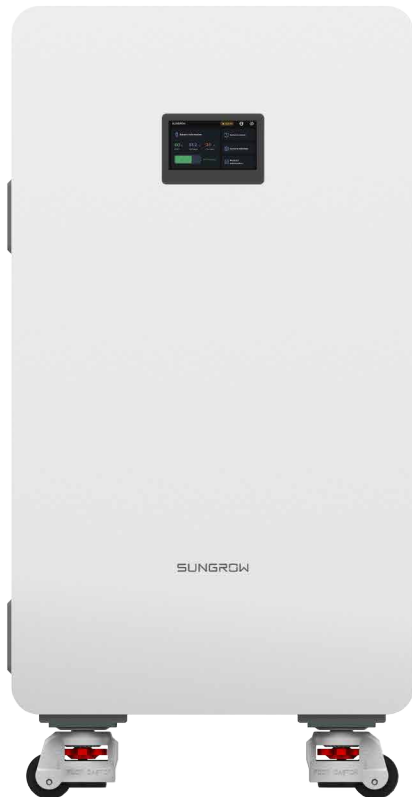


# Quick Installation Guide

## Low Voltage Battery

MBL160












1. Due to ongoing product development, the contents of this guide may be updated or revised periodically without prior notice. This guide does not replace the user manual or any safety instructions provided with the device.
2. Read, fully understand, and strictly follow the detailed instructions in the user manual and other related regulations before installing the device. The user manual can be downloaded from <http://support.sungrowpower.com/> or obtained by scanning the QR code on the side of the device or the back cover of this guide.
3. All operations must be performed by qualified personnel who have received training in electrical system installation, commissioning, and hazard management, and are familiar with the user manual and local regulations/directives.
4. Before installation, verify that all package contents are intact and match the scope of delivery. If any components are damaged or missing, contact SUNGROW or your distributor.
5. The cable used must be intact and well-insulated. Operation personnel must wear appropriate personal protective equipment (PPE) at all times.
6. Failure to comply with any of the instructions in this guide may result in personal injury, death, or device damage, and will void the warranty.

## Safety

The battery has been designed and tested in strict accordance with international safety regulations. Before performing any work, read all safety instructions carefully and follow them at all times when working on or with the battery. Incorrect operation or handling may result in:

- Injury or death to the operator or third parties;
- Damage to the battery or other properties.

The following warning labels are affixed to the battery body.

	CE mark of conformity. EU/EEA importer.
	Danger! Do not work on the product when it is energized.
	Electric shock hazard! Service must be performed only by qualified personnel. Keep out of reach of children.
	No open flames! Avoid exposure to flames, incineration, punctures, or impacts.
	Read the manual before performing any operation on this product.
	Please recycle the battery. Do not discard.
	Do not dispose of it in the trash. Compacting a lithium-ion battery is dangerous as it can explode.
	Do not dispose of the battery as household waste.
	This is a protective grounding terminal. It must be securely grounded to ensure operator safety.

## DANGER

Risk of explosion

- Do not subject the battery to strong forces.
- Do not mechanically damage the battery (pierce, deform, disassemble, etc.)
- Do not heat the battery or dispose of it in a fire.
- Do not install the battery in potentially explosive environments.
- Do not immerse the battery in water or expose it to moisture or liquids.

## DANGER

Risk of fire

- Do not expose the battery to temperatures above 60°C.
- Do not place the battery near heat sources, such as direct sunlight, fireplaces, thermally uninsulated walls exposed to sunlight, hot water, or heaters.
- Keep sources of ignition, such as sparks, flames, and smoking materials, away from the battery.

