



USER MANUAL

Three Phase AC Coupler

SoWave Series
8-12kW

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1. About This Manual

1.1 Scope of Validity

This manual mainly describes the product information, guidelines for installation, operation, maintenance and troubleshooting. And this manual applies to Solenso Three Phase AC Coupler.

• SoWave-TL8 • SoWave-TL10 • SoWave-TL12

Please keep this manual available all the time in case of any emergency.

1.2 Target Group

This manual is for qualified personnel. The tasks described in this manual must only be performed by qualified personnel.

2. Terminals Introduction

2.1 Read This First

This manual includes important instructions for installing and maintaining the Solenso AC Coupler.

2.2 Safety

Instructions

Symbol	Usage
 DANGER	Indicates hazardous situations that can result in deadly electric shock hazards, other serious physical injuries, or fire hazards.
 WARNING	Indicates directions that must be fully understood and followed in their entirety to avoid potential safety hazards including equipment damage or personal injury.
 CAUTION	Indicates that the described operation must not be carried out. The reader should stop, use caution, and fully understand the operations explained before proceeding.

- Note that only professionals may install or replace AC Coupler.
- Do not try to repair the AC coupler without approval from Solenso. If the AC coupler is damaged, send the AC Coupler back to your installer for repairing/replacement. Disassembling the AC coupler without approval from Solenso will invalidate the remaining warranty period.
- Read all instructions and warnings on the technical specifications carefully.
- Do not use Solenso products in a way that is not suggested by the manufacturer. Doing so may cause death or injury to persons or damage to the equipment.

2.3 User

This manual is intended for use by professional installation and maintenance personnel only.

2.4 Support and Contact Information

If you have technical queries concerning our products, contact your system installer or distributor. If further support is required, contact Solenso' support at this link.

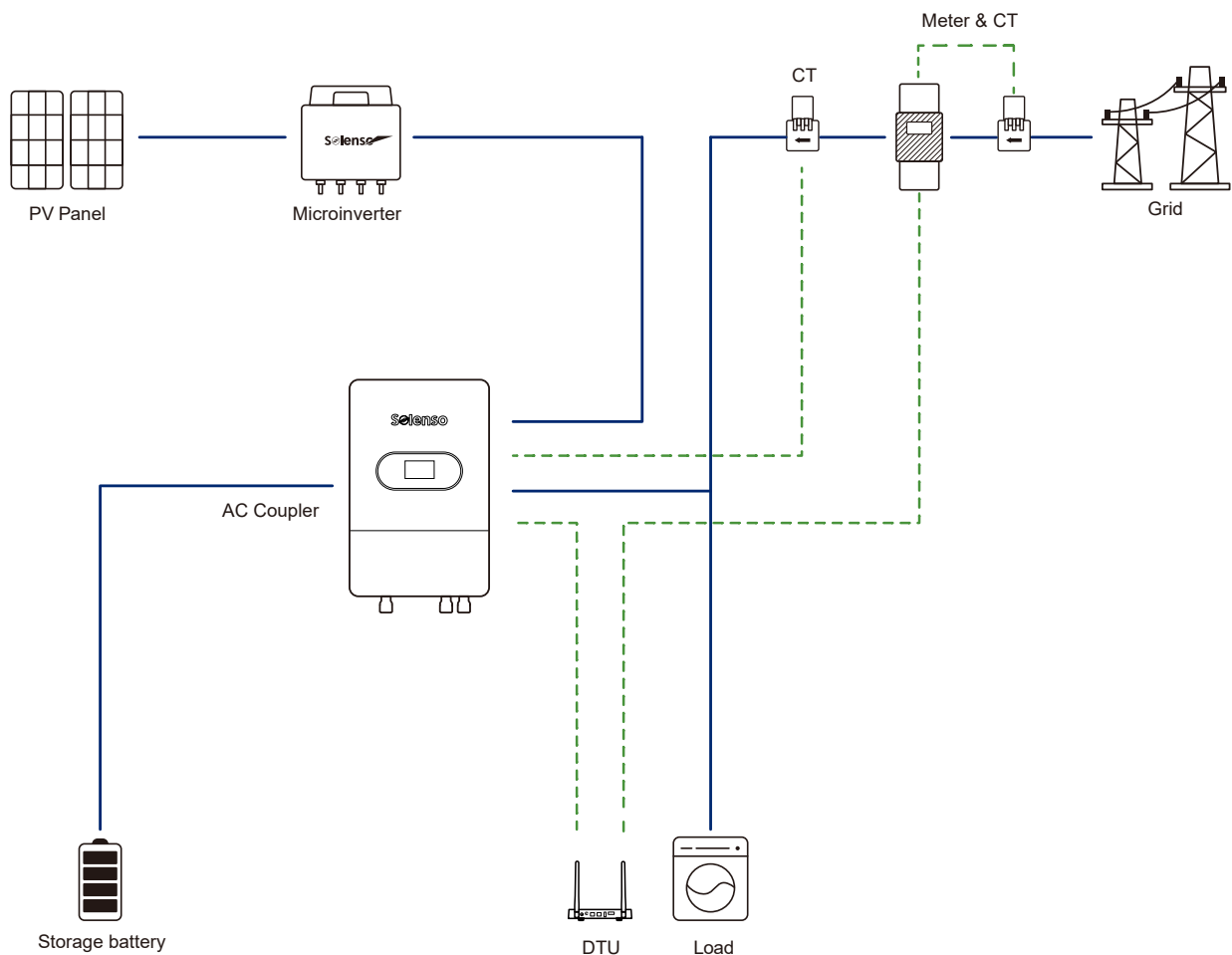
- <https://www.solenso-power.com> / www.solenso-global.com
- Solenso Technical Service Center: contact@solenso.pro / afterservice@solenso-global.com

3. AC Coupler Introduction

3.1 Basic Instruction

The Solenso AC Couplers are designed to increase energy independence for homeowners. Energy management is based on time-of-use and demand charge rate structures, significantly reduce the amount of energy purchased from the public grid and optimize self-consumption.

Three Phase AC coupler for Solenso Storage Solution



3.2 Work Mode

1. Self-consumption

The self-consumption mode is for the regions with low feed-in tariff and high electricity prices. The energy produced by the PV system is used to optimize self-consumption needs. The excess energy is used to recharge the batteries, any remaining excess is then exported to the grid.



Energy flow:

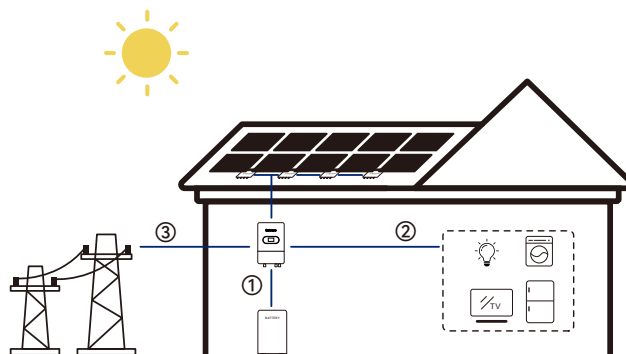
MI → Load → Battery → Grid

Self-consumption--Extra setting

The Extra Setting allows you to customize Forced Charge setting, Forced AC grid charging setting, Forced Discharging and Forbidden Discharging setting.

A. Forced Charge

Forced charge mode will prioritize charging the battery for a set period of time, charging at a set charging power percentage, and stopping when the set Charging Max SOC is reached. Up to 4 customizable time periods.

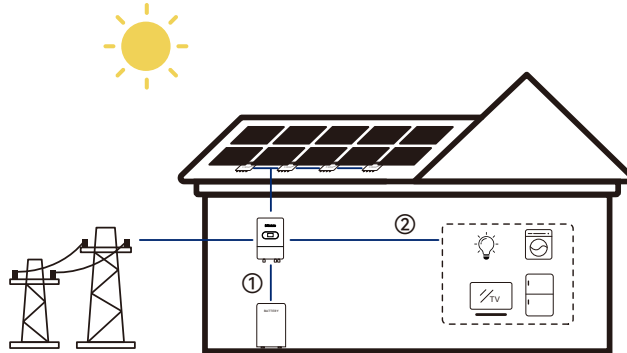


Energy flow:

MI → Battery → Load → Grid

B. Forced AC Grid Charging

Forced AC Grid Charging mode will prioritize charging the battery for a set period of time, charging at a set charging power percentage, and stopping when the set Charging Max SOC is reached. Up to 4 customizable time periods.



Energy flow:

MI and Grid → Battery → Load

⚠ Note:

After select AC Grid charging, the AC will also charge the battery when the PV is low or no PV.

C. Forced Discharging

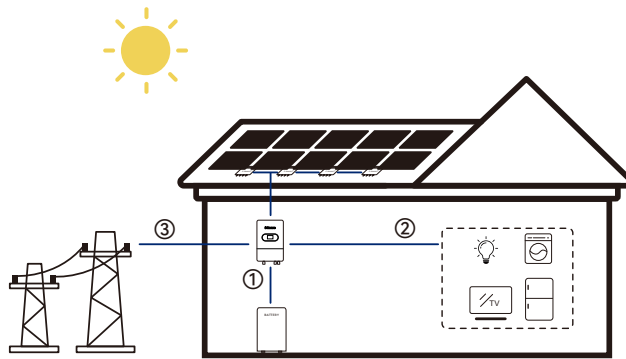
Forced discharge mode will prioritize discharging the battery for a set period of time, discharging at a set discharging power percentage, and stopping when the set Discharging Min SOC is reached. Up to 4 customizable time periods.



Energy flow: Battery and MI → Load → Grid

D. Forbidden Discharging

Forbidden Discharging mode will disables discharging the battery for a set period of time, Up to 4 customizable time periods.



Energy flow:

MI → Battery → Load → Grid

4. Installation

4.1 Pre-installation

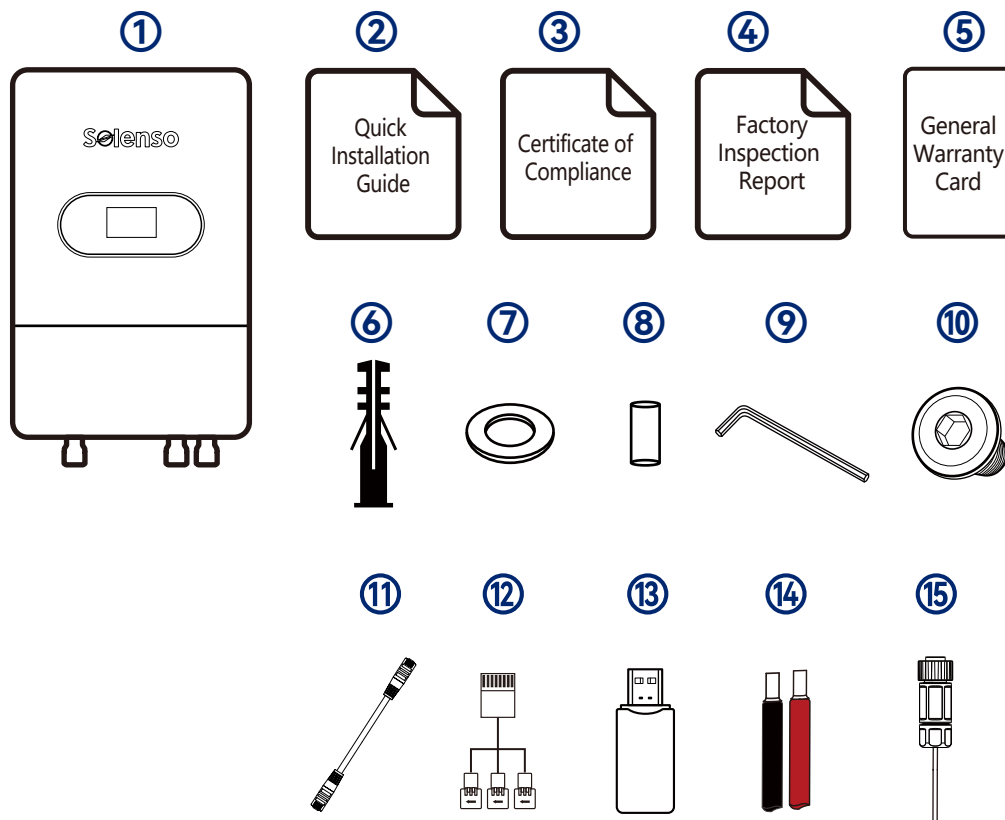
4.1.1 Unpacking & Package List

Unpacking

On receiving the AC coupler, please check to make sure the packing and all components are not missing or damaged. Please contact your dealer directly for supports if there is any damage or missing components.

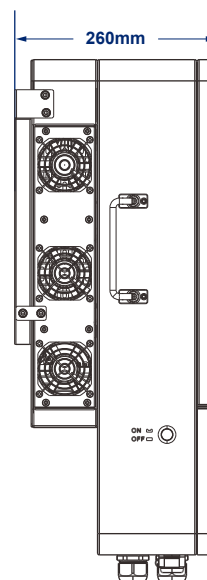
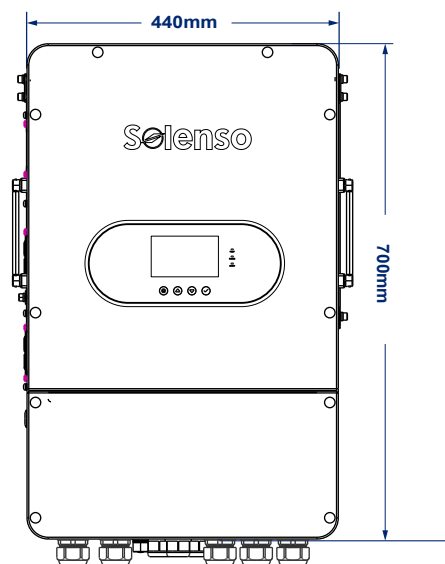
Package List

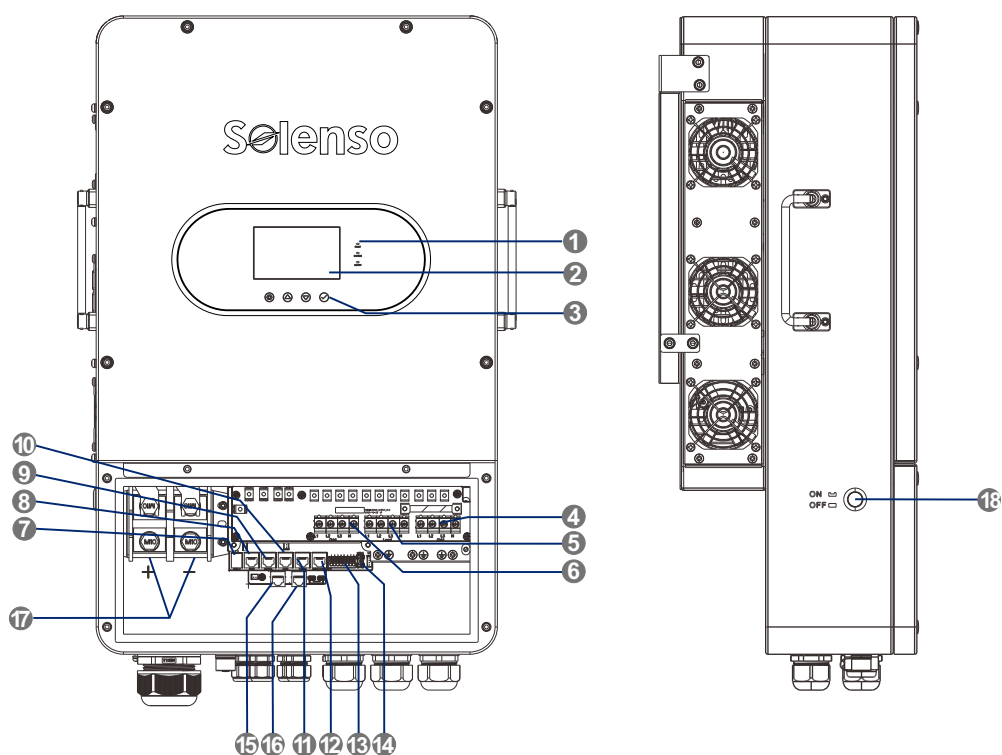
Open the package, please check the packing list shown as below.



