations.



Power ON

Turn on 2 → 6 → 3 → 1

6 → 3 For all batteries.

Black Start

Turn on 2 → 6 → 3 → 4  15s

6 → 3 For all batteries.

4 For any battery.

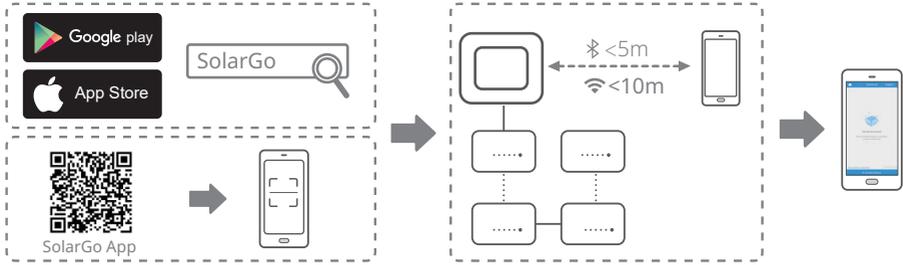
Power OFF

Turn off 1 → 5 → 7 → 2

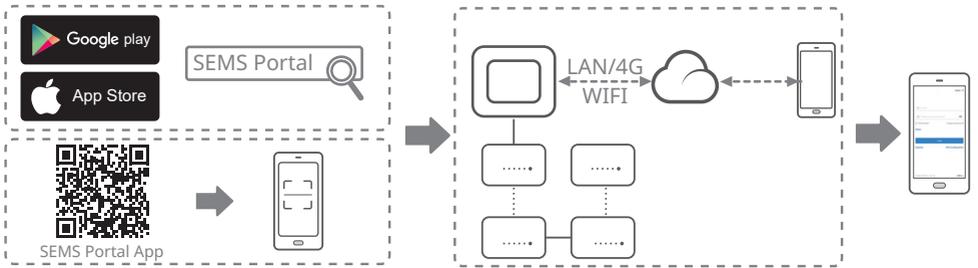
5 For any battery.

7 For all batteries.

Commissioning via SolarGo App



Monitoring via SEMS Portal App



For more information, please scan the following QR for User Manual.





Official Website

GoodWe Technologies Co., Ltd.

 No. 90 Zijin Rd., New District, Suzhou, 215011, China

 www.goodwe.com

 service@goodwe.com



340-01021-00



Local Contacts