## DANGER

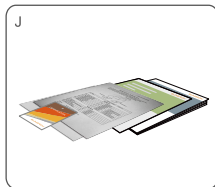
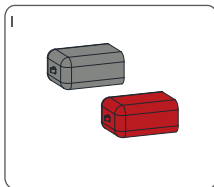
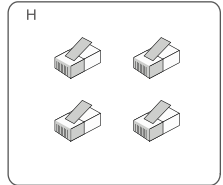
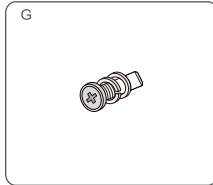
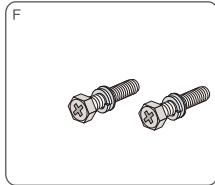
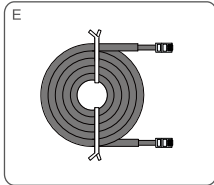
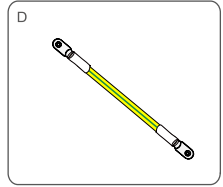
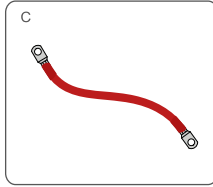
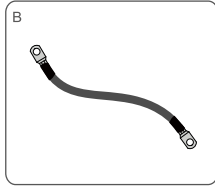
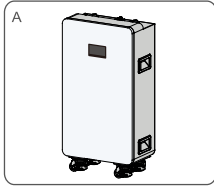
Risk of electric shock

- Do not disassemble the battery.
- Do not handle a wet battery or use wet tools.
- Do not immerse the battery in water or expose it to moisture or liquids.
- Keep the battery away from children and animals.
- Wear suitable clothing, guards and gloves to prevent you from direct contact with the DC voltage.
- Use insulated tools when working on the battery.
- Remove metal jewelry before working on the DC circuit.

## NOTICE

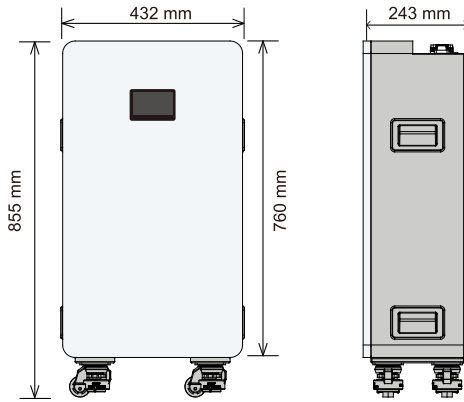
Always follow local regulations and standards when using the battery.

## Scope of Delivery

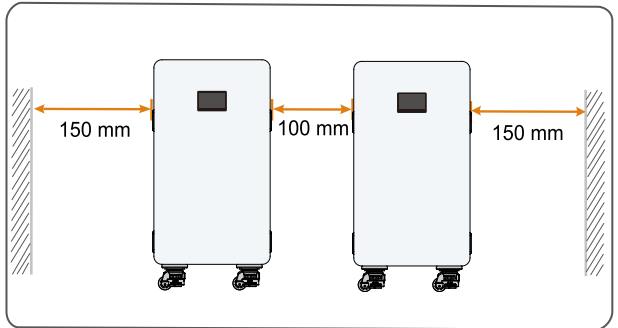
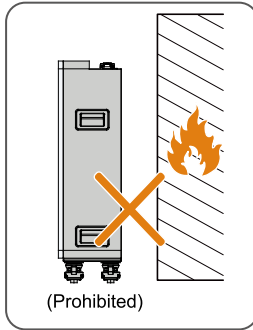
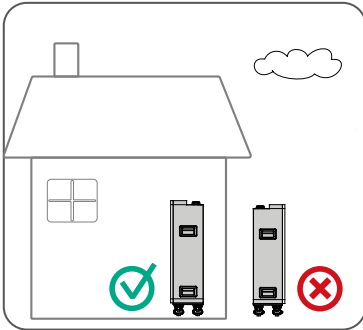
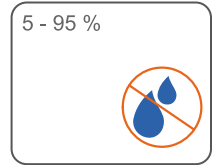
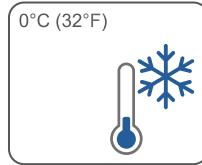
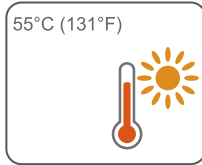


No.	Name	Quantity
A	Battery	1
B	Power line (black)	1
C	Power line (red)	1
D	Yellow-green bi-color grounding cable	1
E	Communication connector	2
F	Screw (M8x16)	2
G	Screw (M5x10)	1
H	RJ45 connector	4
I	Waterproof terminal cover	2
J	Document	1