No.	Accessory Name	Specification/Description	Quantity	Description
1	AC Coupler	SoWave TL12	1	
2	Quick Installation Guide	English	1	Standard Accessory
3	Certificate of Compliance	English	1	Standard Accessory
4	Factory Inspection Report	English	1	Standard Accessory
5	General Warranty Card	English	1	Standard Accessory
6	Expansion Screw	M8x60_304 Stainless Steel	4	Wall Mounting the Unit
7	Washer	M8X20_1.5 Stainless Steel	4	Wall Mounting the Unit
8	Terminal Block	SC70-10	2	Crimping Battery Wires
9	L-Type Hex Wrench	4mm_CR-V	1	Removing Cover
10	Hexagon Socket Screw	M5*18mm	1	Spare
11	Startup Communication Cable	1.5m Network Cable	1	Unit Startup
12	External CT	-	1	Grid Connection
13	USB Flash Drive	-	1	User Upgrade Use
14	Battery Wire	70mm ²	1	Connecting the Battery
15	Pre-Assembled 4Pin Cable	RS485 to 4-Pin Cable	1	AC Coupler Connecting the DTU

4.1.2 Product Overview

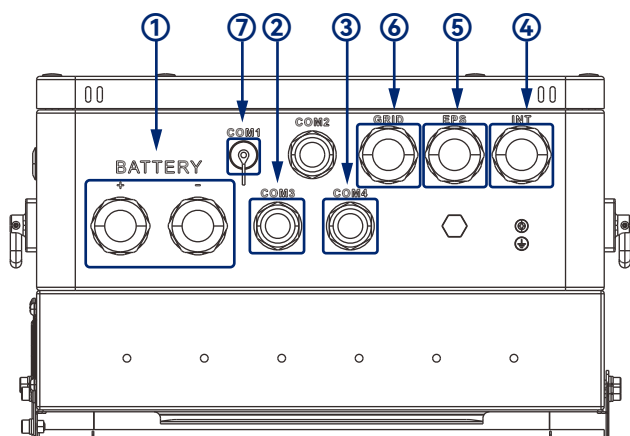




NO.	Items
1	LED indicator
2	LCD screen
3	Physical key
4	INT terminals (L1+L2+L3+N)
5	EPS terminals (L1+L2+L3+N)
6	Grid terminals (L1+L2+L3+N)
7	USB-1
8	WiFi
9	Meter communication terminal

NO.	Items
10	Battery communication terminal
11	DRMS
12	Grid current transformer (CT)
13	Dry contact
14	USB-2
15	Parallel communication B
16	Parallel communication A
17	Battery terminals
18	ON/OFF switch

AC coupler Terminals



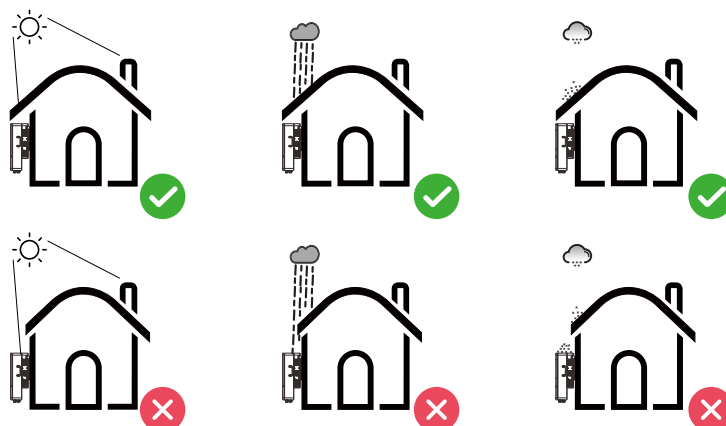
No.	Items
1	Battery Port
2	BAT Communication Port
3	CT Communication Port
4	Microinverter Port

No.	Items
5	EPS Port
6	AC & Grid Port
7	DTU Communication Port

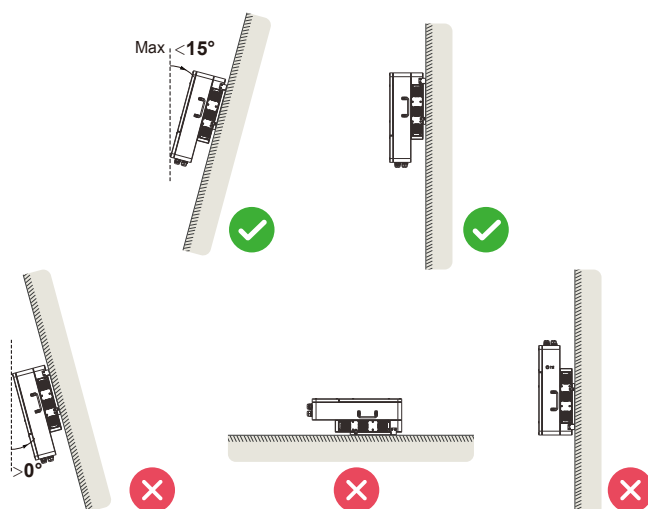
4.1.3 Mounting Location Note

The AC coupler are designed for indoor and outdoor installation (IP65), to increase the safety, performance and lifespan of the AC coupler, please select the mounting location carefully based on the following rules:

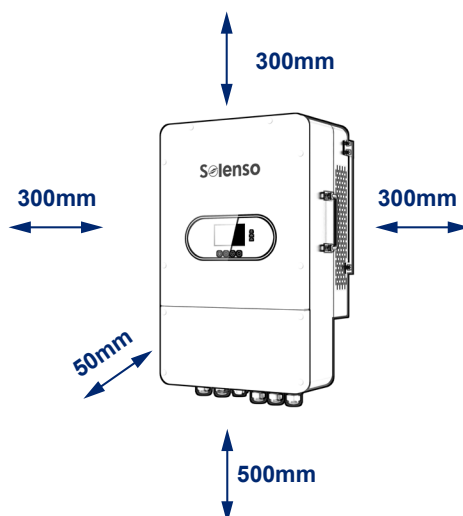
- The AC coupler should be installed on a solid surface, far from flammable or corrosion materials, where is suitable for AC coupler's weight and dimensions.
- The ambient temperature should be within -25°C ~ 60°C (between -13 °F and 140°F).
- The installation of AC coupler should be protected under shelter. Do not expose the AC coupler to direct sunlight, water, rain, snow, spray lightning, etc.



- The AC coupler should be installed vertically on the wall, or lean back on plane with a limited tilted angle. Please refer to below picture.



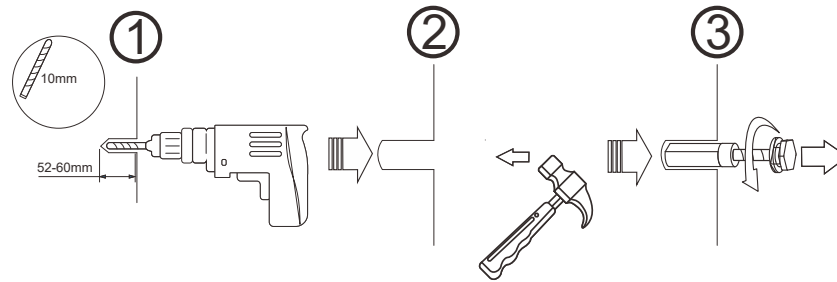
- Leave the enough space around AC coupler, easy for accessing to the AC coupler, connection points and maintenance.



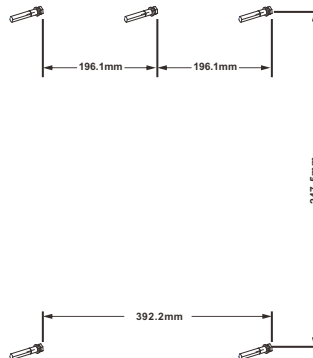
4.1.4 Mount the AC Coupler

Punch 5 mounting holes in the wall with an electric drill according to the specified size, and insert 5 M8*60 expansion screws above.

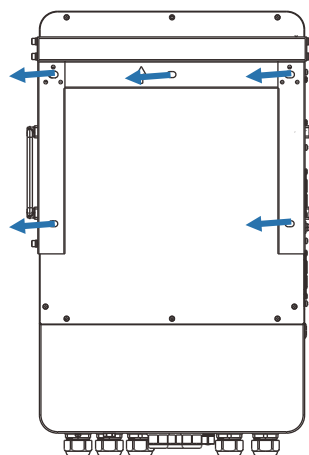
Step 1: Drill holes at appropriate positions and insert the screws.



Step 2: Secure the five screws one by one.



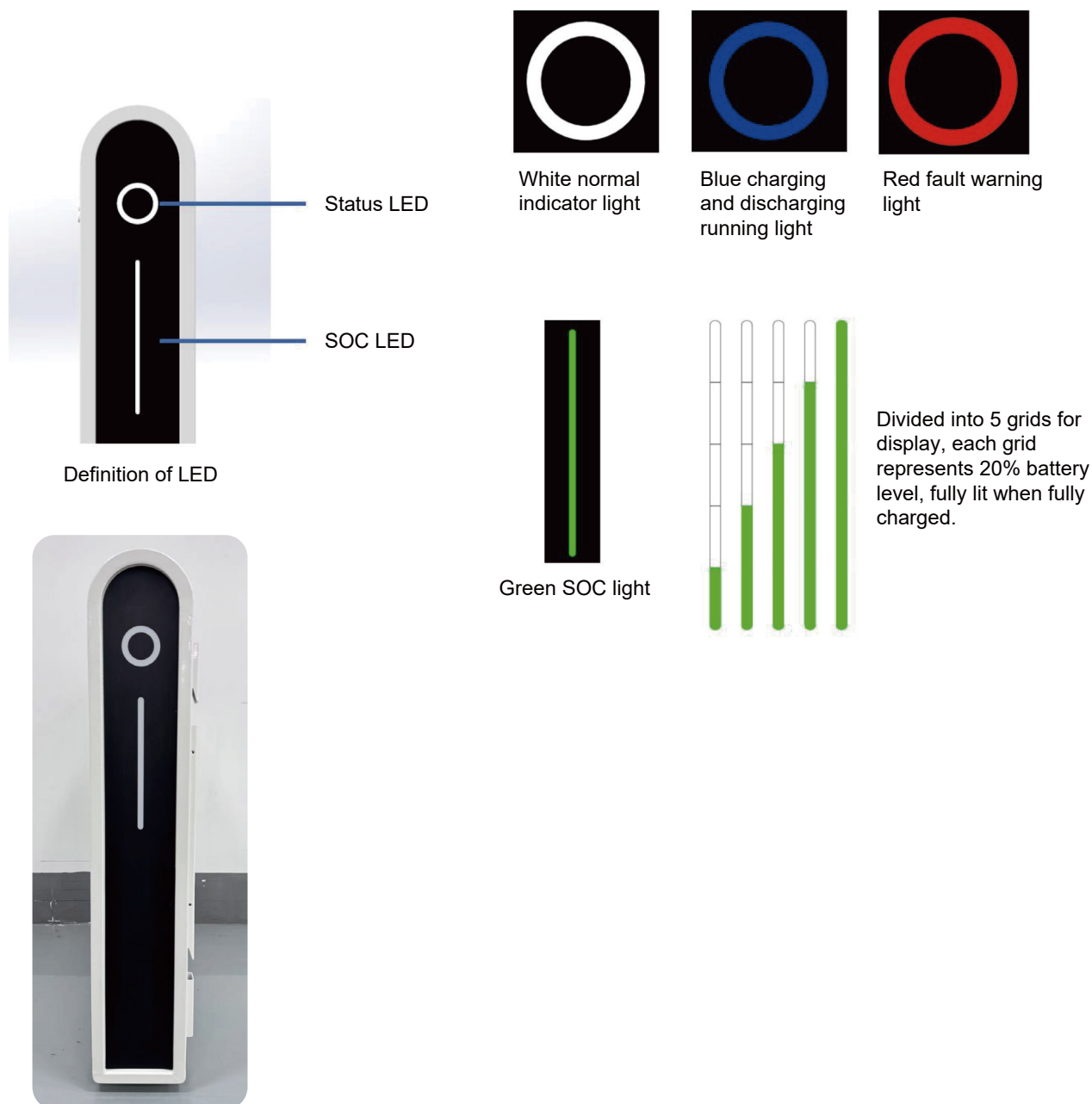
Step 3: Hang the AC Coupler on the screws.



4.2 Battery Instruction

4.2.1 LED Instruction

There are 2 LED indicator, 1 strip LED gives status of SoC, 1 circular LED displays the battery status (indicating charging, discharging etc.).



4.2.2 Package List

Open the package, please check the packing list shown as below.



①



②



③



④



⑤



⑥



⑦



⑧



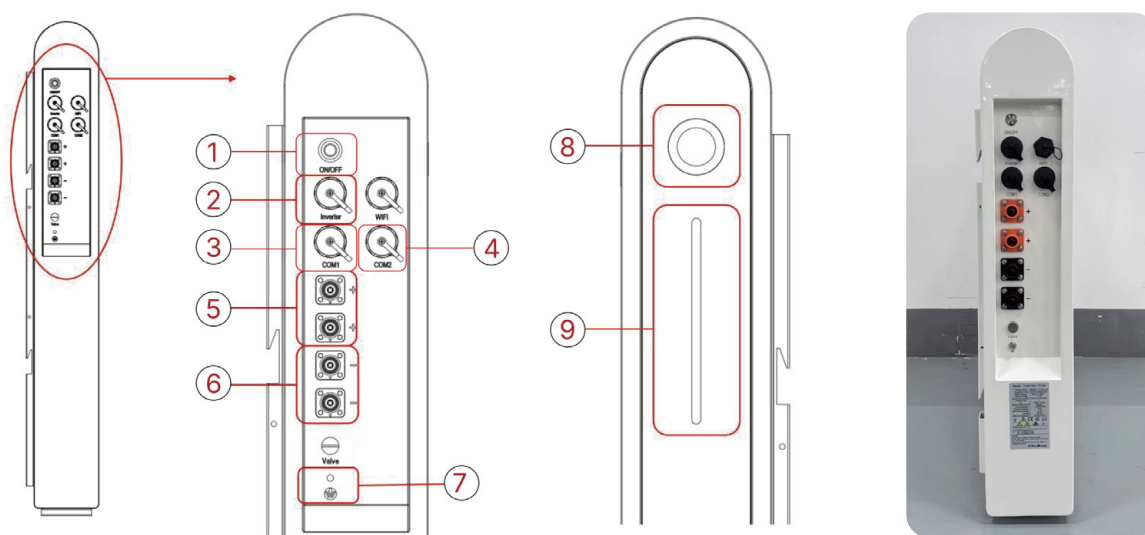
⑨



⑩

No.	Qty	Items	Specification	Note
1	1	Battery System	Lithium Battery	Standard
2	1	Wall-mount	Bracket	Standard
3	4	Accessory Bag	Expansion Bolts: M6x80	Standard
4	1	Accessory Bag	Hexagonal Wrench	Standard
5	4	Accessory Bag	Screw	Standard
6	2	Output Cable	Power Cable Positive: Red plug,25mm ² /L1.5m Negative: Black plug,25mm ² /L1.5m	Option
7	1	Output Cable	Communication cable to Inverter Black/L1.5m/Double RJ45 Plug	Option
8	1	Output Cable	Ground Cable Yellow,Green/L1m/Double OT M6	Option
9	2	Paralle Cable	Power Cable Positive: Red plug,25mm ² /L1.5m Negative: Black plug,25mm ² /L1.5m	Option
10	1	Paralle Cable	Communication cable to Inverter Black/L1.5m/Double RJ45 Plug	Option

4.2.3 Battery Port Instruction



No.	Items	Model	Remarks
1	Power On/Off Switch		
2	Communication port	RJ45	Single RS485 and CAN for inverter and app
3	Communication port	RJ45	
4	Communication port	RJ45	
5	Port Positive x2		Orange, 25 mm ²
6	Port Negative x2		Black, 25 mm ²
7	GND	M6	Yellow-Green, 10 AWG
8	RUN LED		
9	SOC LED		

4.2.4 Battery Cable Configuration

4.2.4.1 Single Unit Connection

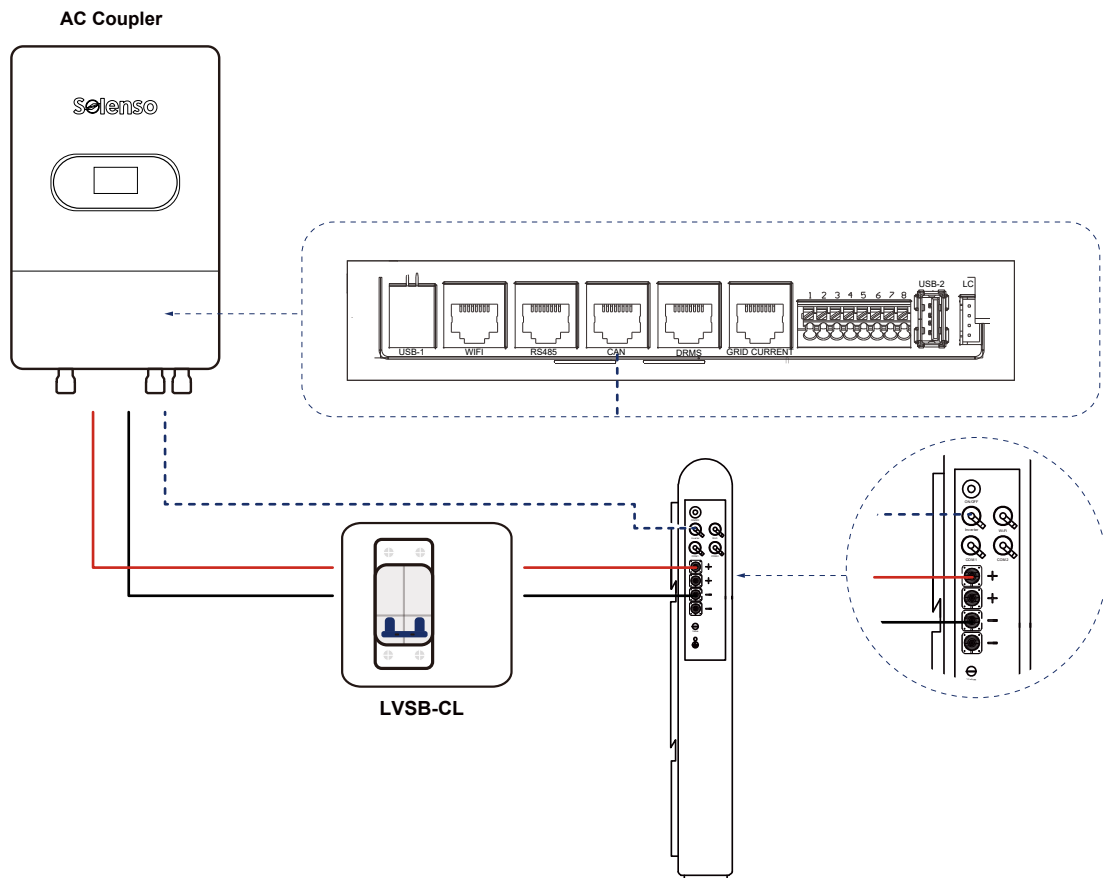


Fig.4.5.1 Single Unit Connection

Single unit charge/discharge power with LVS Box

		Charge power (kW)		Discharge power (kW)	
AC Coupler	Breaker	5.12kWh	10.24kWh	5.12kWh	10.24kWh
Sowave-TL12	125A	2.56	5.12	5.12	5.12

We have two kinds of LVS Box. LVSB-CL is applicable to SoWave-TL12 AC Couplers.