## Dimensions



## Mounting Location



## Installation Tools

Goggles



Dust mask



Safety gloves



Safety shoes

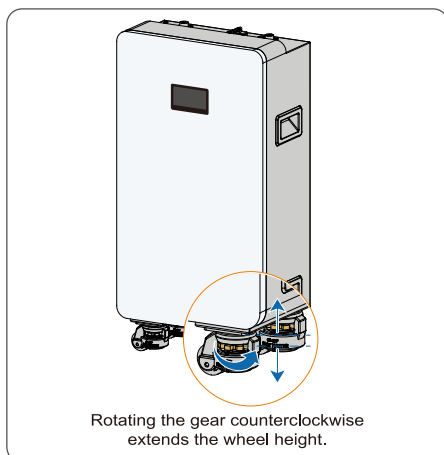
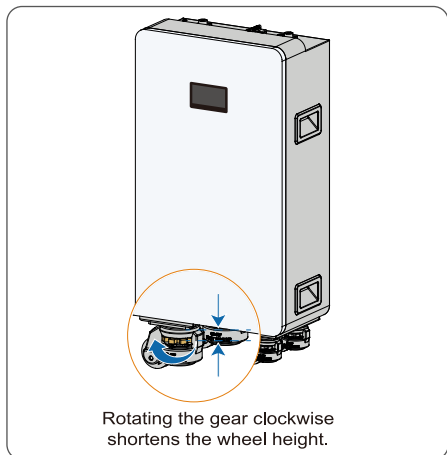
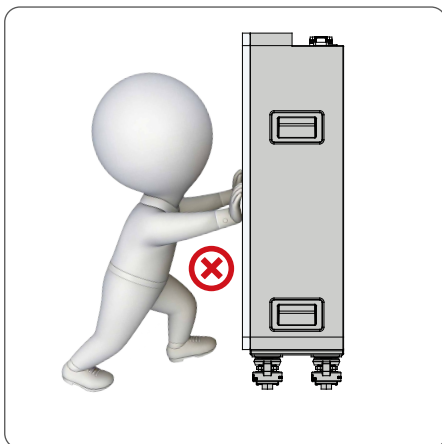
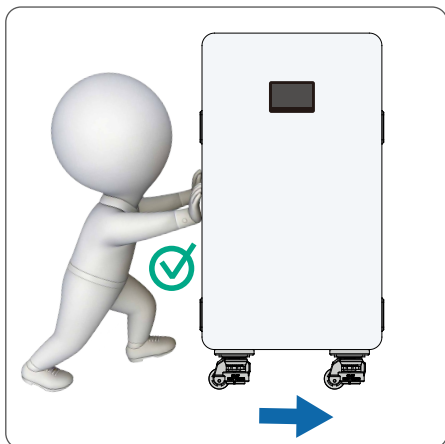


Phillips screwdriver:  
ST6.3, M5, M8



## Battery Installation

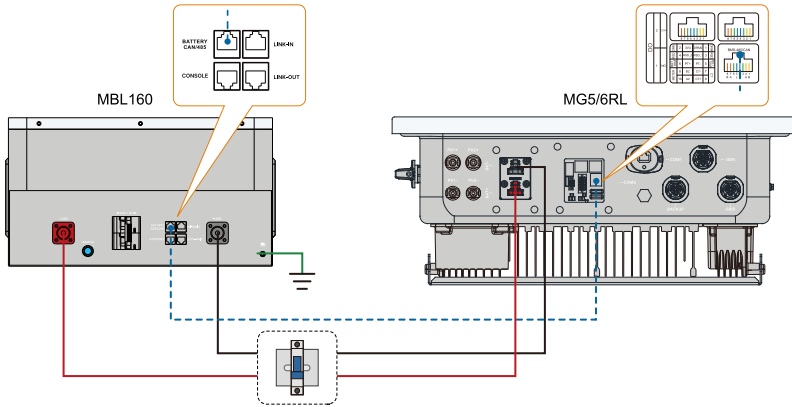
- The battery is pre-installed with leveling casters; please push it directly from the left or right side to the appropriate installation location.
- Rotate the adjustment gear in the center of the leveling caster until the bottom of the wheel contacts the ground, to prevent the battery from moving due to wheel rolling.
- After leveling, confirm that the battery remains vertical. Prolonged tilted placement or tipping may damage battery performance.