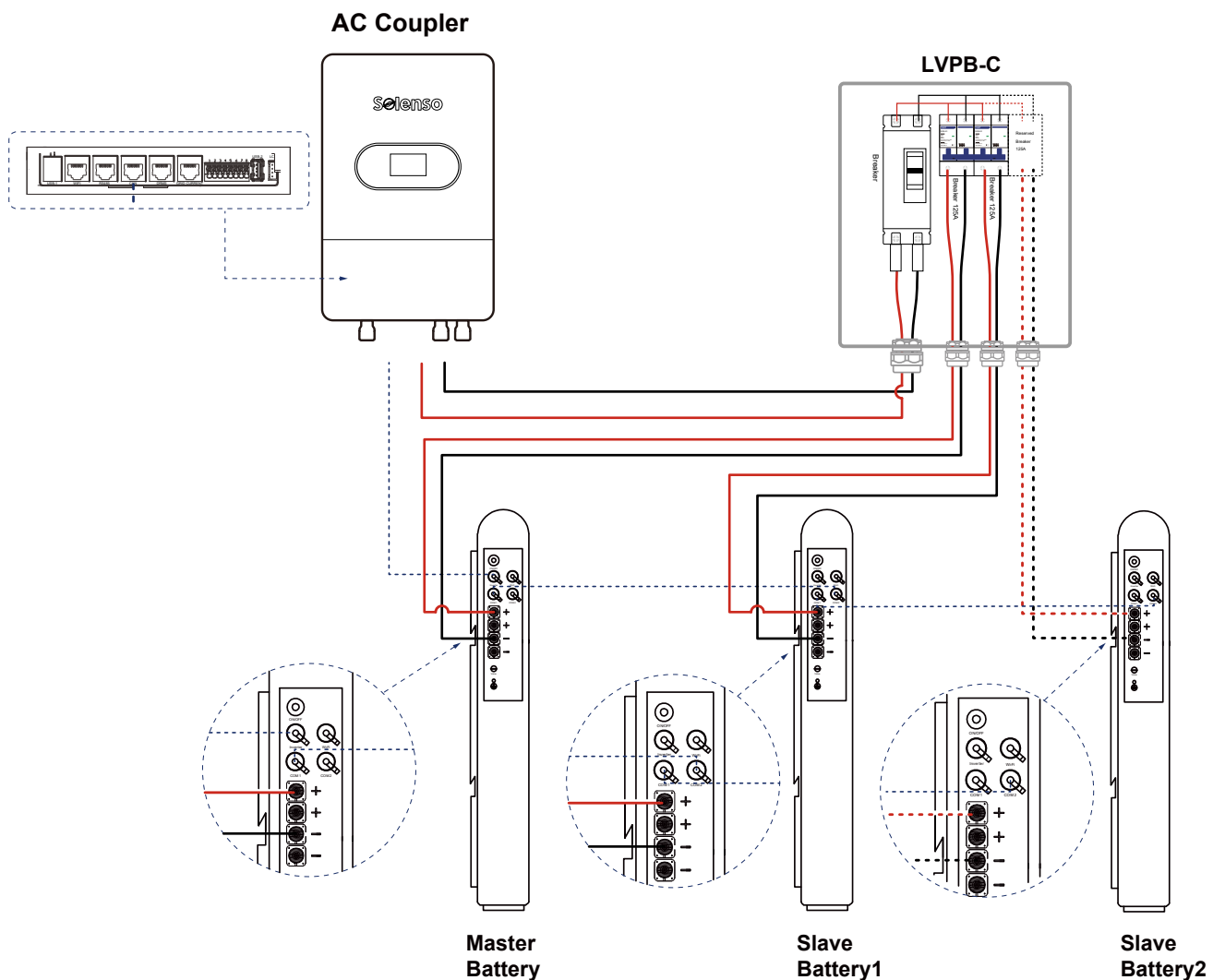
4.2.4.2 Multiple Units Connection

Parallel Connection Requirement:

CALB lithium batteries with different capacities (e.g. 5.12 kWh and 10.24 kWh) must NOT be connected in parallel. Parallel connection of batteries with different capacities may cause uneven current sharing, inconsistent SOC behavior, premature BMS protection, and accelerated aging of the smaller-capacity battery. Only CALB batteries of the same model, capacity, and voltage are permitted for parallel connection.

Before connecting the batteries in parallel. Please ensure that the battery voltage difference is less than 1V.

For the three phase AC Coupler multiple units connection , only the LVPB-C wiring method is recommended. The LVPB-C is pre-installed with two circuit breakers and reserves one additional installation position for circuit breakers.

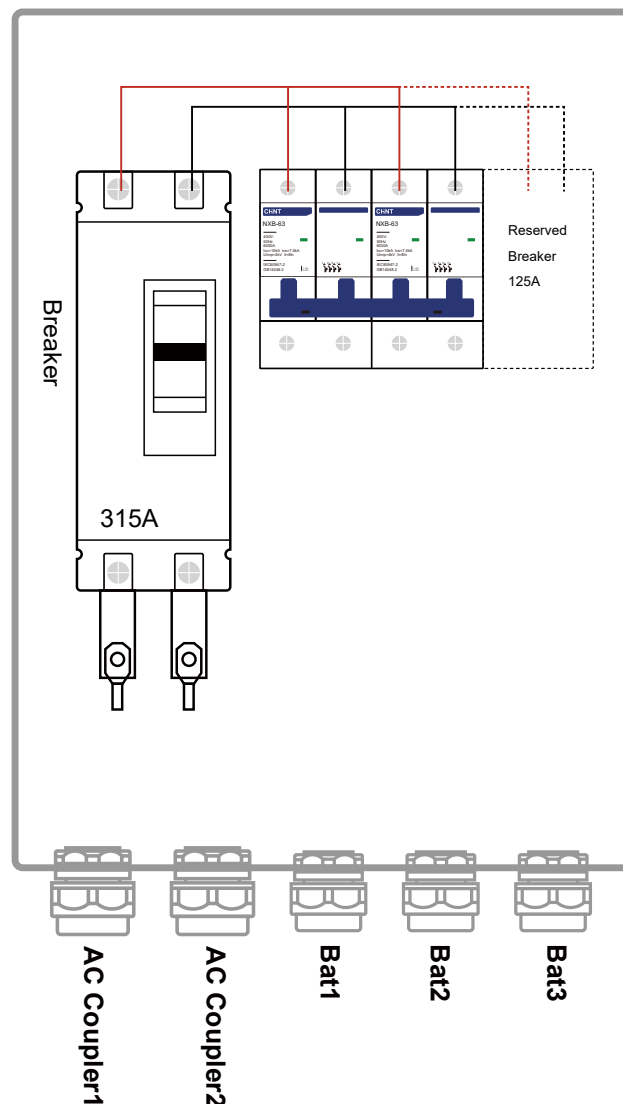


Multiple units charge/discharge power with LVPB-C

				Charge power (kW)		Discharge power (kW)	
LVPB-C	AC Coupler	Battery quantity	Breaker	5.12kWh	10.24kWh	5.12kWh	10.24kWh
	Sowave-TL12	2pcs	315A	5.12	10.24	10.24	10.24
		3pcs	315A	10.24	13.31	13.31	13.31

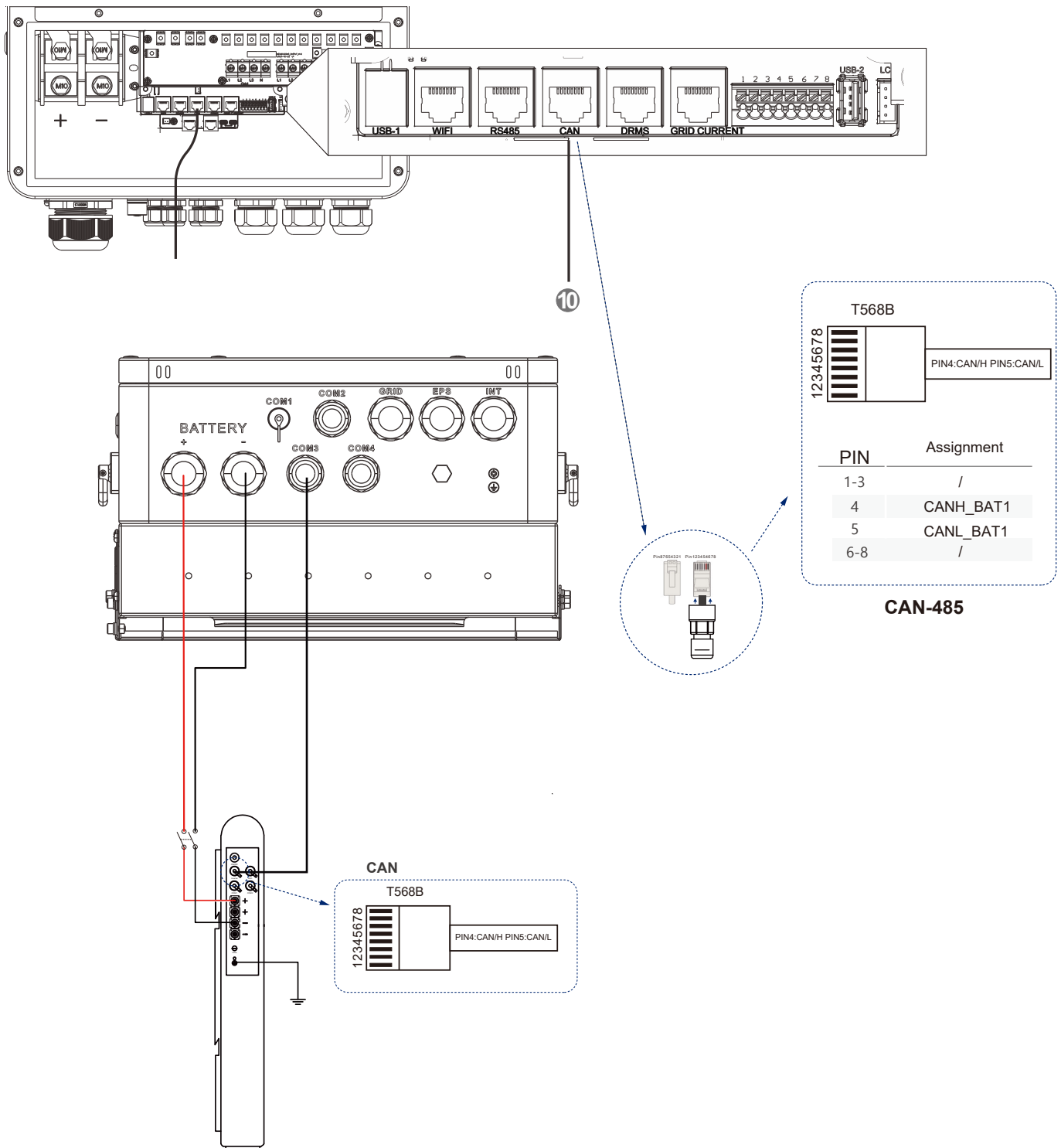
4.2.4.3 LVPB-C Introduction

The LVPB-C accommodates up to three batteries connected to the AC Coupler. The device is pre-installed with two circuit breakers and reserves one additional installation position for circuit breakers. If multiple batteries need to be connected in parallel, please contact the supplier to purchase this device.

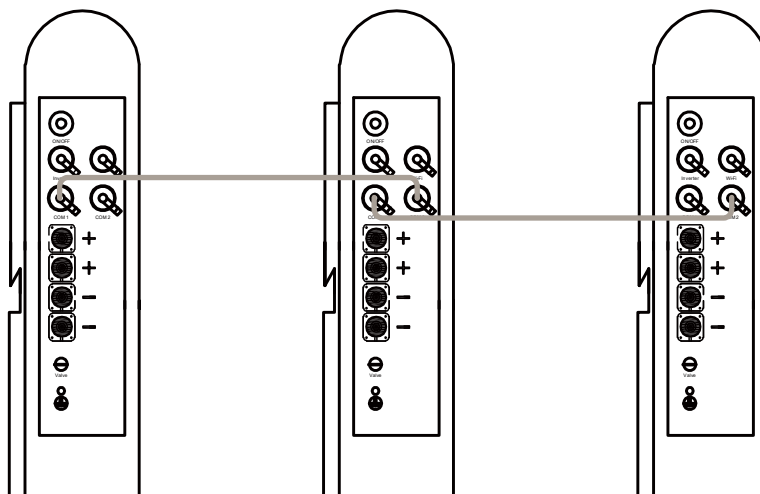


4.2.4.4 Battery Communication Cable Connection

As shown in the AC Coupler's diagram, find the battery communication cable in the battery package. Connect one end to the battery's Inverter Port. The other end passes through the COM3 port of the AC coupler and finally connects to the terminal 10.



Multiple units communication parallel connection method: Connect the communication cable to the COM1 port of the last battery and the COM2 port of the next battery to ensure the communication function.

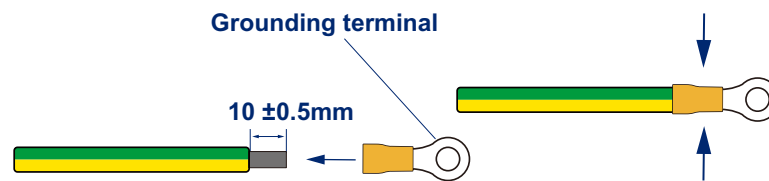


4.2.5 Battery Earth Connection

⚠ Note:

A protective earth (PE) terminal should be connected to the Battery. The ground cable can ensure the safety of the equipment.

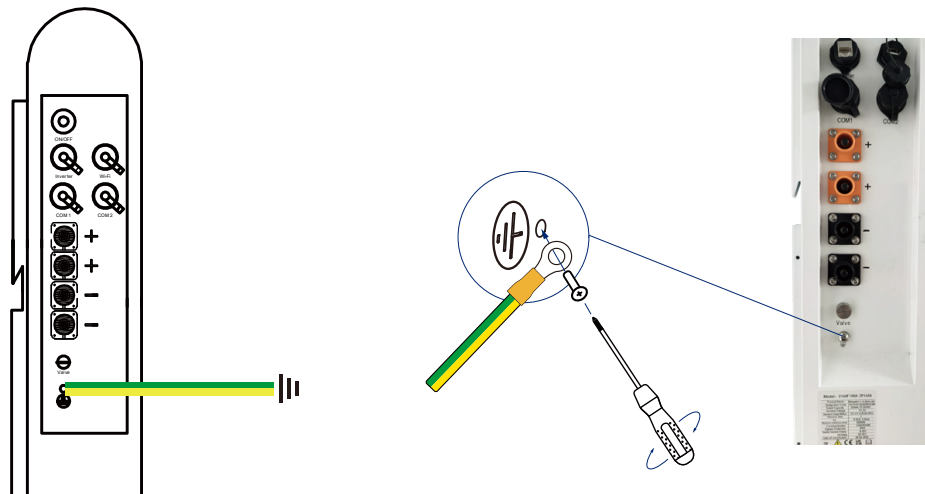
Step: 1



⚠ Note:

You can find the ground cable in the battery package.
Ground Cable: Yellow, Green/L1m/Double OT M6.

Step: 2

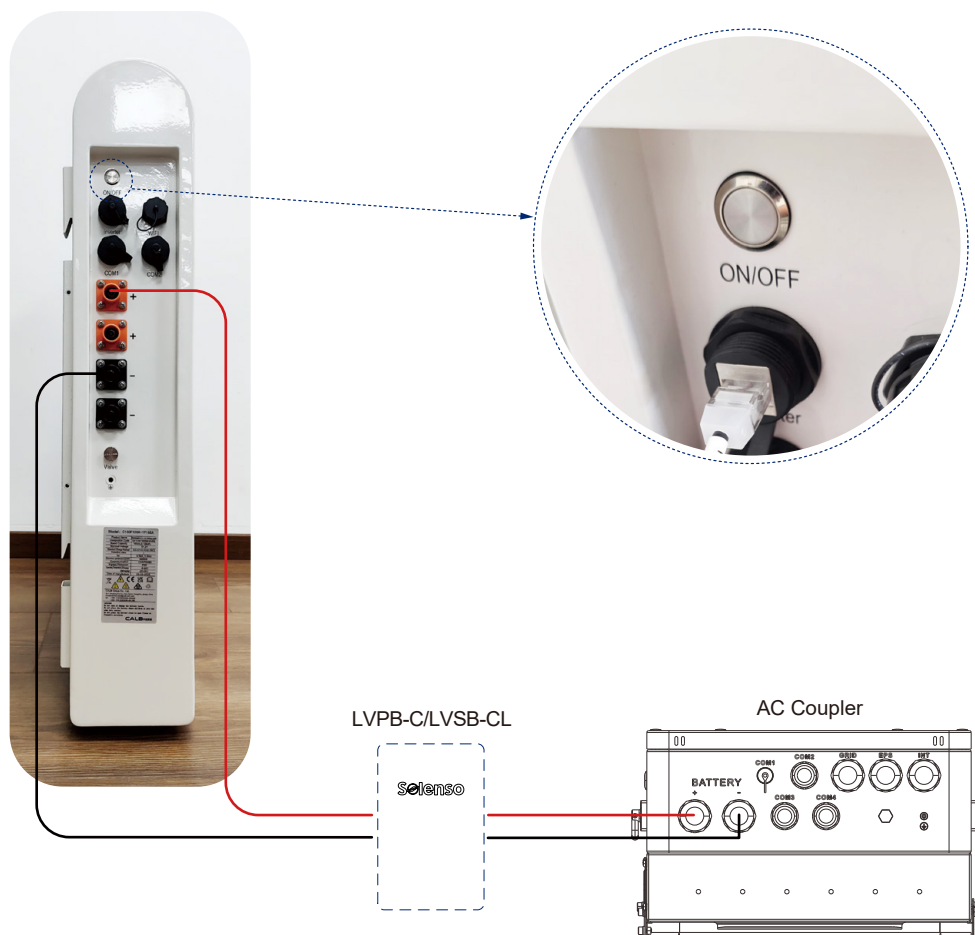


Fix the grounding screw to the grounding connection of the machine housing.

4.2.6 Powering On and Off the Energy Storage System

System Operation Notice:

- When turning ON the energy storage system:
 1. Switch ON the LVP/LVS Box first
 2. Then turn ON the battery power
- When turning OFF the energy storage system:
 1. Turn OFF the battery power first
 2. Then switch OFF the LVP/LVS Box

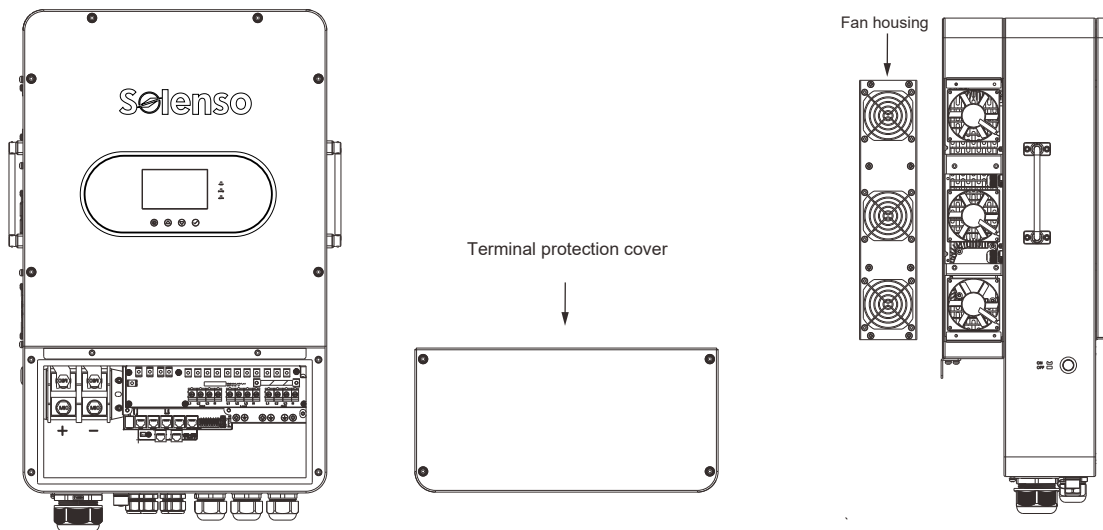


4.3 AC Coupler Port Configuration

Remove terminal protection cover and dust screen

Before doing the connection. Please first remove the terminal protection cover.

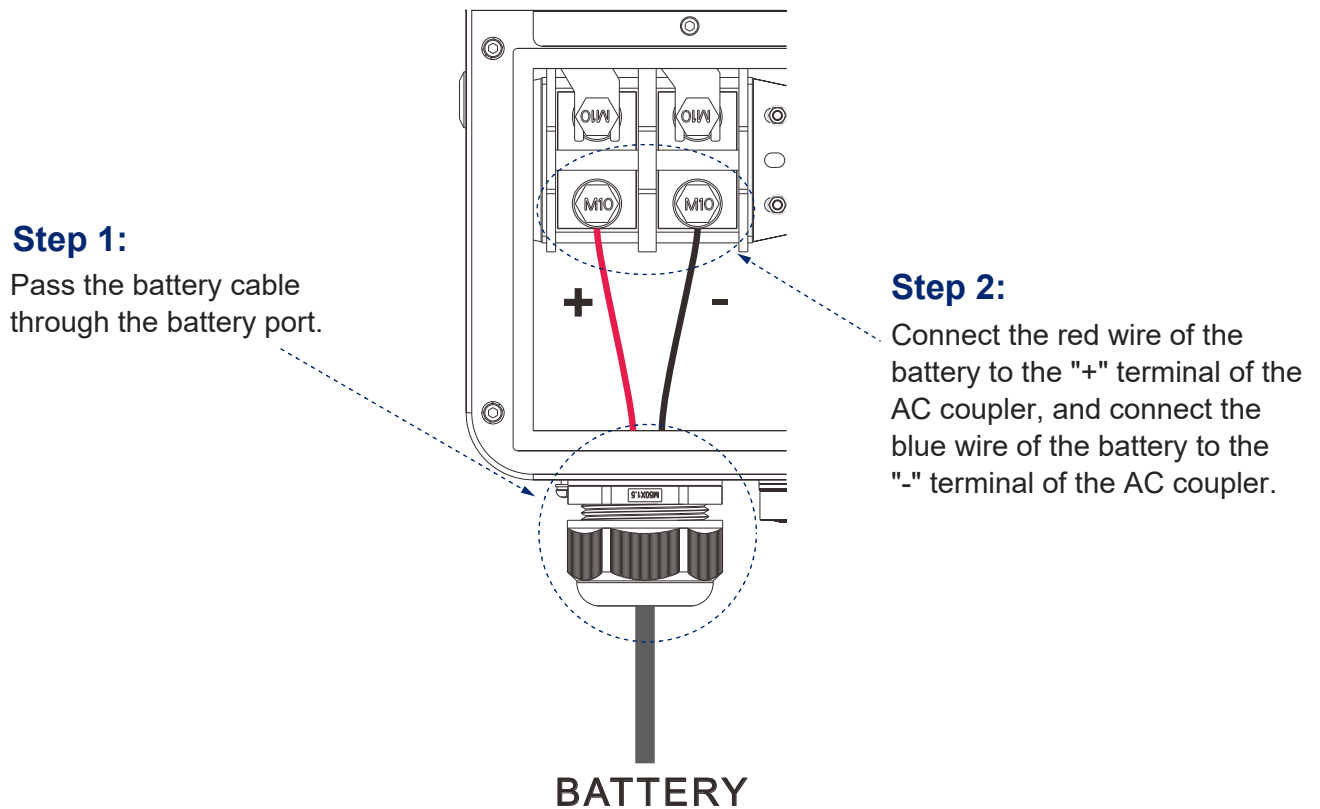
Using a screwdriver, remove the terminal protection cover and dust screen.



When using the device in areas with poor air quality, the dust screen is easily blocked by air particles. Please disassemble and clean the dust screen periodically to avoid affecting the internal air flow rate of the inverter, which may trigger an over-temperature protection fault (19/20 fault) affecting the use of the power supply and the service life of the inverter.

4.3.1 Battery connection

Connect the positive and negative cable of the battery according to the diagram below.



Note:

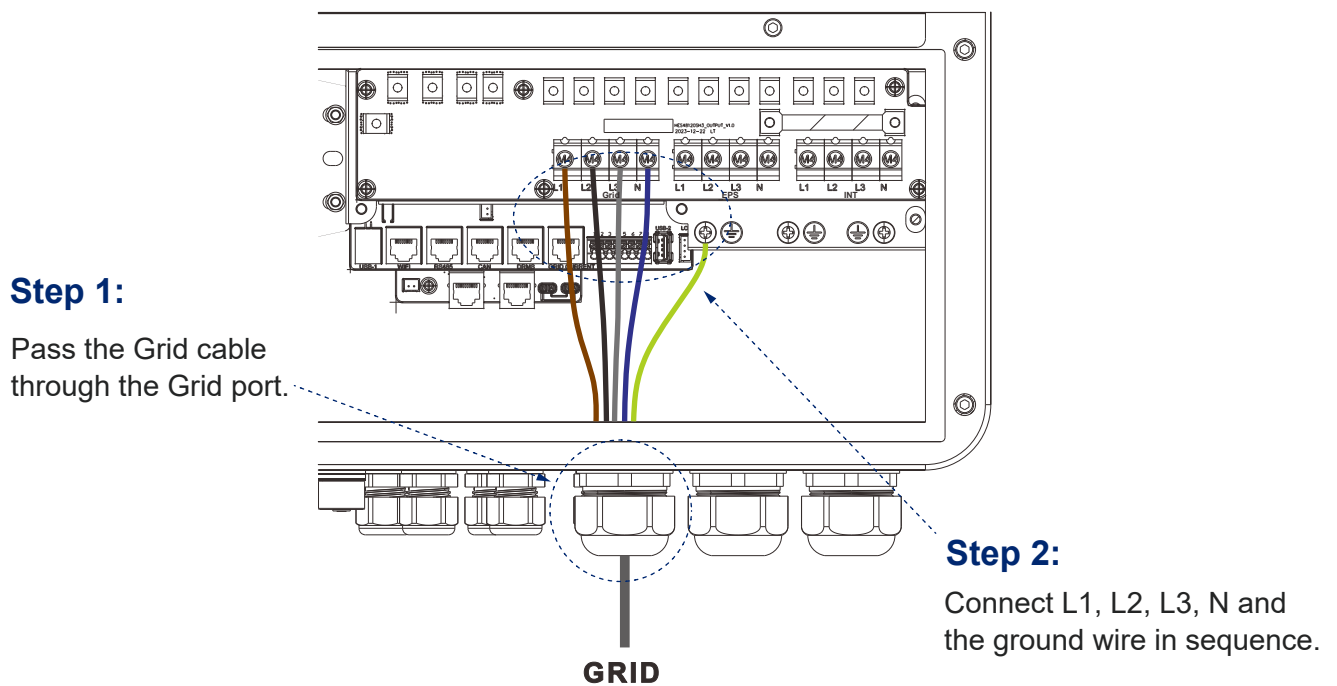
- Before connecting the battery, the circuit breaker must be disconnected to avoid the risk of electric shock and must not be operated with electricity.
- Please ensure that the positive and negative terminals of the batteries are correctly connected and not reversed, otherwise the AC Coupler may be damaged.
- Please check that the cable used is sufficient for the requirements, too thin, poor quality cables are a serious safety hazard.

4.3.2 Communication Cable Instruction (BAT-CAN)

This has been previously described. For detailed information, please refer to **Section 4.2.4.4**.

4.3.3 Grid port connection

Connect the live, neutral and ground cables in the position and order of the cables as shown in the diagram below.



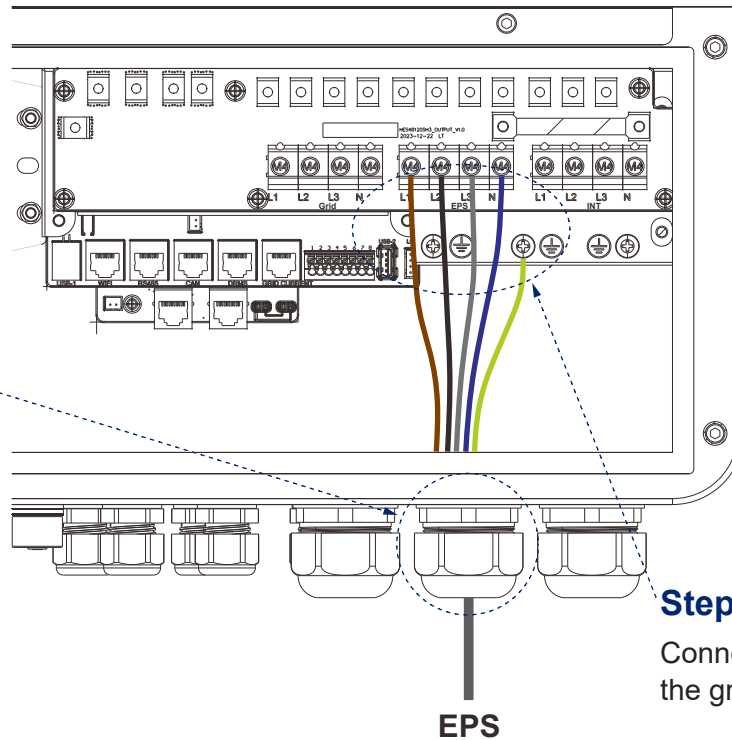
Note:

- Before connecting the Grid port, the circuit breaker must be disconnected to avoid the risk of electric shock and must not be operated with electricity.
- Please check that the cable used is sufficient for the requirements, too thin, poor quality cables are a serious safety hazard.

4.3.4 EPS port connection

Step 1:

Pass the EPS cable through the EPS port.



Step 2:

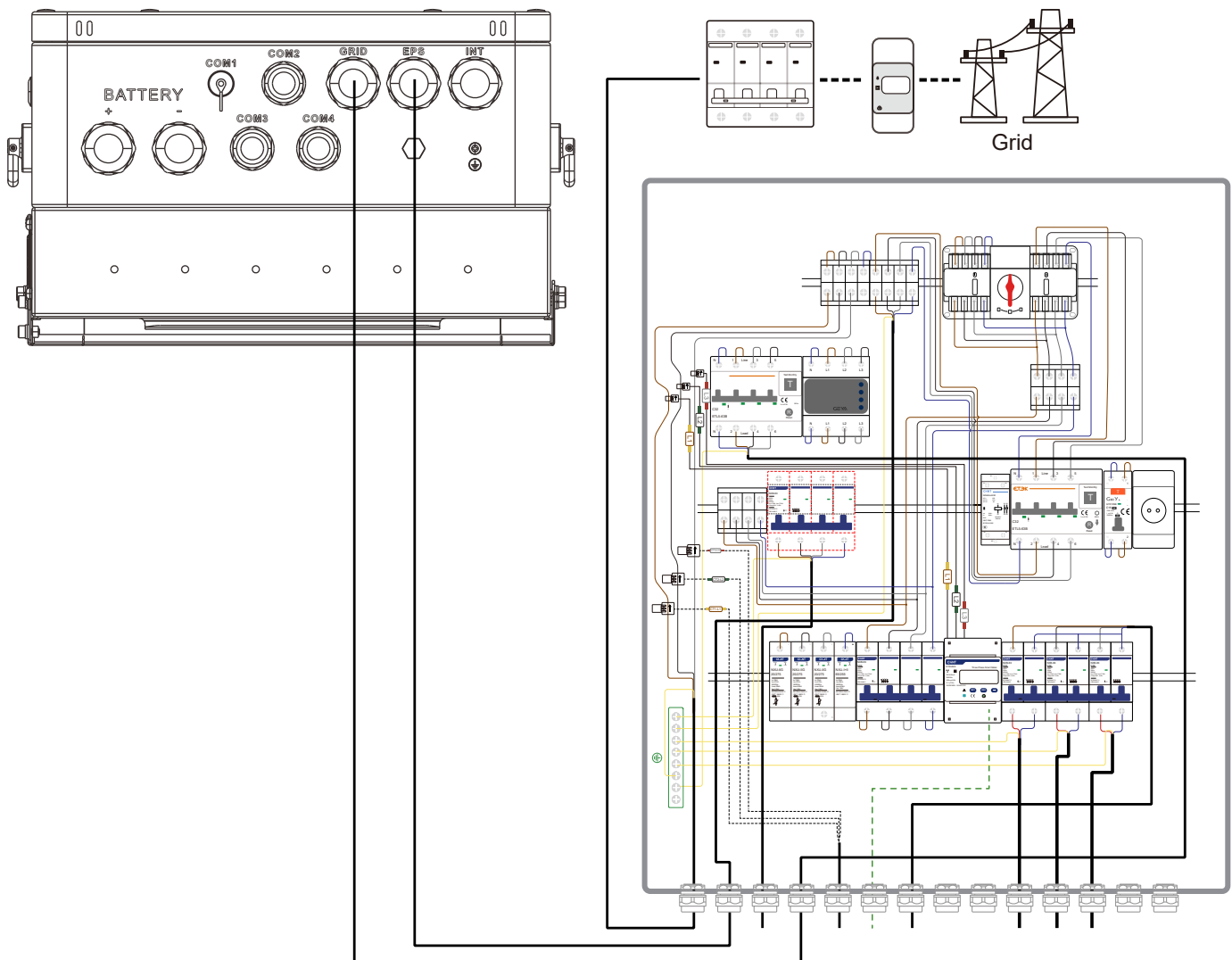
Connect L1, L2, L3, N and the ground wire in sequence.

Note:

- Before connecting the EPS port, the circuit breaker must be disconnected to avoid the risk of electric shock and must not be operated with electricity.
- Please check that the cable used is sufficient for the requirements, too thin, poor quality cables are a serious safety hazard.