- If the installation floor is uneven, rotate the adjustment gear in the center of the leveling caster (adjustment range 0–10 mm) to level the battery vertically.

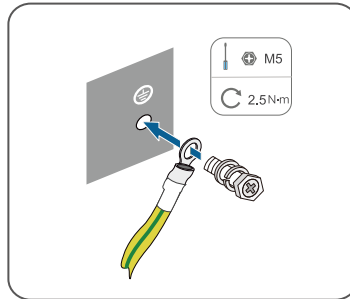
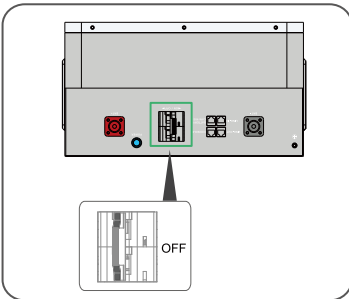
## Electrical Connection Overview

The following diagram uses the MG5/6RL inverter as an example to illustrate the connection method with a single battery. This connection method also applies to the MG8/10/12RL inverter.



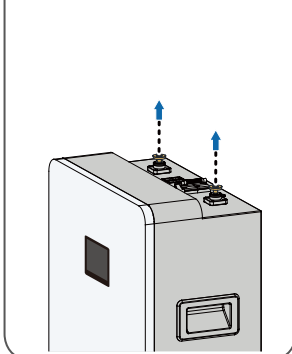
\*Users may choose to connect an external circuit breaker via the power line.

## Connecting the PE Cable

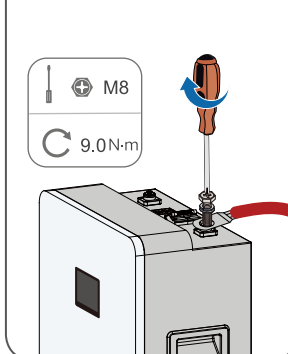


## Power Cable Connection

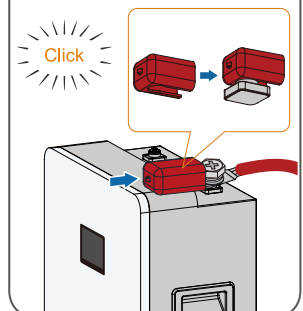
- 1 Remove the transparent dust plug from the terminal.

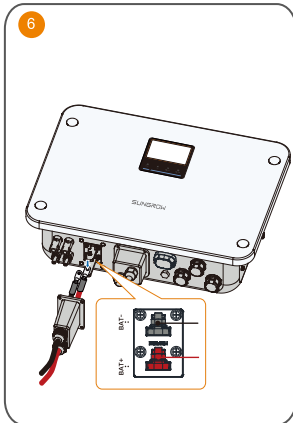
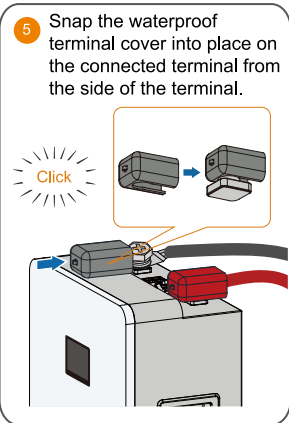
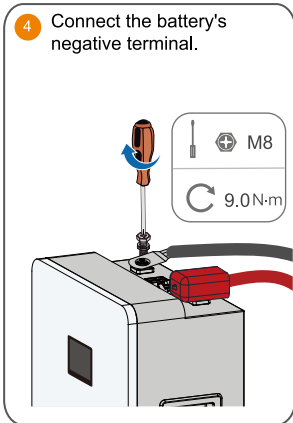


- 2 Connect the battery's positive terminal.