4.3.5 ATS configuration

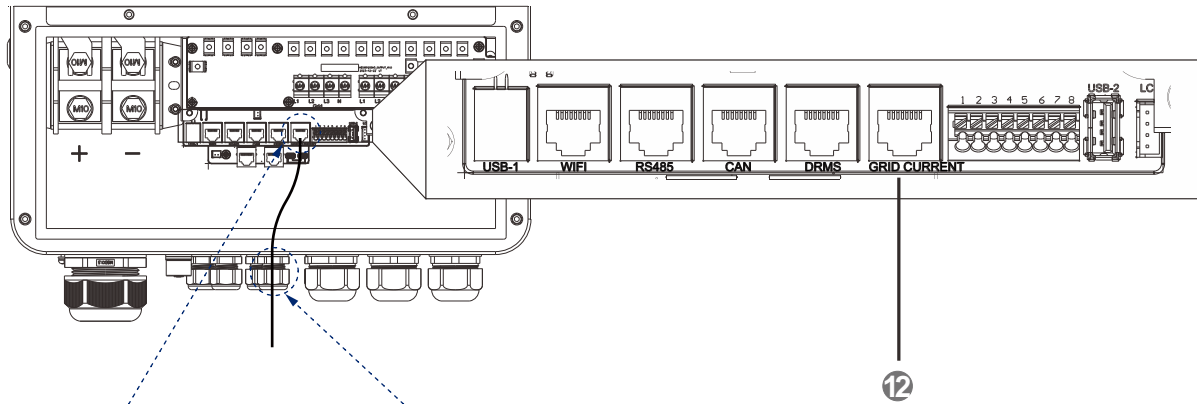
Installing the ATS on the EPS side of the AC coupler ensures that emergency power is supplied to the load when the grid power fails. The function of the ATS is to automatically or manually switch between two power sources to ensure continuous power supply to the load. We have Boxes containing ATS available for purchase if you need it.



EPS stands for Emergency Power Supply. It starts and operates off-grid during a power outage, using micro-inverters and batteries to supply electricity.

4.3.6 CT Connection

Connection are used to detect current power direction of the local load and the grid. The output control function of the AC Coupler will be activated based on the detected data.



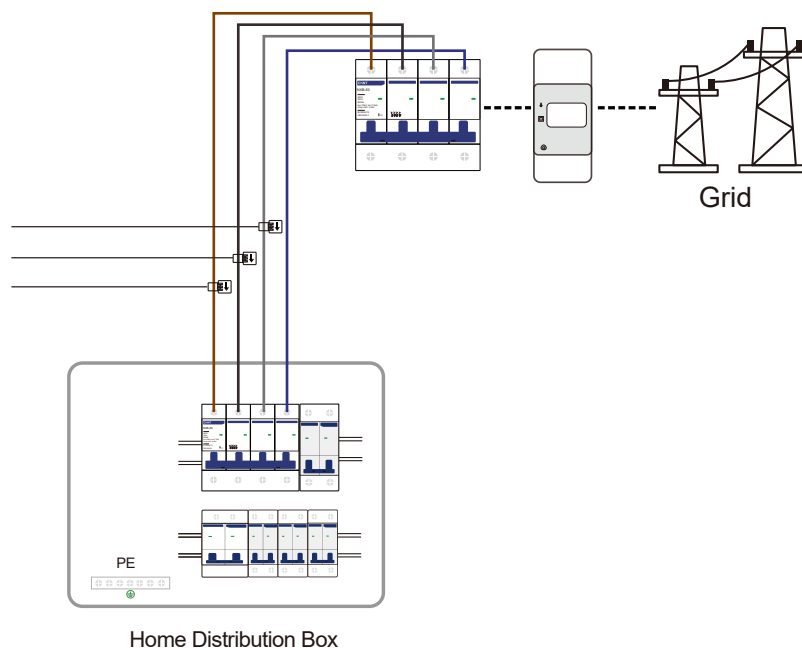
Step 2:

Insert the line to terminal 12

Step 1:

Pass the CT cable through the CT communication port.

The opposite end of the CT cable is terminated with three current transformers (CTs). Please connect the aforementioned CTs to the grid line in accordance with the requirements specified in Section 4.3.9.

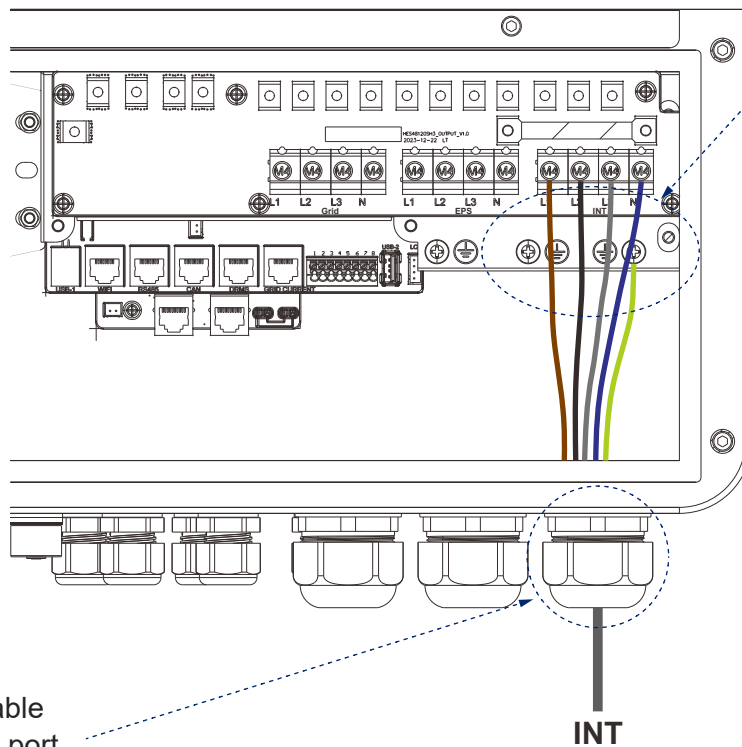


4.3.7 Microinverter Connection

INT Port Supports Three-Phase Dynamic Balance.

Step 2:

Connect L1, L2, L3, N and the ground wire in sequence.



Step 1:

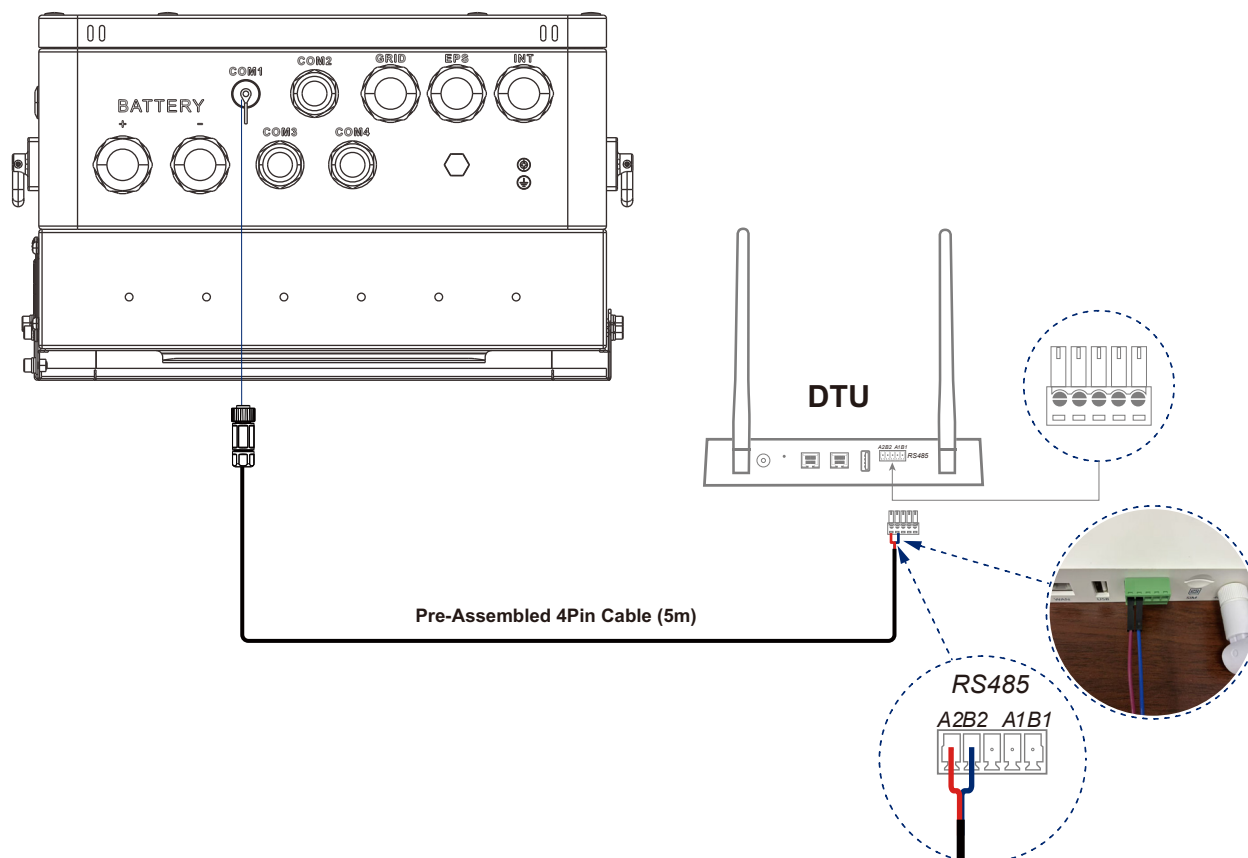
Pass the INT cable through the INT port.

⚠ Note:

- Before connecting the INT port, the circuit breaker must be disconnected to avoid the risk of electric shock and must not be operated with electricity.
- Please check that the cable used is sufficient for the requirements, too thin, poor quality cables are a serious safety hazard.

4.3.8 DTU Connection

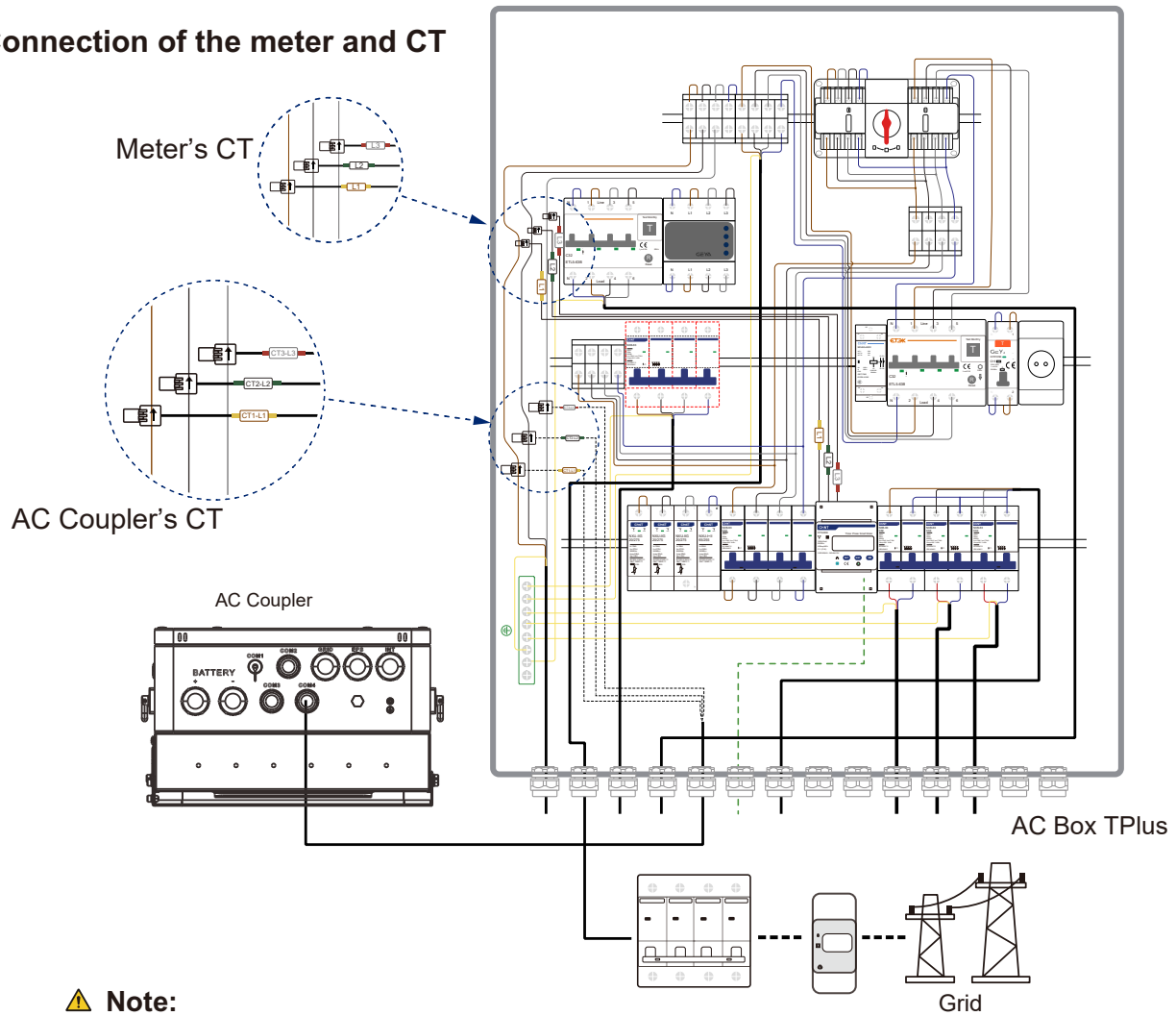
Please find the Pre-Assembled 4Pin Cable (5m) in the package. Please connect the line to DTU port. One end shall be inserted into the COM1 port of the AC Coupler, while the other end shall be connected to the A2 and B2 terminals of the DTU's RS485 port.



4.3.9 Meter Connection

Meter is used to detect current direction and power of the grid side. The Export Management function of the Microinverters will be activated based on the detected data.

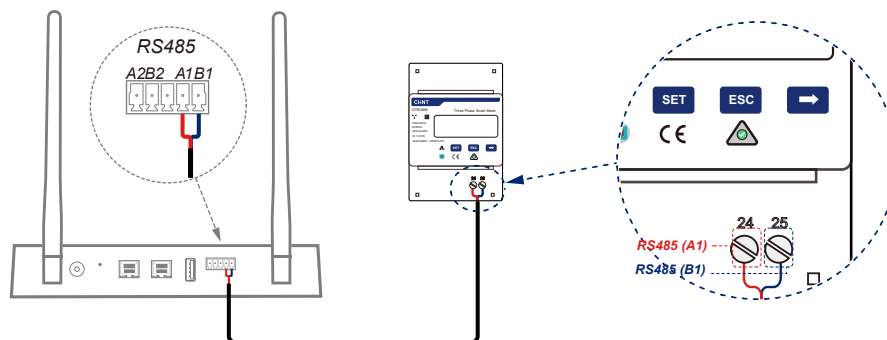
Connection of the meter and CT



⚠ Note:

The CT's direction → must point away from the grid side.

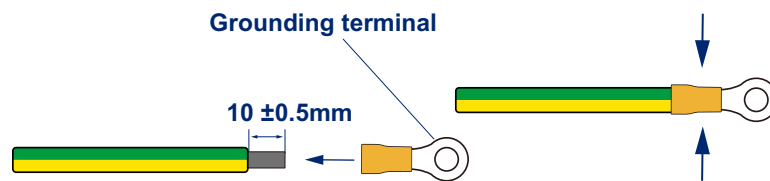
Connection to DTU



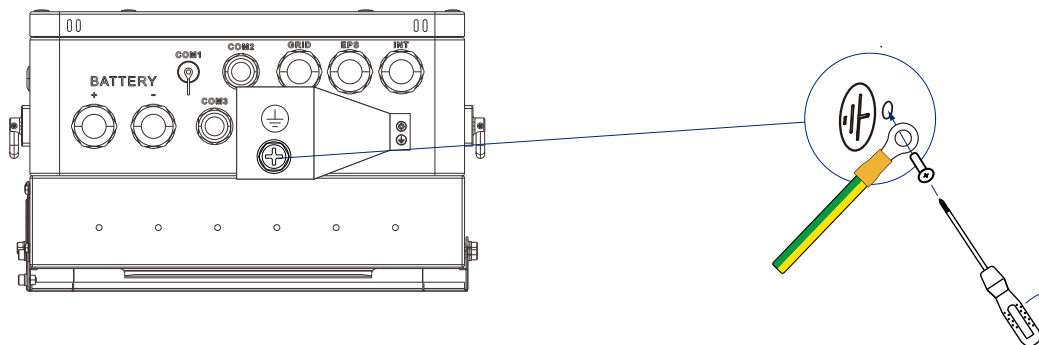
4.3.10 Earth Connection

Make sure that the earth terminal is securely connected to the grounding busbar. Grounding wire shall be not less than 4 mm² in diameter and as close as possible to the earthing point.

Step: 1



Step: 2



4.3.11 Final assembly

After ensuring that the wiring is reliable and the wire sequence is correct, restore the terminal protection cover to its original position.

Step 1: Close the circuit breaker of the battery.

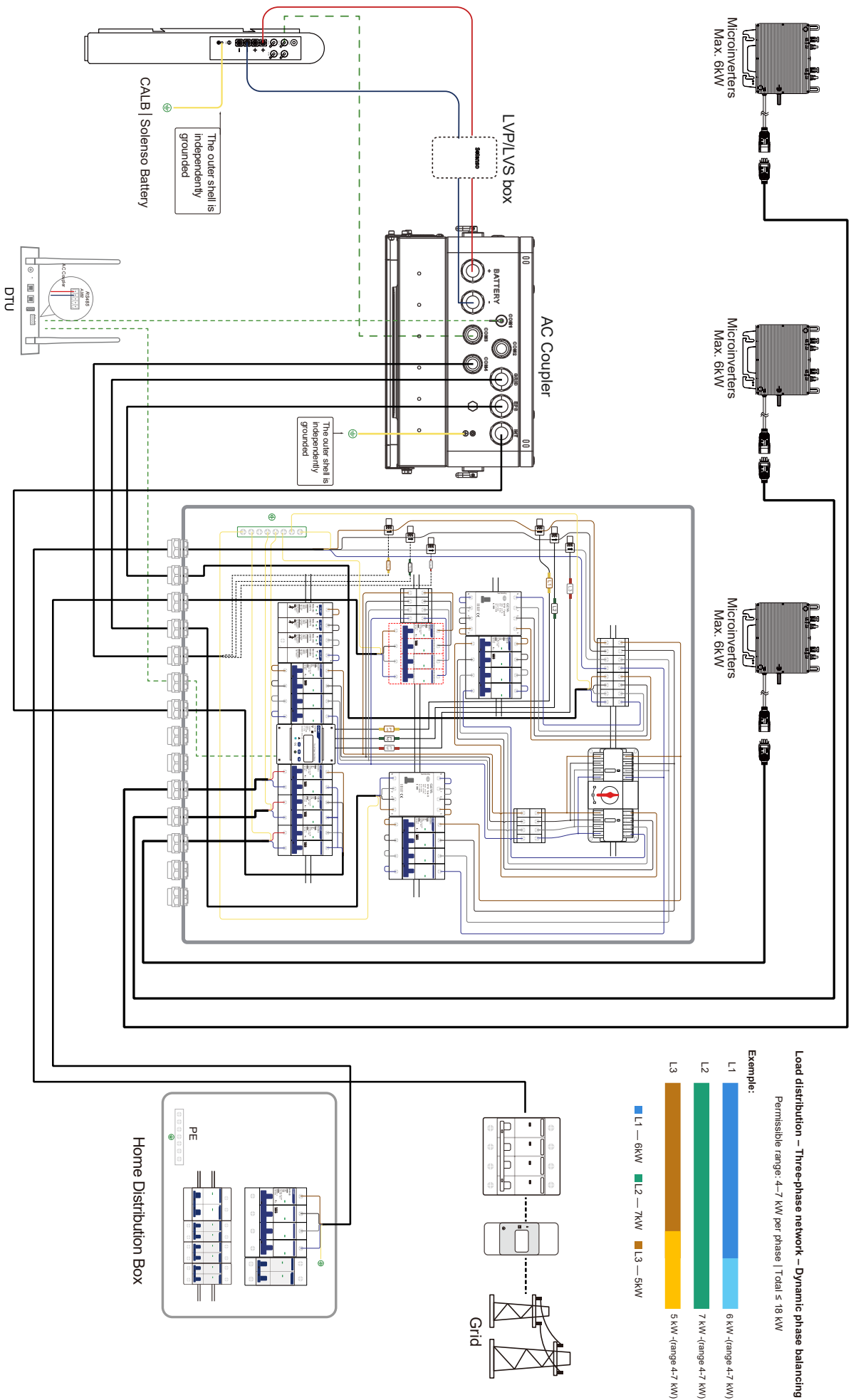
Step 2: Press the ON/OFF switch on the bottom of the AC Coupler, the screen and the indicator light come on to indicate that the AC Coupler is activated.

Step 3: Sequential close of the circuit breakers for Microinverter, Grid and EPS.

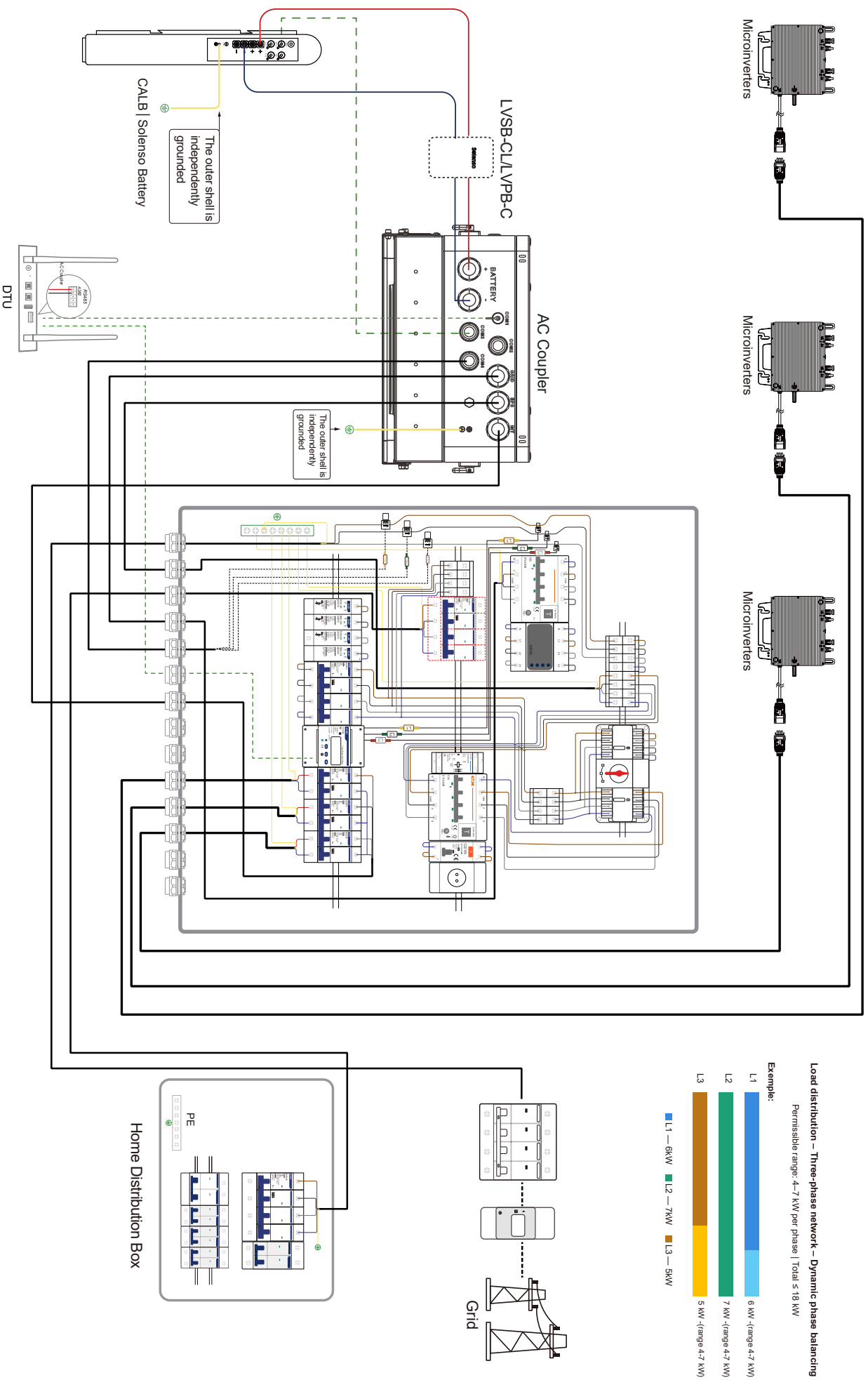
Step 4: Start the loads one by one in order of power from small to large.

4.4 System Wiring Configuration

4.4.1 Microinverter System Wiring with AC Box TPlus (V0)



4.4.2 Microinverter System Wiring with AC Box TPlus (V1)



5. Add AC Coupler and Battery

This is a brief description of how to add the ac coupler and battery.

5.1 Add AC Coupler

A. Add AC Coupler to a new plant

1. Download the “Solenso Pro” App

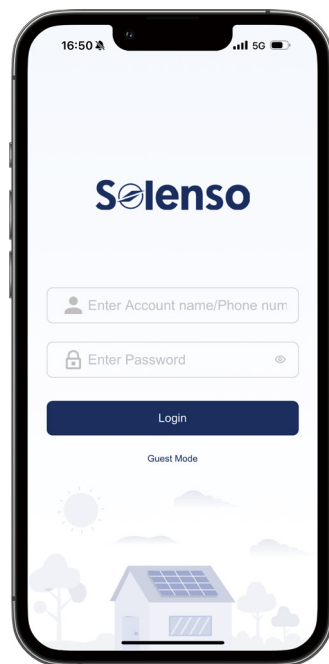


Android



iOS

2. Open the app and log in with your installer account and password. If you are a new installer, please apply for an Installer account from your distributor in advance.

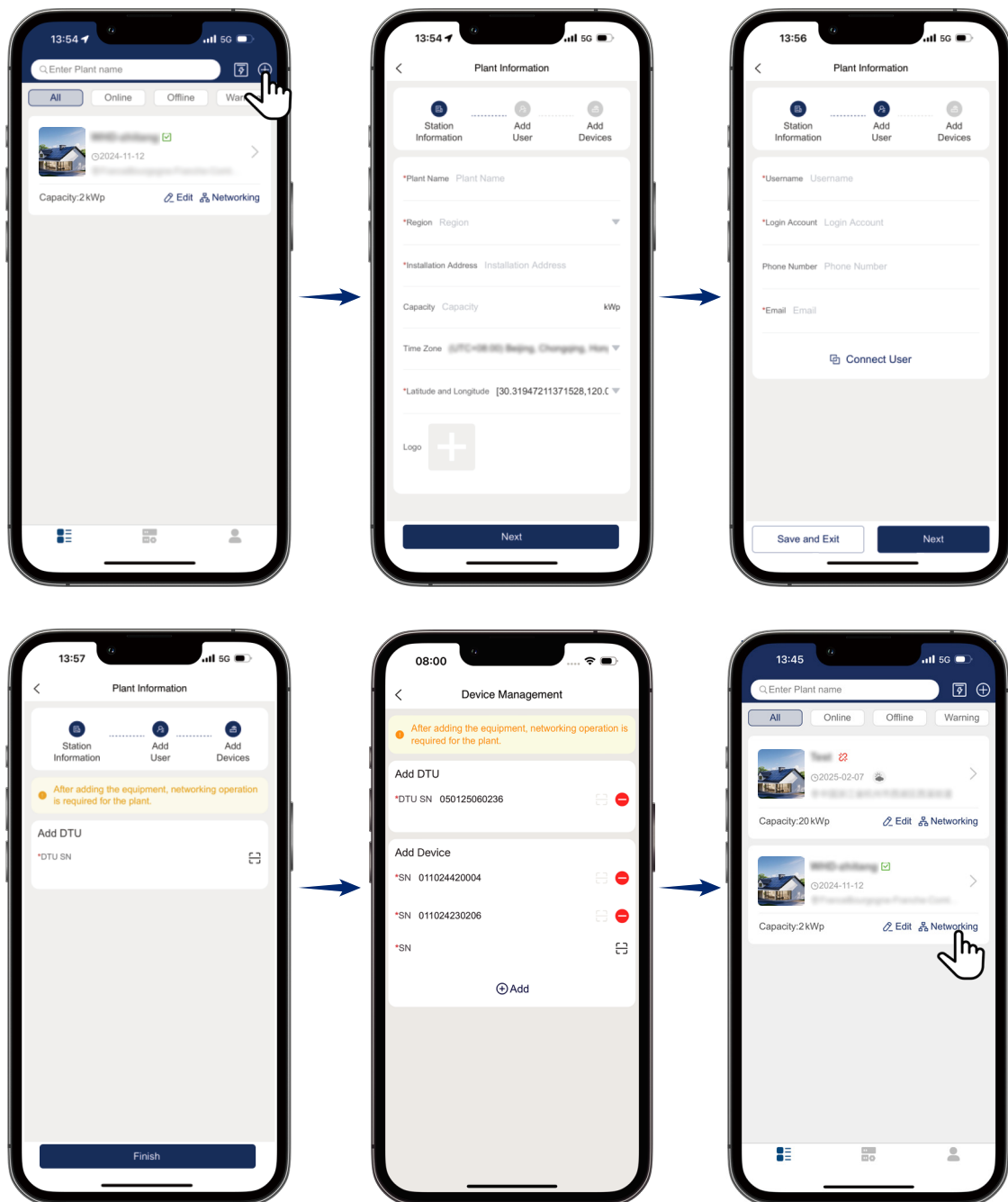


⚠ Note:

If you are a new installer, please contact your distributor or send an email to **log2solenso@solenso-global.com** for an installer account.

3. On the second page, select “+” on the right top side of the page to add plant. Follow the on-screen instructions to fill in the plant details and press “Next”.

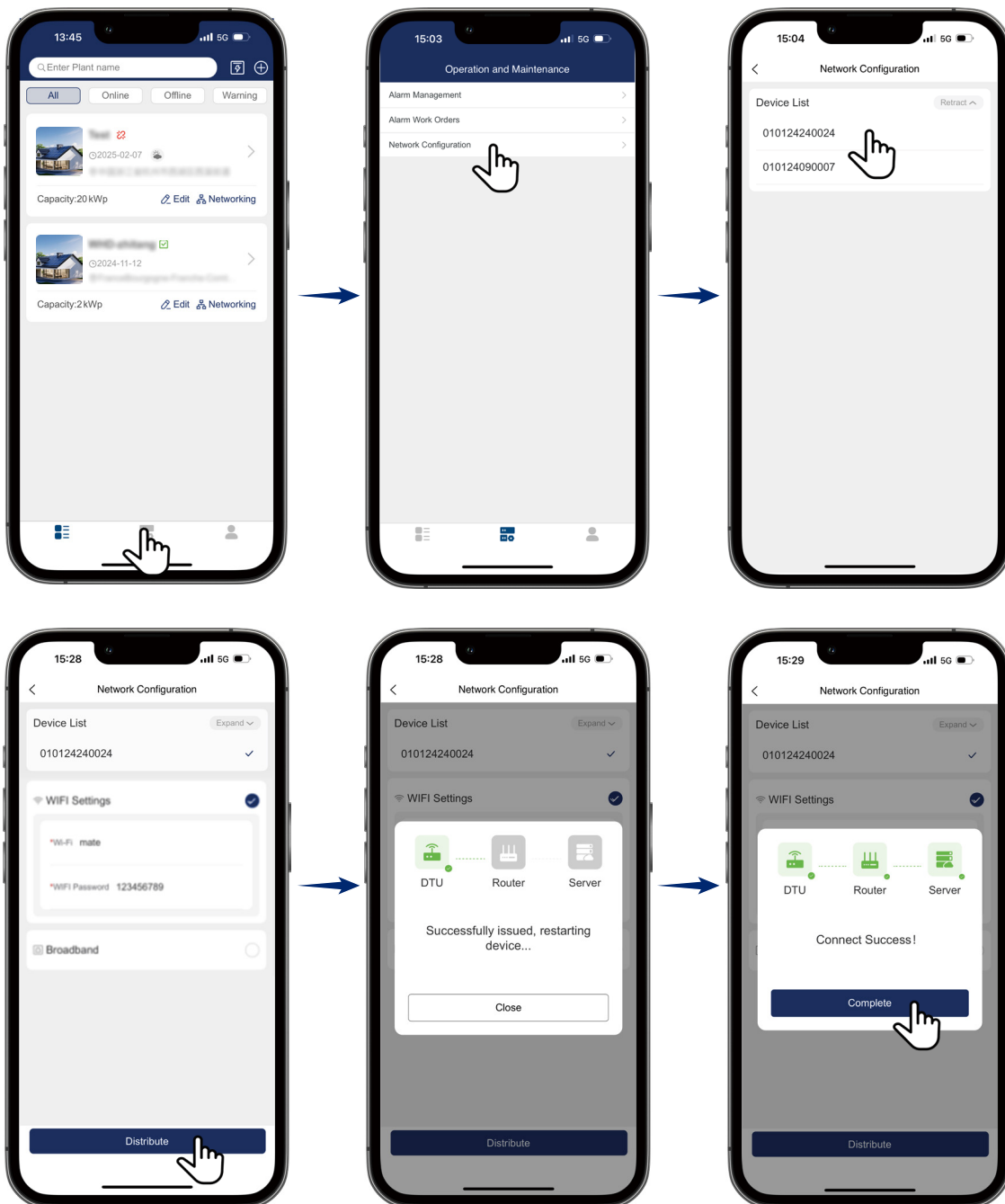
4. Add DTU, Micro inverter, AC Coupler during plant creation. For the AC Coupler, the SN is on the side nameplate.



⚠ Note:

The ADD device column includes micro inverter and ac coupler.

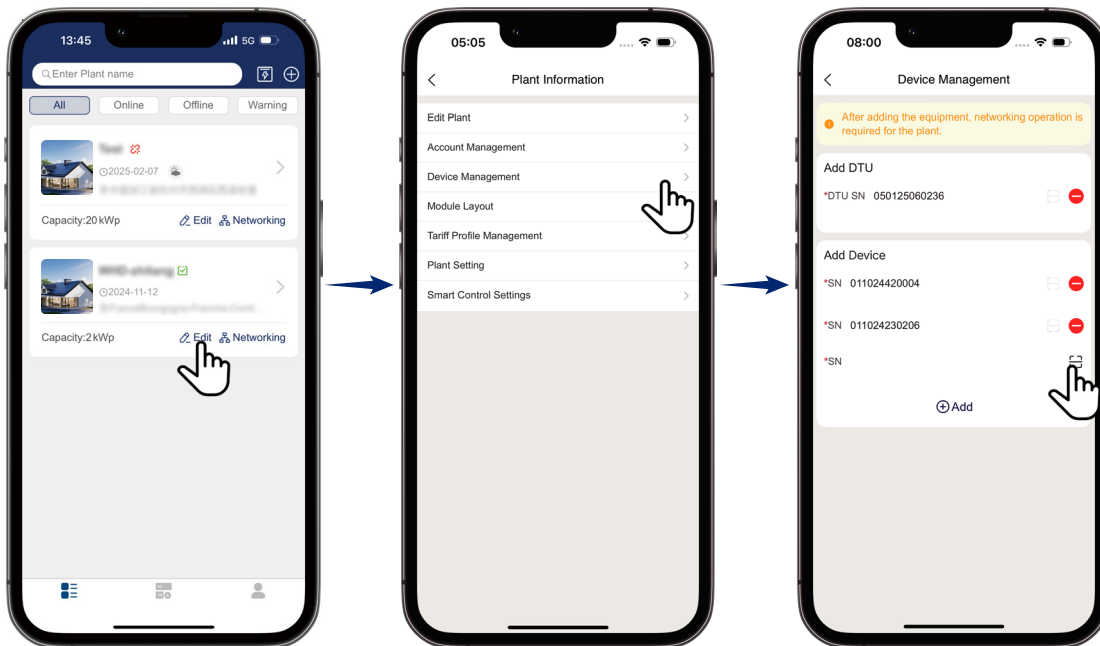
5. Select “Network Config” under “O&M” from the main page.
6. Choose the network configuration.
 - WiFi: select the WiFi settings, enter the WiFi password and account, then click “Distribute”;
 - Ethernet: insert the network cable into the DTU network port, select “Broadband”, and then click “Distribute”.