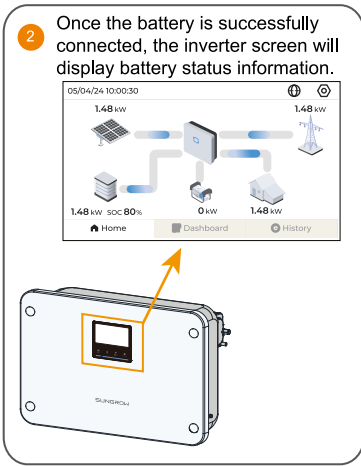
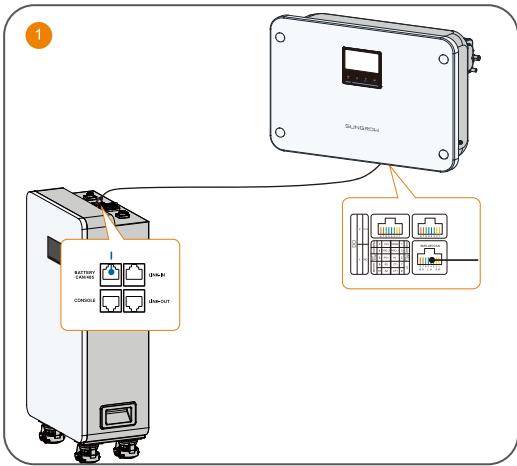


- 3 Snap the waterproof terminal cover into place on the connected terminal from the side of the terminal.





## Communication Cable Connection

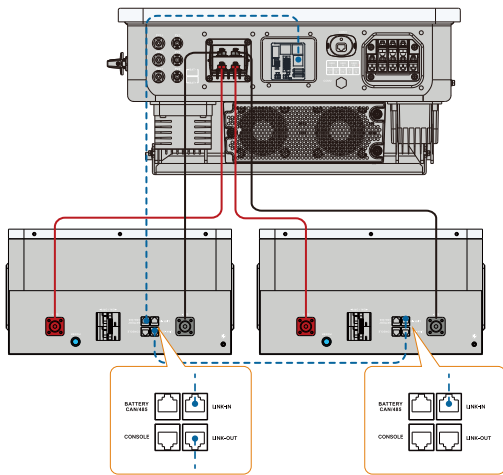


## Battery Parallel Connection

### Multiple-Battery Cascade Requirements

- Supports parallel connection of up to 20 batteries simultaneously.
- When multiple batteries are connected in parallel, a terminal block must be used. Please ensure that:
  - The power cables from each battery to the terminal block shall be of equal length.
  - The terminal block used meets the charge / discharge current requirements for multiple batteries in parallel.
- Consistent battery status: Before parallel connection, ensure all batteries have the same State of Charge (SOC) and that the voltage difference between them is less than 1 V. If the battery SOC is found to be inconsistent on-site, handle it using any of the following methods.
  - First, connect one battery to the inverter for charging or discharging until its SOC matches the others, then proceed with parallel connection.
  - Charge the batteries to the same SOC in the warehouse in advance, then transport them to the site for installation.

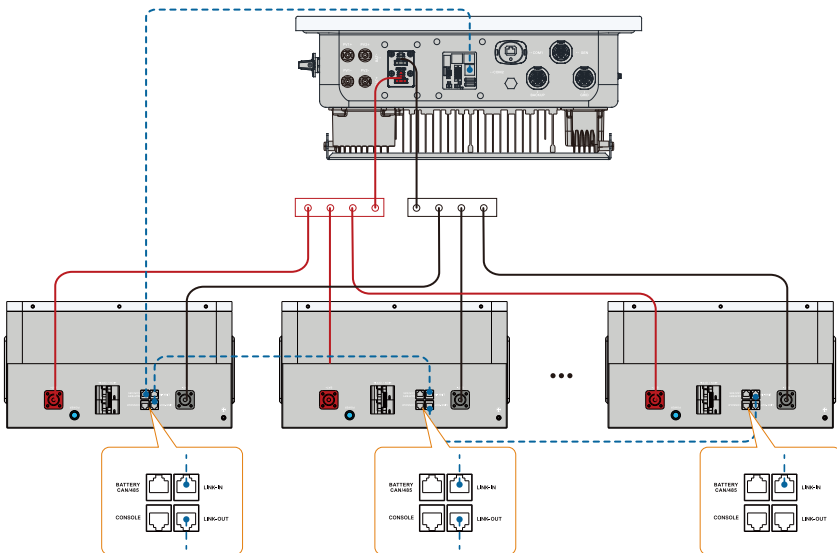
### MG8/10/12RL Connected to Two Batteries

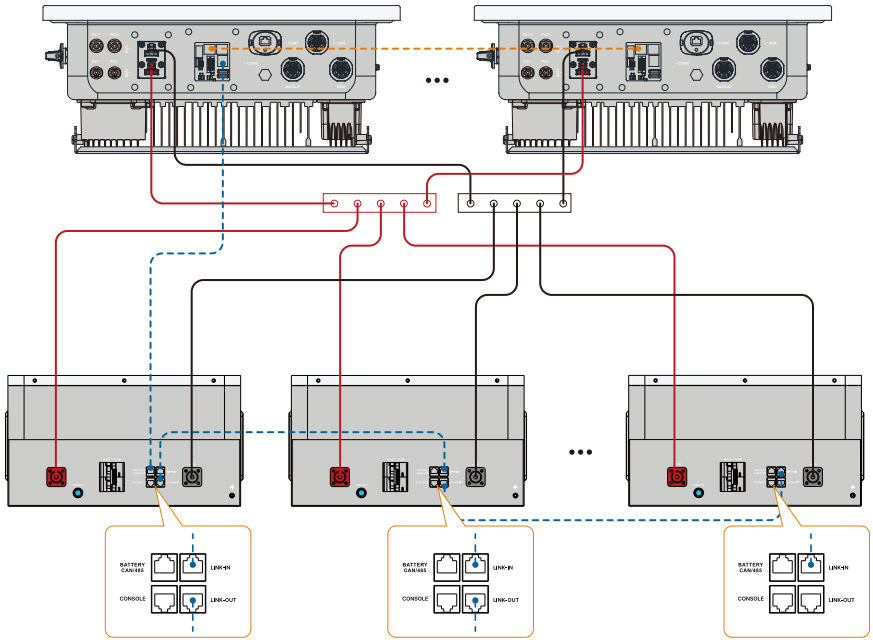


### ⚠ NOTICE

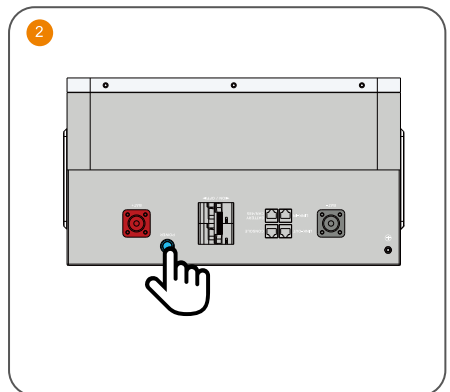
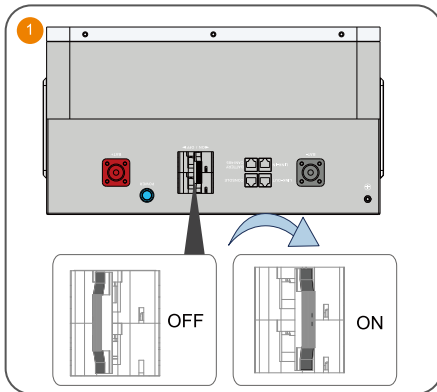
For information on how to connect the MG5/6RL to two batteries, refer to the instructions for connecting multiple batteries below.

### MG5/6/8/10/12RL (Single Inverter) Connection Method with Multiple Batteries





### Commissioning Procedure

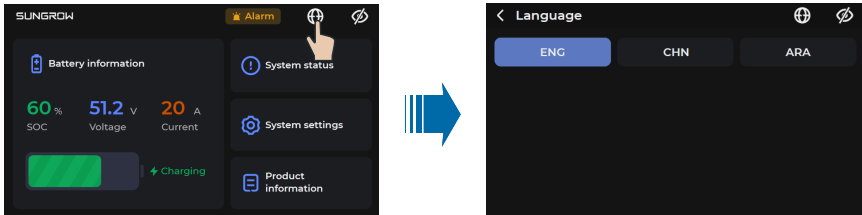


# Screen Operation

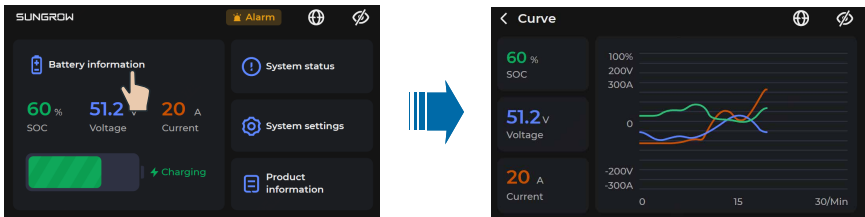
## Screen Introduction



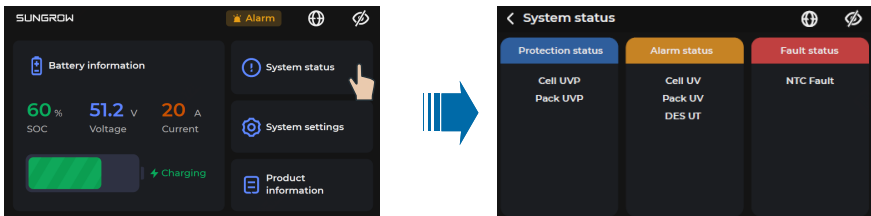
## Switch Language



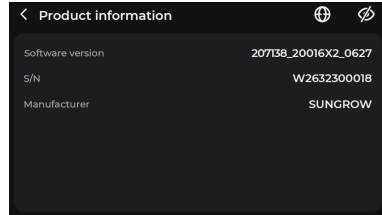
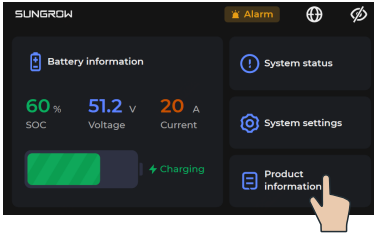
## View Battery Information



## View System Status

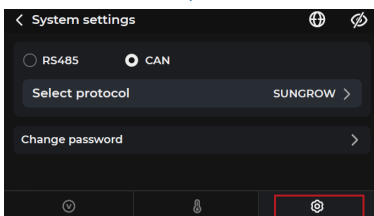
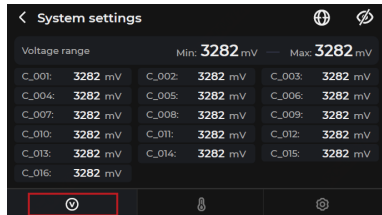
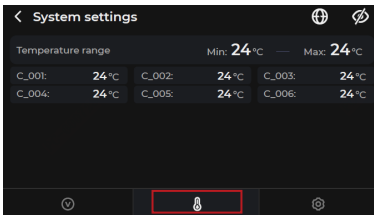
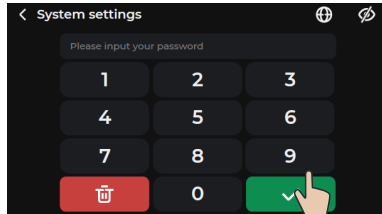
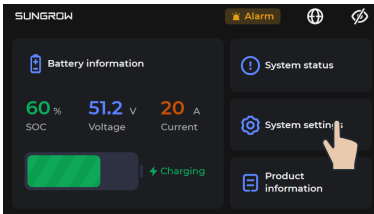


## View Product Information



## System Settings

System settings are intended for after-sales use only and generally do not require customer operation. To adjust them, please contact SUNGROW for the password.





Scan the QR code for more information or visit  
<http://support.sungrow.com/>

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