7. Then back to the plant list, find your plant and click “  Networking ”, then you will see success.

B. Add AC Coupler to an existing plant

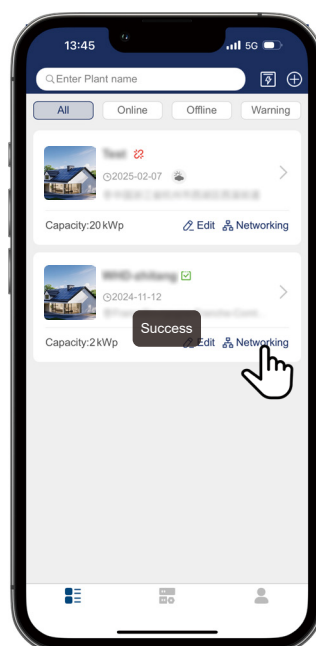
1. Choose the plant that you want to change, press the “Edit” button, and enter the plant edit page.



2. Click the Device Management.

3. Scan the SN of the AC Coupler to add the Device.

4. Back to the plant list, find your plant and click “  Networking ”, then you will see success.

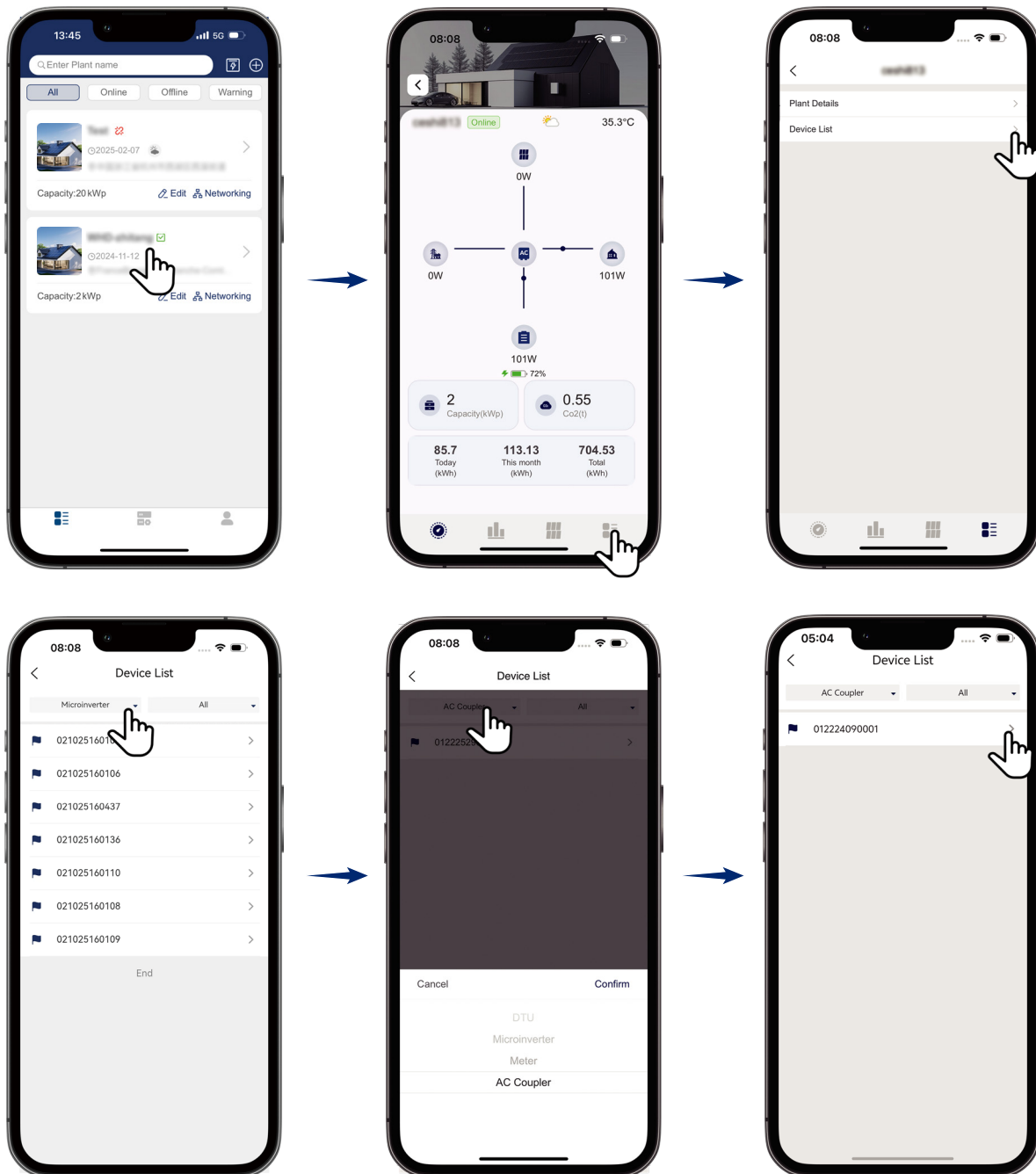


5.2 Add Battery

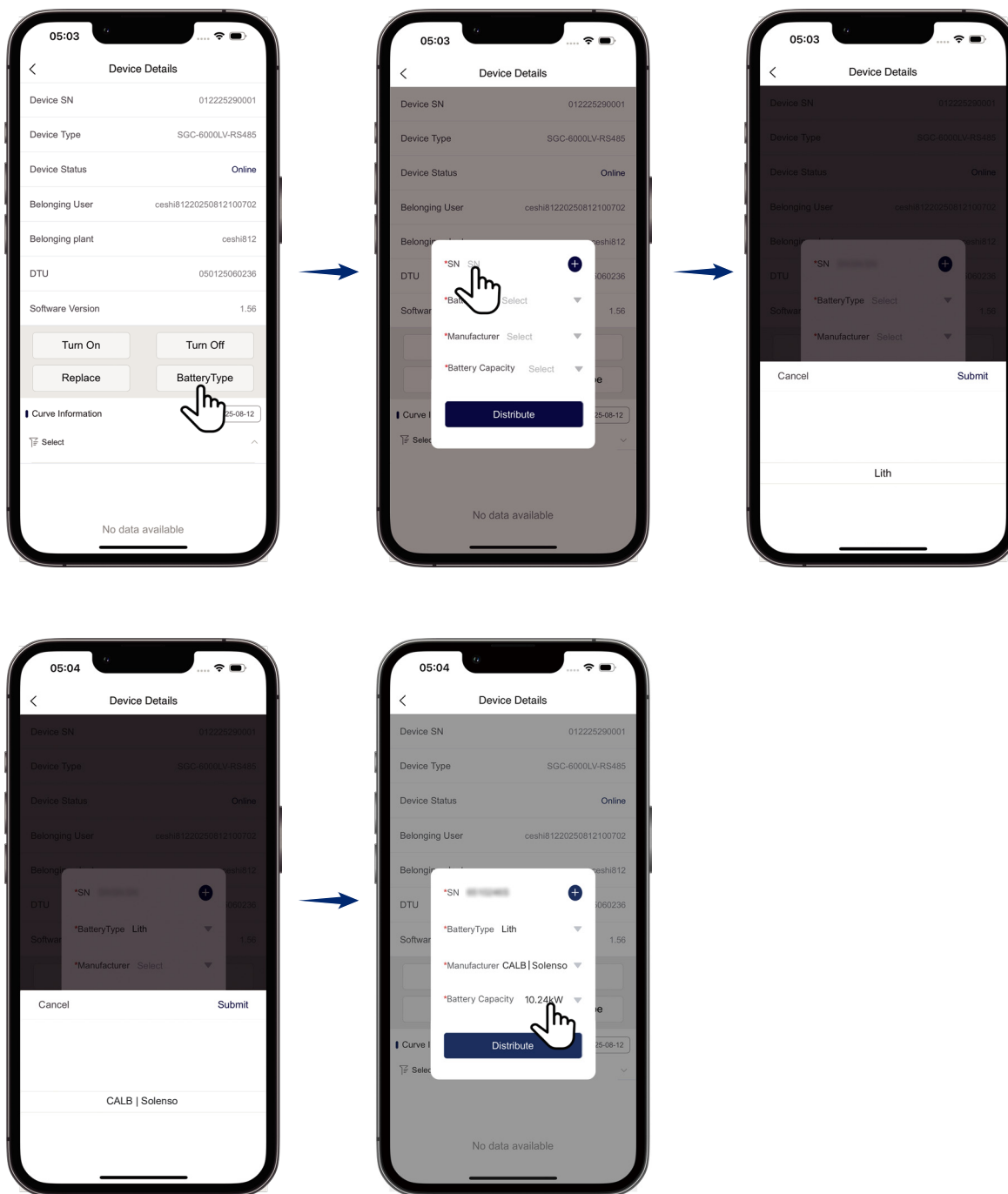
⚠ Note:

Please ensure that you have “Networking” before performing following operations.

1. Click to enter the plant. Click on the bottom right corner of the plant, and then click “Device list”.



2. Filter out the AC Coupler, and click on the “battery type”.

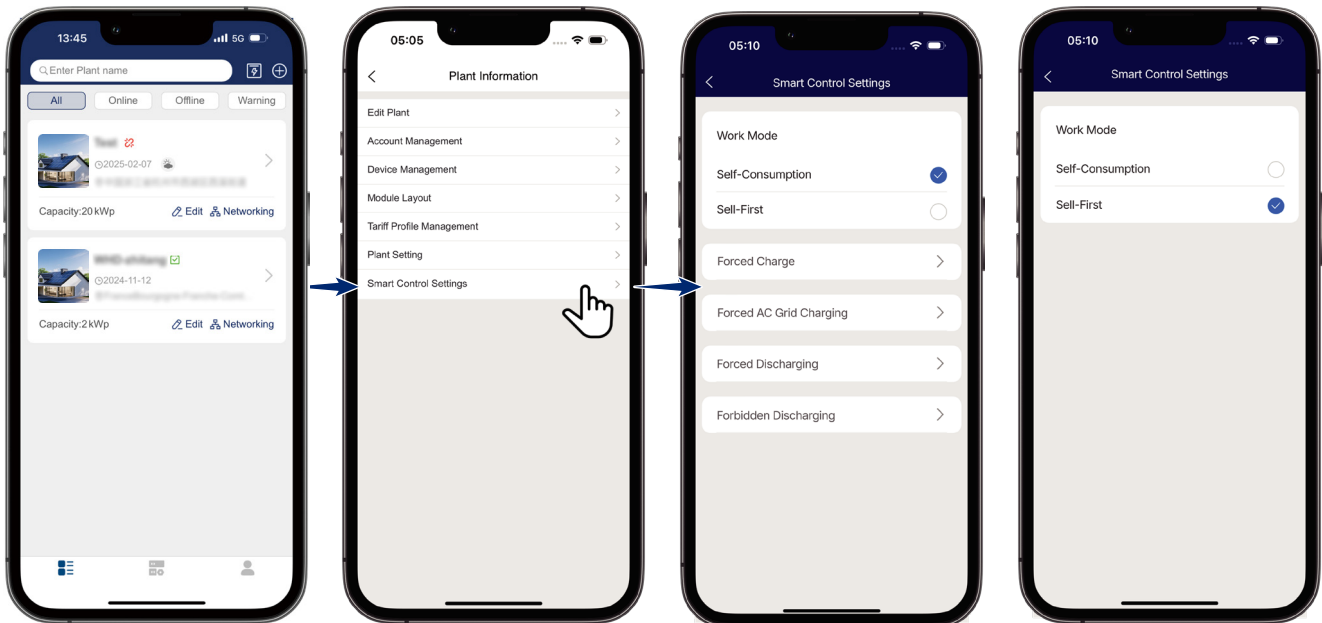


3. Enter the SN, battery type, manufacturer and battery capacity in sequence. Finally, click “distribute”.

5.3 Set the work mode

5.3.1 Select The Work Mode

There is one work mode available: self-consumption.



1. Choose your plant and click “[Edit](#)”.
2. Click on the Smart control setting.
3. You can choose Self-Consumption work mode.

- Self-consumption Mode (without optional setting)

In the daytime, solar energy supports the loads firstly, and surplus energy is stored in the battery. When the battery is fully charged or reaches the maximum charge power, the surplus energy is fed into grid (or limited if required). At night, the battery discharges for the loads firstly, and the grid will supply the loads once the battery power is not enough.

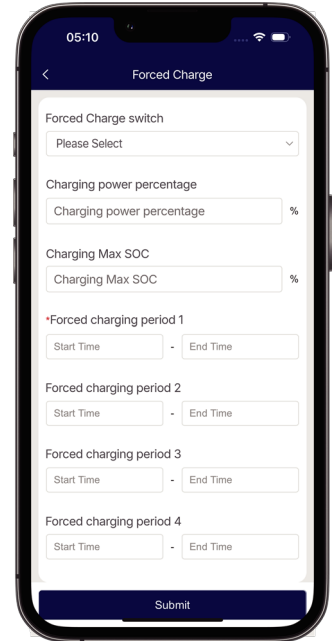
5.3.2 Optional Settings

Self-Consumption mode also has extra optional setting. The four optional settings can be set separately, They can also be set simultaneously, but the time period should not be repeated.

a) Forced Charge

Parameters	Setting Instructions	Scope
Forced charge switch	Set the Forced charge turn on or turn off.	• Turn on • Turn off
Charging power percentage	Set the Charging power percentage. Please set the Charging power percentage appropriately, as this will affect the battery life. We recommend set it to 95%.	[1%,100%]
Charging Max SOC	Set the charging cutoff capacity.	90%~100%
Forced charging period (1~4)	Set the Forced charging period.	Any time period within the 24-hour period
Example	During the period from 12:00 to 14:00 in the afternoon, the PV generation of electricity is abundant. At this time, we force the PV to charge our batteries. The priority of the load and the feeder network will then decrease.	

If you want to enable this function, you should set at least one time period.



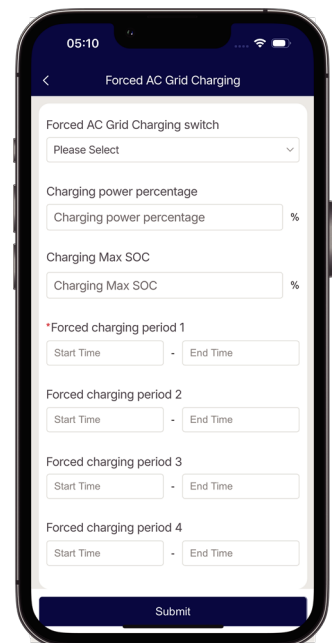
b) Forced AC Grid Charging

Parameters	Setting Instructions	Scope
Forced AC Grid Charging switch	Set the Forced AC Grid Charging turn on or turn off.	• Turn on • Turn off
Charging power percentage	Set the Charging power percentage. Please set the Charging power percentage appropriately, as this will affect the battery life. We recommend set it to 95%.	[1%,100%]
Charging Max SOC	Set the charging cutoff capacity.	90%~100%
Forced charging period (1~4)	Set the Forced charging period.	Any time period within the 24-hour period
Example	From 1:00 to 3:00, the electricity price is low. At this time, the power grid is forced to charge our batteries.	

If you want to enable this function, you should set at least one time period.

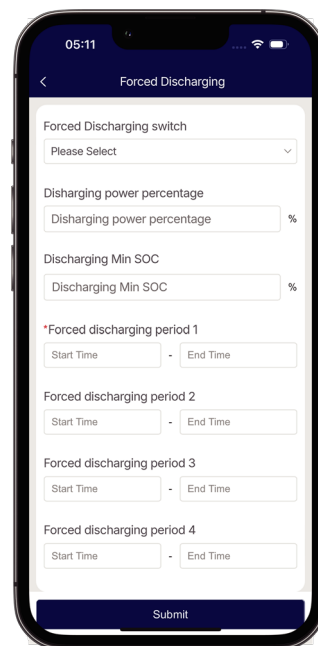
⚠ Note:

If situation A and situation B are accidentally set at the same time, situation B will take priority.



c) Forced Discharging

Parameters	Setting Instructions	Scope
Forced Discharging switch	Set the Forced Discharging turn on or turn off.	• Turn on • Turn off
Discharging power percentage	Set the Discharging power percentage. Please set the Discharging power percentage appropriately, as this will affect the battery life. We recommend set it to 95%.	[1%, 100%]
Discharging Min SOC	Set the discharge cutoff capacity. When the battery's SOC drops to 0%, it is necessary to recharge promptly; failure to do so will result in irreversible degradation of the battery capacity. Any battery failure caused by this will not be covered by the warranty. It is recommended to avoid setting the "Discharging Min SOC" of the battery to 0 as much as possible.	0%~20%
Forced Discharging period (1~4)	Set the Forced Discharging period.	Any time period within the 24-hour period
Example	During the peak usage period from 17:00 to 21:00, but at this time, the PV power generation is no longer sufficient to meet our load requirements. Therefore, the battery discharge will be prioritized, and the priority of drawing power from the grid will be reduced.	



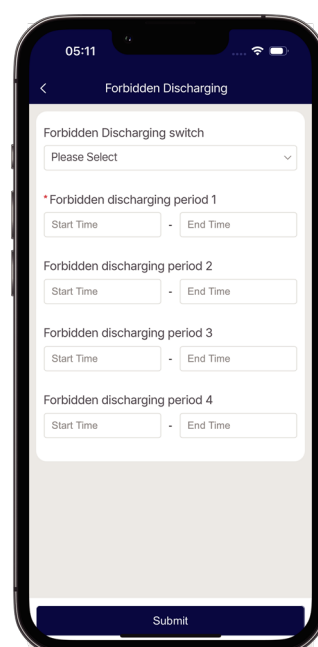
If you want to enable this function, you should set at least one time period.

⚠ Note:

If situation A, situation B and c are accidentally set at the same time, situation B will take priority, followed by situation A, and situation C will not work.

d) Forbidden Discharging

Parameters	Setting Instructions	Scope
Forbidden Discharging switch	Set the Forbidden Discharging turn on or turn off.	• Turn on • Turn off
Forbidden Discharging period (1~4)	Set the Forbidden Discharging period.	Any time period within the 24-hour period
Example	From 15:00 to 17:00, I hope that when I get home, the battery will have sufficient power to be used. Therefore, I set it so that no power loss is allowed during this period.	



If you want to enable this function, you should set at least one time period.

6. Maintenance

To maintain optimum long-lasting working performance, it is recommended that the following items be checked twice a year.

1. Ensure that the airflow around the inverter is not blocked and remove any dirt or debris from the radiator.
2. Check that all exposed conductors are not damaged by sunlight, friction with other surrounding objects, dry rot, insect or rodent damage, etc. The conductors need to be repaired or replaced if necessary.
3. Verify that the indications and displays are consistent with the operation of the equipment note any faults or incorrect displays and take corrective action if necessary.
4. Check all terminals for signs of corrosion, insulation damage, high temperatures or burning/discolouration and tighten terminal screws.
5. Check for dirt, nesting insects and corrosion, clean as required, clean insect screens regularly.
6. If the lightning arrester has failed, replace the failed arrester in time to prevent lightning damage to the inverter or other equipment of the user.

⚠ Note:

Make sure that the AC Coupler is disconnected from all power sources and that the capacitors are fully discharged before carrying out any checks or operations to avoid the risk of electric shock.

The Company shall not be liable for damage caused by:

1. Damage caused by improper use or use in a wrong location.
2. PV modules with an open-circuit voltage exceeding the maximum permissible voltage.
3. Damage caused by the operating temperature exceeding the restricted operating temperature range.
4. Dismantling and repair of the inverter by unauthorised persons.
5. Damage caused by force majeure: damage during transport or handling of the AC Coupler.

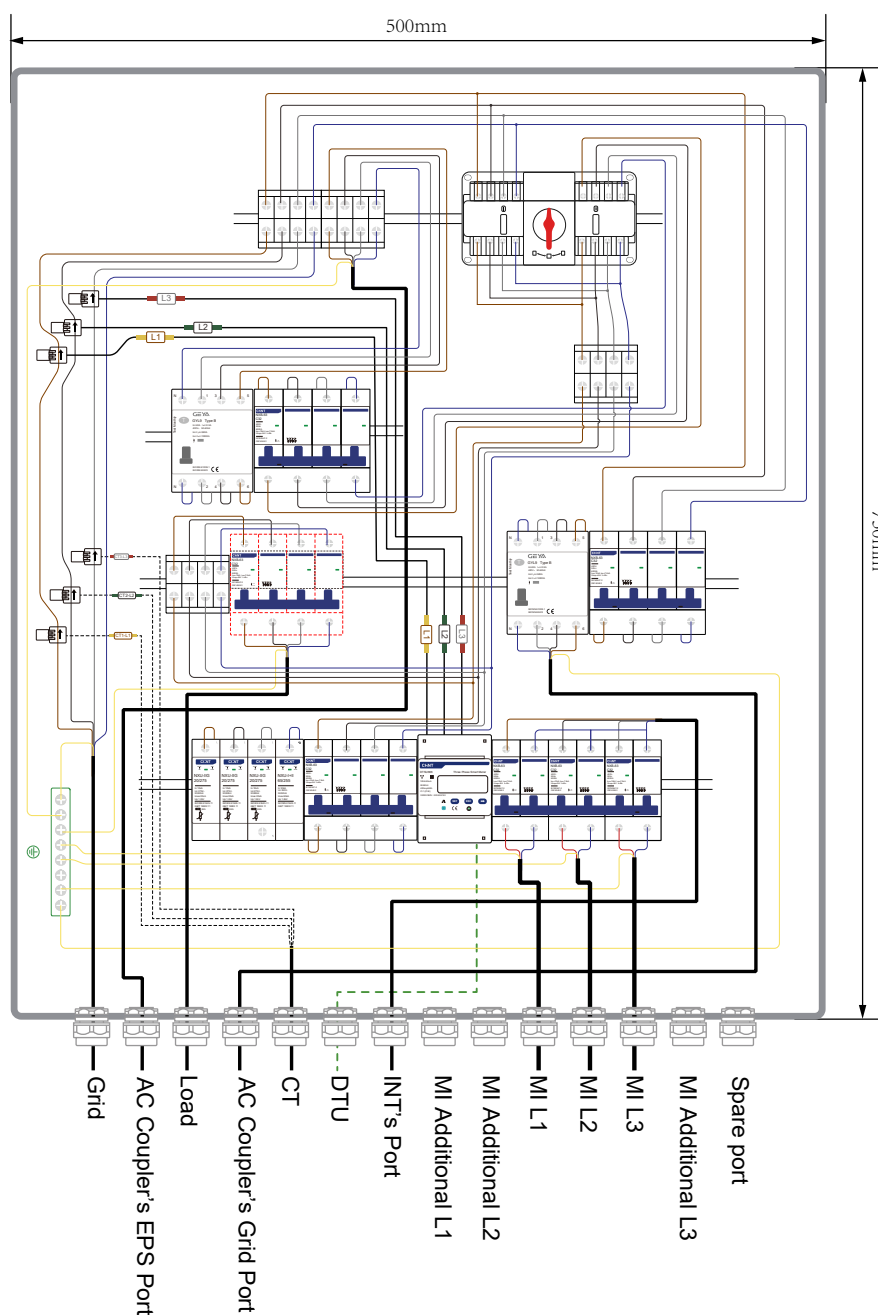
7. Specifications

Model	SoWave-TL8		SoWave-TL10		SoWave-TL12	
Grid Port						
Rated Output Power (VA)		8000		10000		
Rated Output Current Per Phase (Aac)		11.6		14.5		
Rated Output Voltage (Vac)				230/400		
Current THD (%)				<3%		
Power Factor				0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)		
Load Motor Capacity		5HP		6HP		
Rated Frequency (Hz)				50/60		
EPS Port						
Rated Output Power (VA)		8000		10000		
Rated Output Current Per Phase (Aac)		11.6		14.5		
Rated Output Voltage (Vac)				230/400		
Current THD (%)				<3%		
Power Factor				0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)		
Load Motor Capacity		5HP		6HP		
Rated Frequency (Hz)				50/60		
INT Port						
Max. Input Power (VA)		16000		20000		
Max. Input Current Per Phase (A)		23.2A		29A		
Max. Input Power Per Phase		5/5/6		6/7/7		
Input Voltage Range				Phase voltage 170~280V, Line voltage 305~485V		
Battery						
Max.Charging/Discharging power (W)		9216		11264		
Max.Charging/Discharging current (A)		180		220		
Rated Battery Voltage (V)				51.2		
Battery Volatge Range (Vdc)				44.8~56		
Battery Type				Li-ion / Lead-Acid / User Defined		
Efficiency						
Max. Efficiency (%)				97.5		
European Efficiency (%)		97.2		97.5		
Protection						
Anti-Islanding Protection				Yes		
Over Current/Voltage Protection				Yes		
AC Short Circuit Protection				Yes		
Ground Fault Monitoring				Yes		
Insulation Resistance Protection				Yes		
General Data						
Dimensions (W*H*D, mm)				400*700*260mm		
Weight (kg)				39.2kg		
Enclosure Protect Level				IP65		
Operating Temperature Range (°C)				-25~60°C, >45°C Derate		
Relative Humidity (%)				0~100		
Cooling Method				Heat sink + intelligent fan cooling		
Communication						
Communication inter Interfaces				RS485/CAN/USB		
External Module (ptional)				Wi-Fi/GPRS		
Certification						
Certification				IEC62109-1,IEC62109-2		
EMC				EN61000-6-1,EN61000-6-3		
Rohs				Enable		

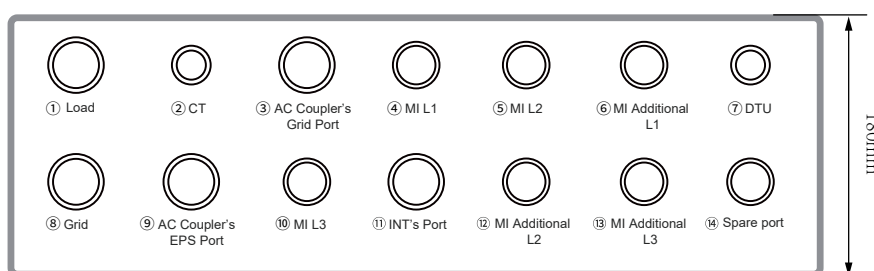
Appendix:

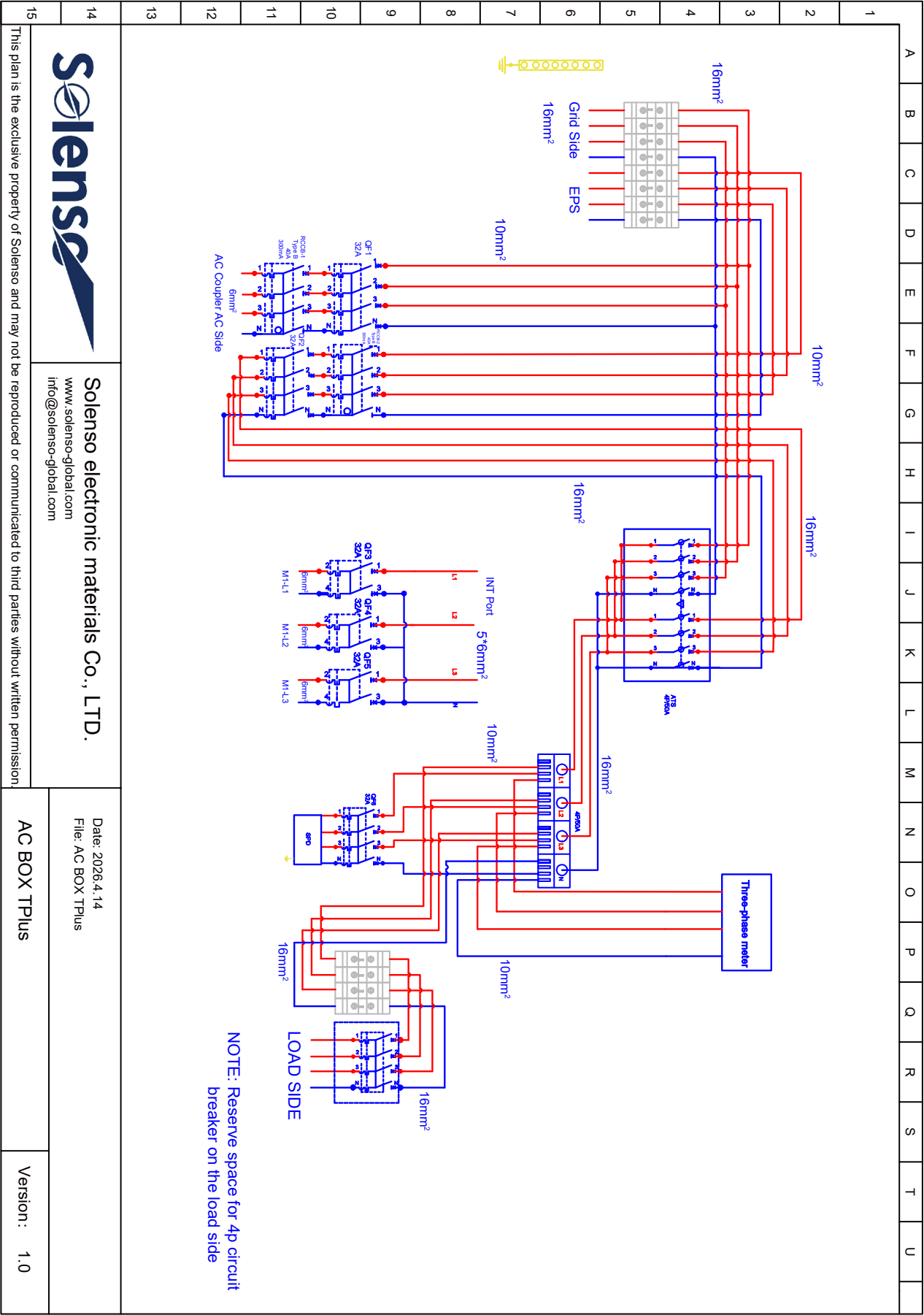
System Wiring Configuration

1.1 AC Box TPlus introduction (V0)



The ports at the bottom are shown in the figure:





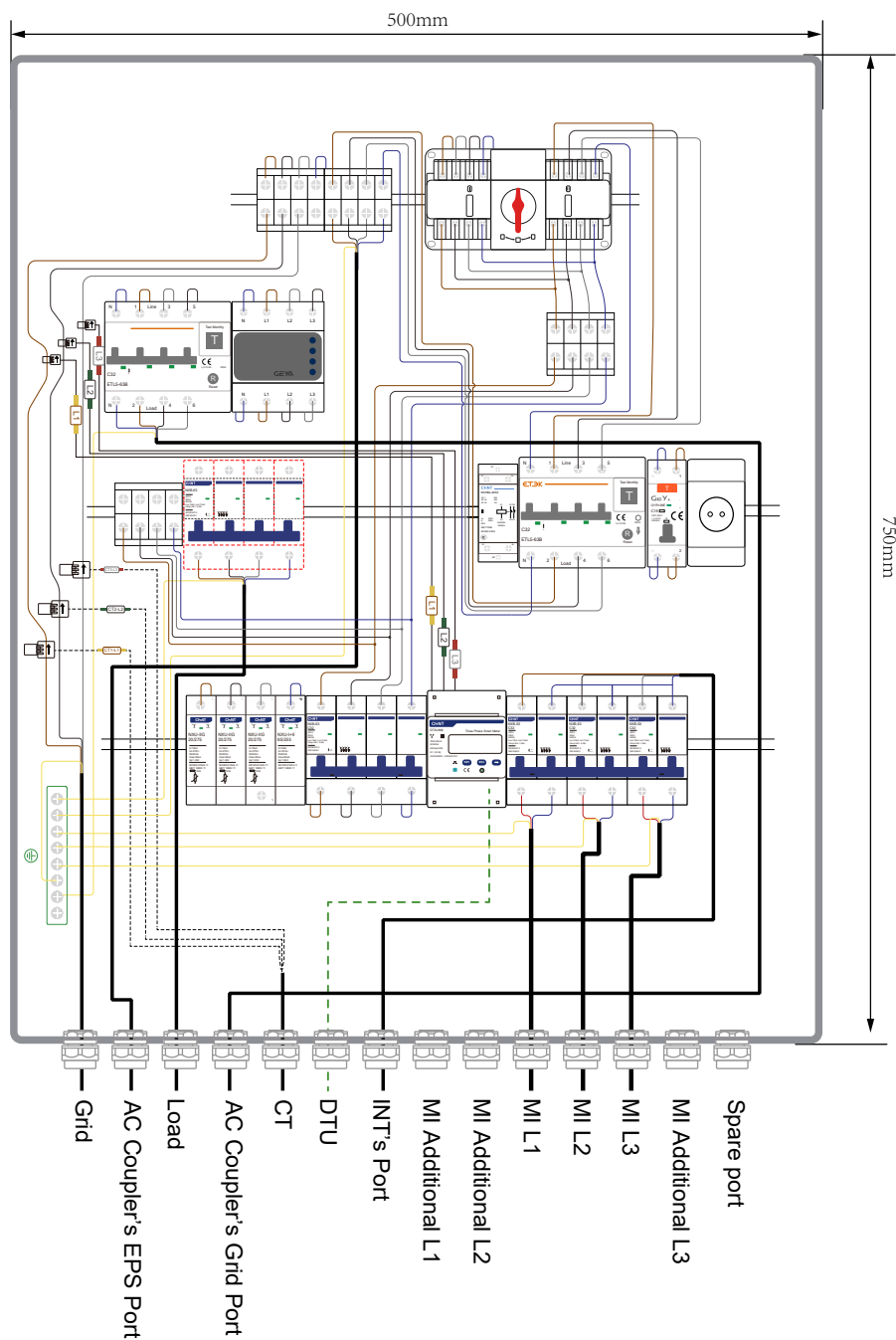
Solenso electronic materials Co., LTD.
www.solenso-global.com
info@solenso-global.com

Date: 2026.4.14
File: AC BOX TPlus

AC BOX TPlus

Version: 1.0

1.2 AC Box TPlus introduction (V1)



The ports at the bottom are shown in the figure:

