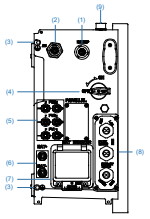
QUICK INSTALLATION GUIDE

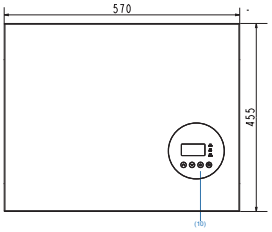
Three - Phase Energy storage inverter 4kW / 5kW / 6kW / 8kW / 10kW

412-10057-01

01 Product Overview

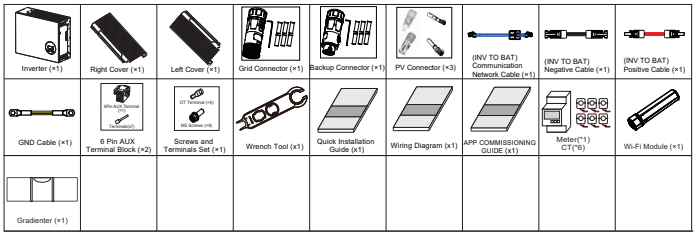
(1) Backup Connector
(2) Grid Connector
(3) Grounding Point
(4) PV Switch
(5) PV Connectors
(6) BAT + Connector / BAT - Connector
(7) Battery Circuit Breaker
(8) Communication Ports
(9) Wi-Fi Port
(10) LCD Display





02 Accessories, Additional Materials and Installation Tools

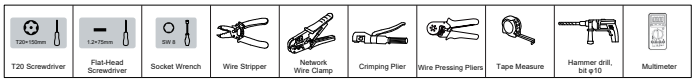
2.1. Scope of Delivery for Inverter Installation



2.2. Additional Required Installation Materials



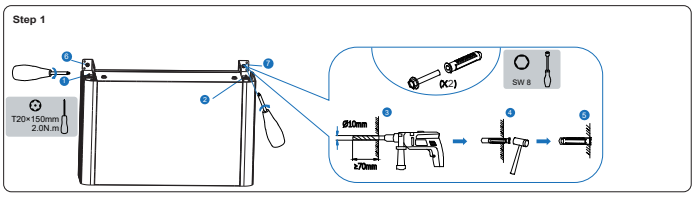
2.3. Installation Tools

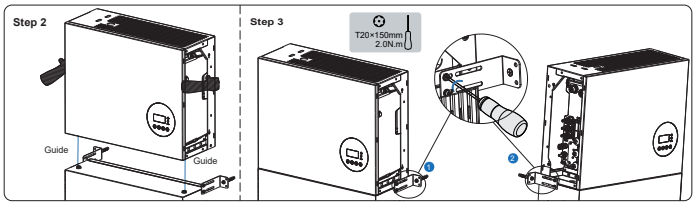


03 Mount the Inverter

⚠ WARNING
Before installing the inverter, please ensure the battery is properly installed.

3.1. Mount the Inverter on the Battery





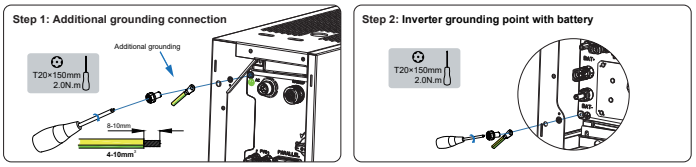
04 Electrical Connections

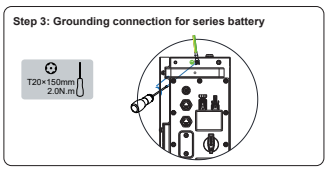
⚠ WARNING
Before doing electrical connection, please ensure the PV switch & AC and BAT circuit breakers are switched OFF and cannot be reactivated.

⚠ DANGER
You must protect each inverter with an individual grid&backup circuit breaker in order to ensure that the inverter can be disconnected safely.

NOTE !
Please refer to system wiring diagram for detailed system wiring.

4.1. Grounding Connection





4.2. Grid&Backup Connection

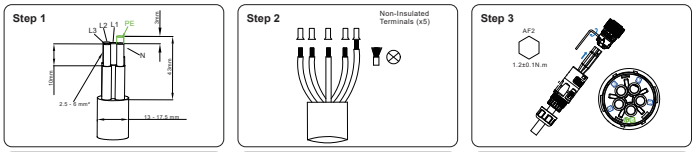
AC connector recommendation for 4kW			
Description	Max. Current	Breaker Type for 4kW	Recommend cable cross section
Grid Side	11.6A	16A	2.5~6mm²
Backup Side	8.7A	16A	2.5~6mm²

AC connector recommendation for 5kW			
Description	Max. Current	Breaker Type for 5kW	Recommend cable cross section
Grid Side	14.5A	25A	4~6mm²
Backup Side	10.9A	16A	2.5~6mm²

AC connector recommendation for 6kW			
Description	Max. Current	Breaker Type for 6kW	Recommend cable cross section
Grid Side	17.4A	25A	4~6mm²
Backup Side	13.0A	25A	2.5~6mm²

AC connector recommendation for 8kW			
Description	Max. Current	Breaker Type for 8kW	Recommend cable cross section
Grid Side	23.2A	32A	4~6mm²
Backup Side	17.4A	25A	4~6mm²

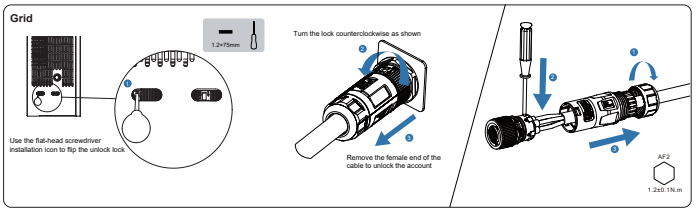
AC connector recommendation for 10kW			
Description	Max. Current	Breaker Type for 10kW	Recommend cable cross section
Grid Side	29A	40A	6mm²
Backup Side	21.7A	32A	4~6mm²

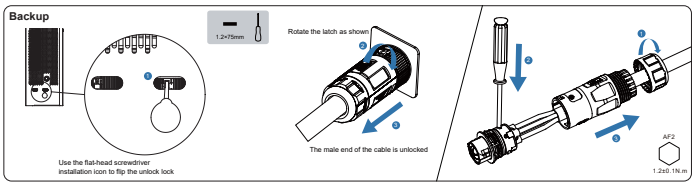


The steps for backup connection are similar as grid connection.

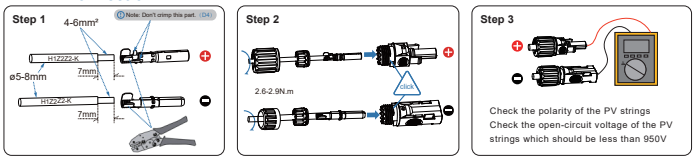
NOTE !
Do not install the grid and backup connector on the inverter.

4.3. Disassemble the Grid&Backup Connector

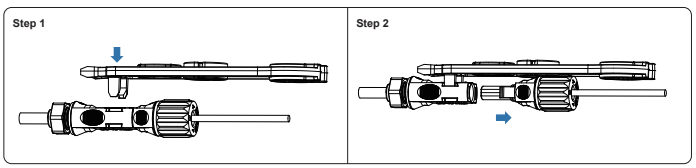




4.4. PV Connection



4.5. Disassemble the PV Connectors

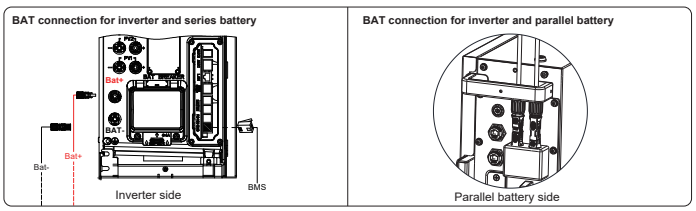


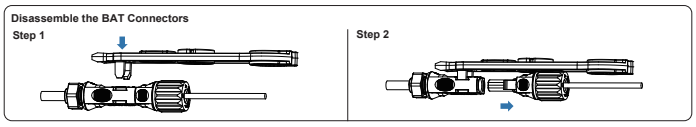
4.6. Connecting the Battery to the Inverter

⚠ DANGER
Danger to life due to short-circuiting of the battery.
Touching the short-circuit connection of the battery could result in death or lethal injuries caused by electric shock and massive energy release.

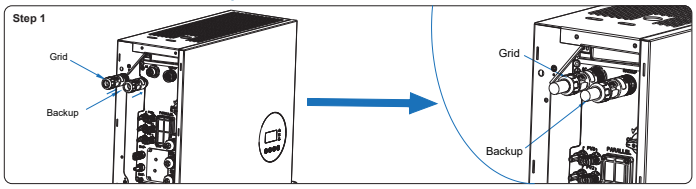
- Switch off the battery breaker which is located on the lower left of the inverter;
- Switch off the battery breaker of the battery;
- Connect both ends of one battery power cable completely before connecting the next power, cable to avoid short-circuit of the battery power positive and negative cables.

NOTE !
please use 10mm² power cable provided by the manufacturer to connect between the inverter and battery ,or between the batteries.



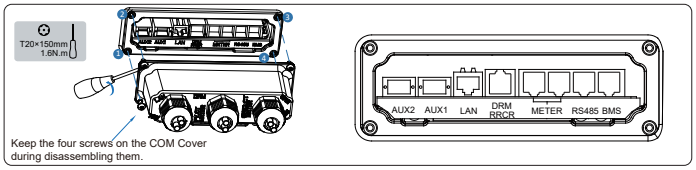


4.7. Connect the Grid&Backup Connector

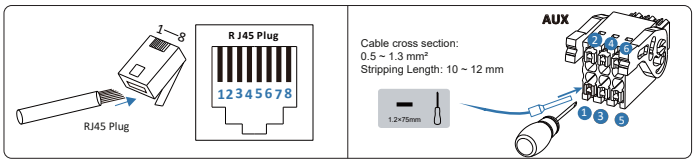


05 Communication Connection

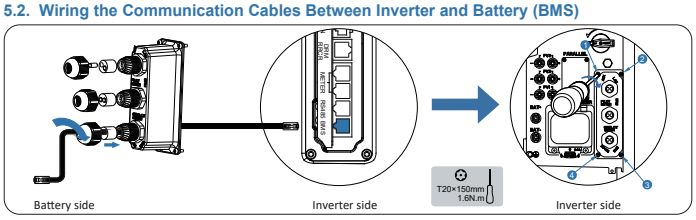
5.1. AUX / LAN / DRM&RRCR / Meter / RS485 / BMS Connection



ITEM / No	1	2	3	4	5	6	7	8
BMS	NC	RS 485-A4	NC	CAN1_H	CAN1_L	NC	RS 485_B4	NC
RS485	12V	DEBUG_RXD_COM	GND	RS 485_B5	RS 485_A5	NC	DEBUG_TXD_COM	NC
METER	NC	NC	RS485_A7	NC	NC	RS 485_B7	NC	NC
DRM	DRED 1/5	DRED 2/6	DRED 3/7	DRED 4/8	REF GEN/0	COM LOAD/0	NC	NC
RRCR	K1	K2	K3	K4	3.3V	NC		
AUX 1	DO1_NO	DO1_COM	DO1_NC	DI_negative	DI_positive	GND		
AUX 2	DO2_NO	DO2_COM	DO2_NC	DI_negative	DI_positive	GND		

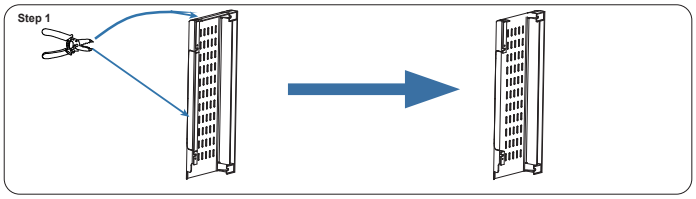


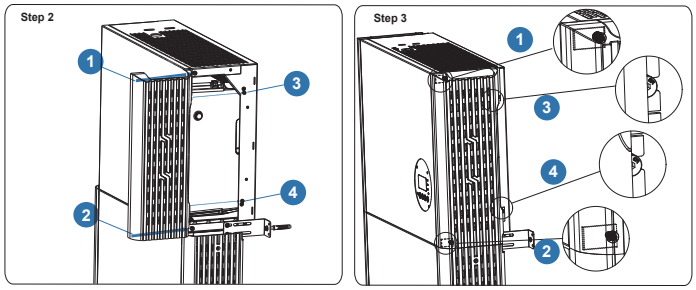
5.2. Wiring the Communication Cables Between Inverter and Battery (BMS)



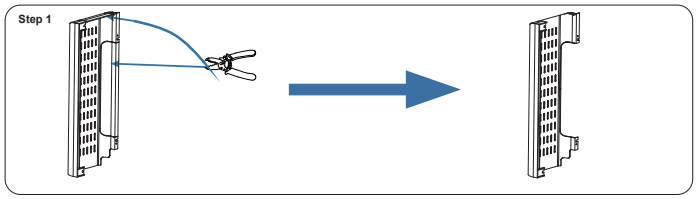
06 Mount the covers of the Inverter (Installed on the Battery)

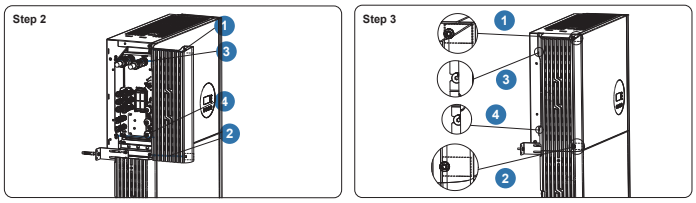
6.1. Mount the Right Cover



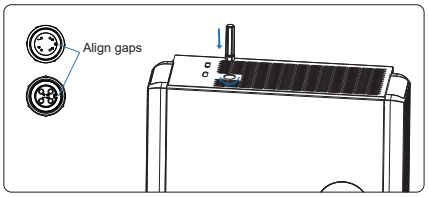


6.2. Mount the Left Cover





07 Mount the Wi-Fi Module



08 Commissioning

⚠ WARNING
Never power on without the correct and reliable installation and electrical connection.

Follow the commissioning steps in COMMISSIONING GUIDE AND REPORT to download APP and it also include steps to download APP and register account, power on the product, configure Wi-Fi module, set system parameter and operate the system.
After completing the commissioning, please submit the commissioning report.

09 Power ON / OFF the Energy Storage System Procedure

9.1. Procedure for Powering On the System

1) Switch on the battery breaker which is at the lower left of the inverter.
2) Switch on the PV switch (if there is any) on the left side of the inverter.
3) Switch on the battery breakers of all batteries.
4) Shortly press the battery power buttons. For more than one parallel battery installed, please shortly press all power buttons within 10 seconds. (For series batteries, please skip this step)
5) Switch on the AC breaker between the grid port of the inverter and the grid.
6) Switch on the AC breaker between the backup port of the inverter and the loads.
7) Switch on the AC breaker (if there is any) between the PV-inverter and the grid.

9.2. Procedure for Powering Off the System

1) Switch off the AC breaker between the inverter and the loads.
2) Switch off the PV switch (if there is any) on the left side of the inverter.
3) Switch off the PV switch between the PV string and the inverter if there is any.
4) Long press the power button of each battery for 6 seconds. (For series batteries, please skip this step)
5) Switch off the battery breakers of all batteries.
6) Switch off the battery breaker which is at the lower left of the inverter.
7) Switch off the AC breaker between the inverter and the grid.

Please refer to the commissioning guide to commission this energy storage system!

Quick Installation Manual

Inspiration DC3000

WARNING!

THIS SYSTEM CONTAINS HIGH-VOLTAGE BATTERY

Installation and maintenance should only be carried out by trained professionals. We do not undertake any consequences or related responsibility because of violation of safety operation or violation of design, production and equipment safety standards.

1. It is required to charge the battery at least once every six months. For this charge, maintenance ensures the SOC is higher than 90%.
2. The connection of the power connector, grounding point, power cable and screw are suggested to be checked yearly. Ensure there is no loose, broken, or corrosion at the connection point. Check the installation environment, such as dust, water, insect and more, to ensure it is suitable for the IP65 battery system.

In case a battery (normal condition or damaged) needs disposal or needs recycling, it shall follow the local recycling regulation (i.e. Regulation (EC) Number 1013/2006 among European Union) to process and use the best available measures to achieve relevant recycling efficiency.

Tool

Part No. 3060160052



Electric drill



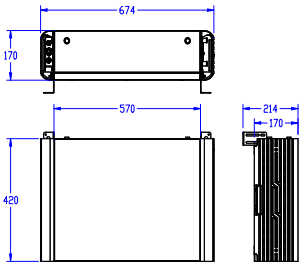
Spanner



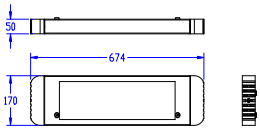
Cross screwdriver

Size

Battery Module

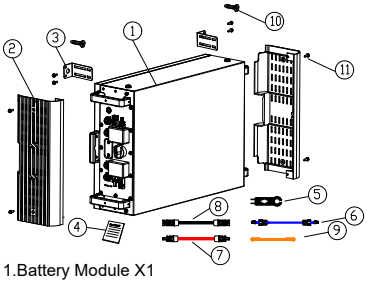


System base

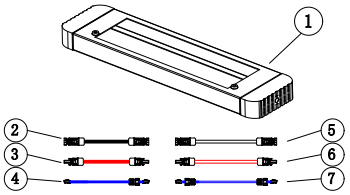


Unit: mm

Check

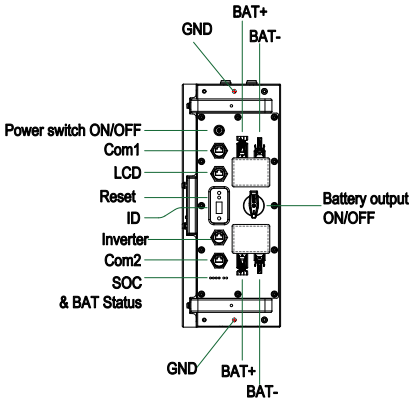


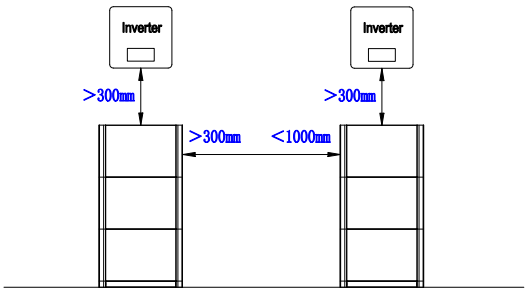
1.Battery Module X1
2.Plastic Decorative Cover X2
3.Wall Bracket X2
4.User Manual
5.MC4 Connector tool X1
6.Communication network cable X1
7.Positive Cable X1
8.Negative Cable X1
9.GND Cable X1
10.Self-tapping screw X4

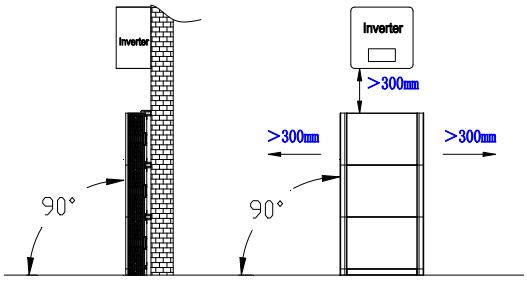


1.System base X1
2.INV to BAT Negative Cable X1
3.INV to BAT Positive Cable X1
4.INV to BAT Communication network cable X1
5.BAT to BAT Negative Array Cable X1
6.BAT to BAT Positive Array Cable X1
7.BAT to BAT Communication network Array cable X1

Connection interface introduction

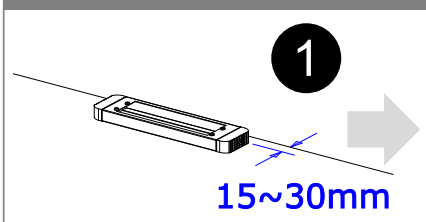


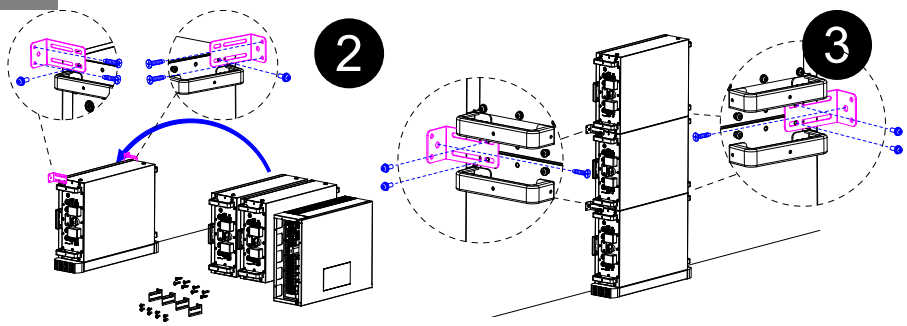




Floor installation with base

Part No. 3060160052





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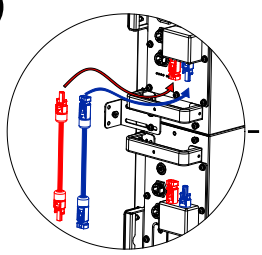
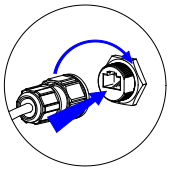
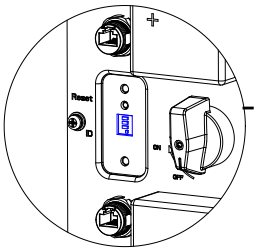
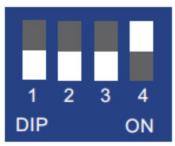


Connect battery and Inverter cable



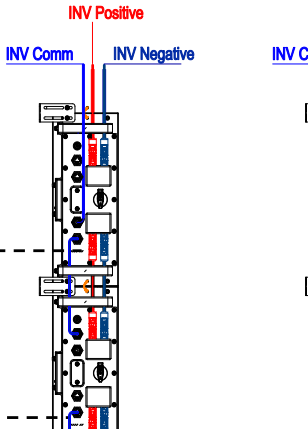
Connect battery to battery communication wiring
Connect Inverter to battery communication wiring



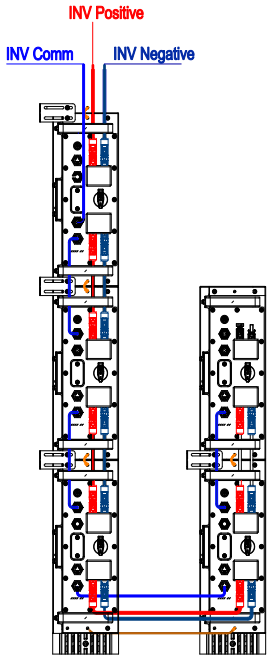


ID:1

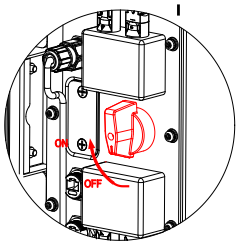
The battery pack ID connected to the hybrid inverter must be set to ID1,indicating that it is the host, other batteries do not need to be set, and the ID1 host will automatically assign an address to the slave.

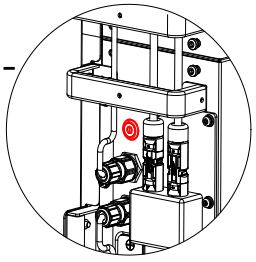


Single array



Two arrays

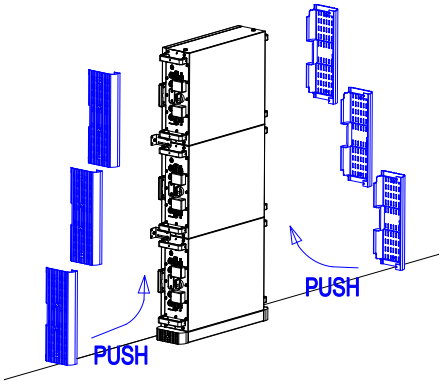




Start: Step 1:Turn ON battery output
Step 2: Press continuously for 5 seconds to turn ON battery (host battery)

Stop: Step 1:Turn OFF battery output
Step 2:Press continuously for 5 seconds to turn OFF every battery

5



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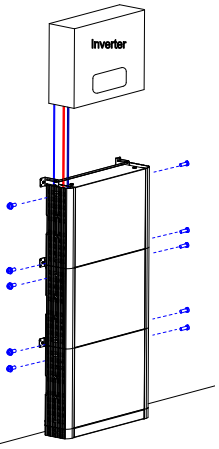
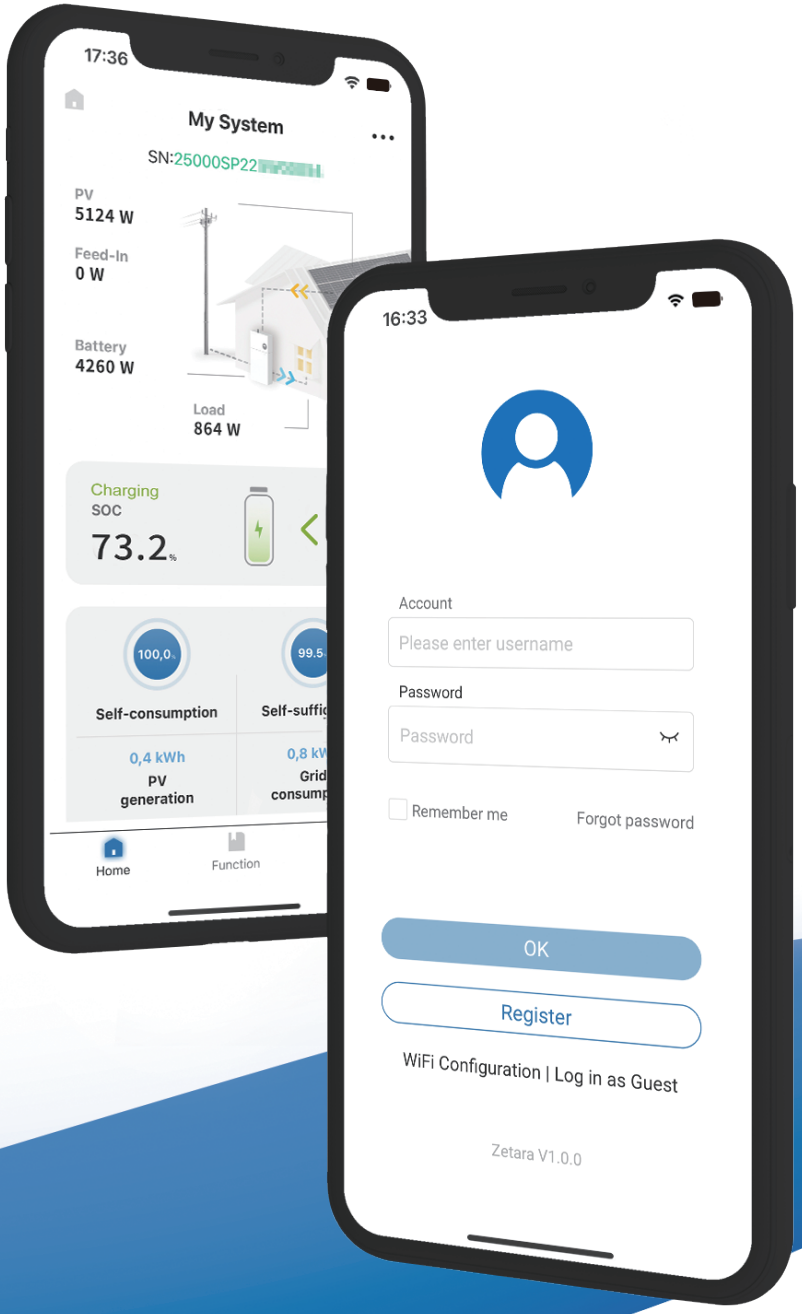




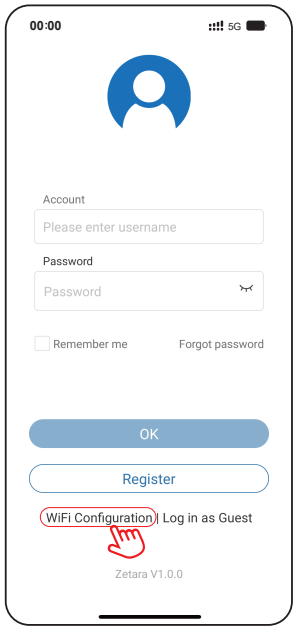
APP COMMISSIONING GUIDE

01 WIFI CONFIGURATION INSTRUCTION GUIDE

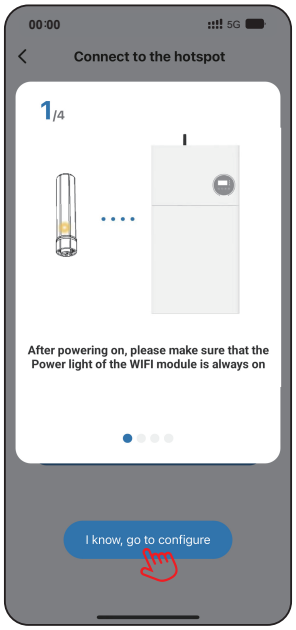
SECTION1 PREPARATORY WORK

Step1 : Make sure the interver's Wi-Fi dongle is powered on ;
Step2 : Make sure the Wi-Fi router is powered on;
Step3 : For IOS users, search for "Zetara" on App Store to install the app.
For Android usesrs,search for "Zetara" on Google Play to install the app.

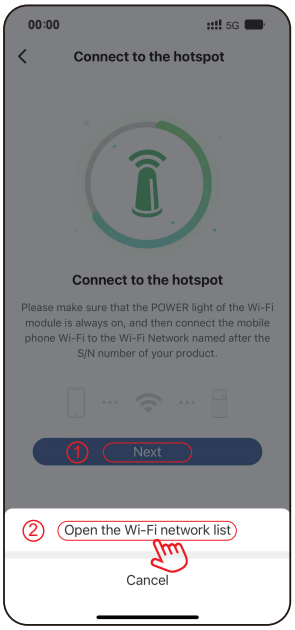
SECTION2 WI-FI CONFIGURATION



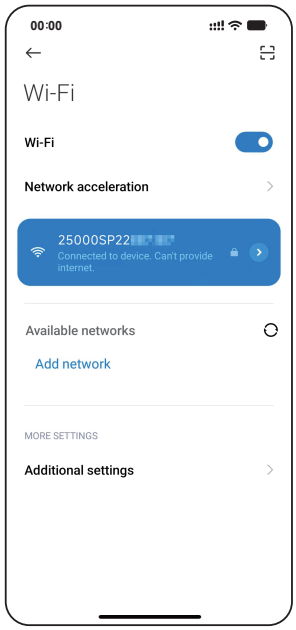
Step1 : Open the "Zetara" APP and Click "Wi-Fi Configuration"



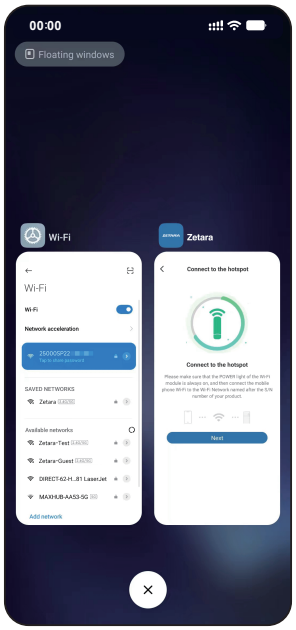
Step2 : Click "I know, go to configure"



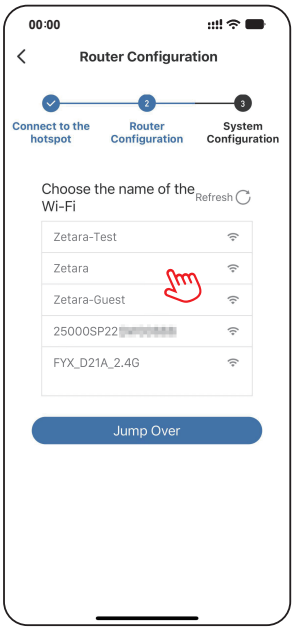
Step3 : Click the "Next" button, then Click "Open the Wi-Fi network list"



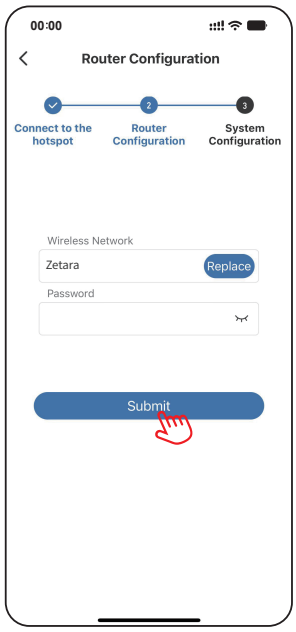
Step4 : Select the Wi-Fi SSID (named after SN) and input the default Password (12345678)



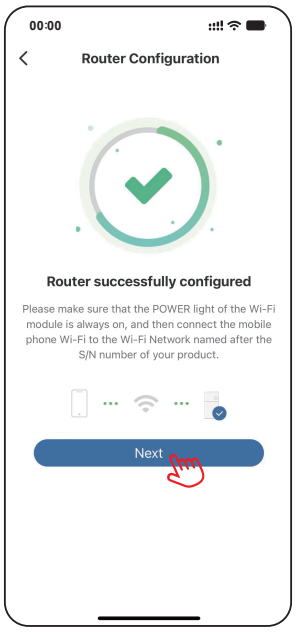
Step5 : After successfully connecting to the SSID, swipe your screen to return to the "Zetara" APP



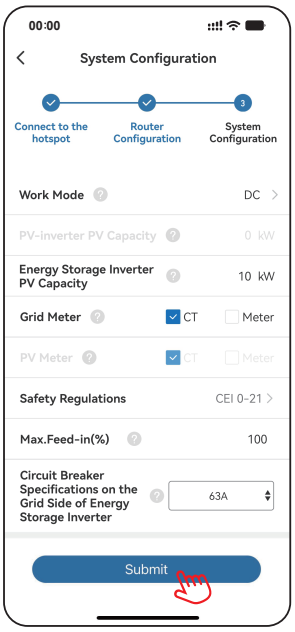
Step6 : Select the Wi-Fi network name of home router



Step7 : Enter the home router Password, click "Submit"



Step8 : Wait until router successfully configured, click "Next"



Step9 : Set the parameters, then click "Submit"

02 CHECK THE RUNNING STATE

SECTION1 : CHECK THE RUNNING STATE OF PV AND BATTERY

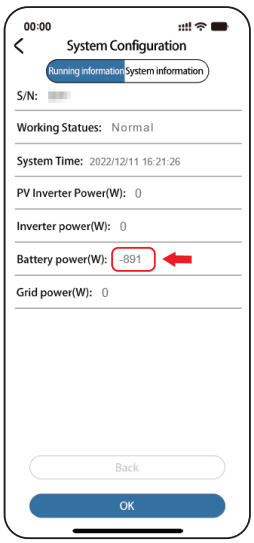
Step1 : Keep the AC breaker between the grid port of the energy storage inverter and the grid off, and keep the AC breaker between the backup port of the energy storage inverter and the loads off;

Step2 : Press the battery button. If there are more than one battery, press the button of each battery and the interval time of powering on each battery should be less than 5s;

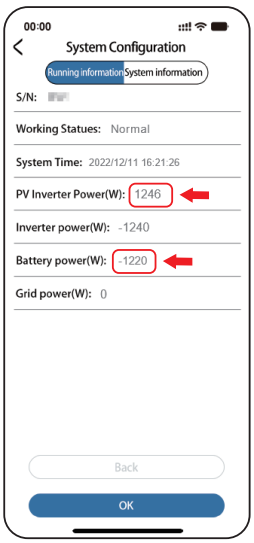
Step3 : Switch on the AC breaker between the grid port of the energy storage inverter and the grid;

Step4 : Switch on the PV switch on the energy storage inverter and AC breaker on the PV-inverter if any;

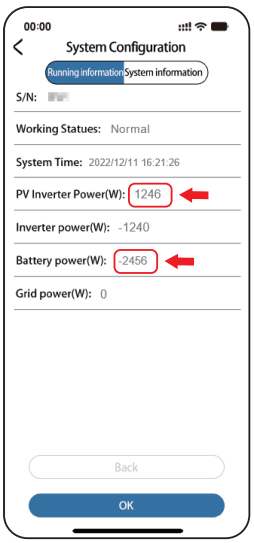
Step5 : Switch off all the loads to see the battery charging status and the inverter's "SYS" LED indicator will be solid on white. Battery power value should be negative. If the system is in AC or hybrid mode, the PV inverter power value should be positive. If PV inverter power value is negative, please check the direction of PV CT or PV meter installed.



DC Mode



AC Mode



Hybrid Mode

SECTION2 : CHECK THE UPS STATE

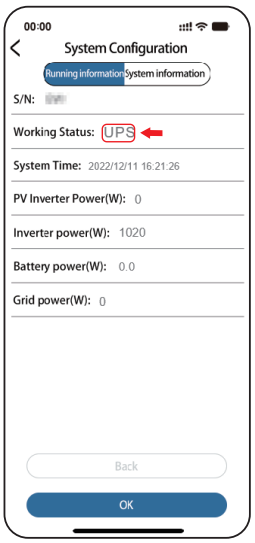
Step1 : Keep the inverter in normal state, as described in the previous section.

Step2 : Connect to the Load;

Step3 : Turn off the switch of the Inverter's AC (Connected the Grid);

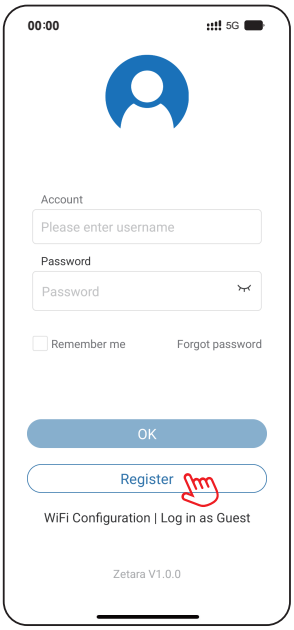
Step4 : Check if the "WORKING STATUS" is "UPS", and also check if the Load working normally.

Step5 : Turn on the the switch of the Inverter's AC, to return to normal state.

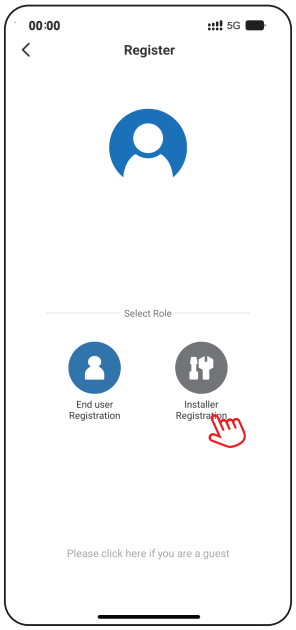


03 INSTALL A NEW SYSTEM

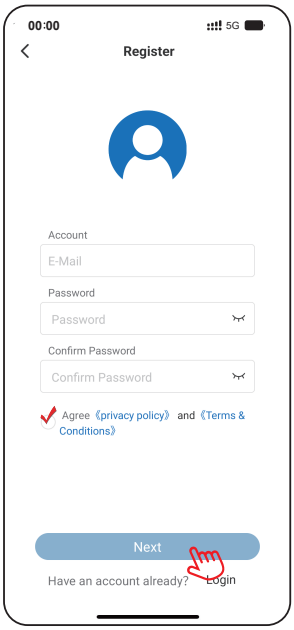
SECTION1 REGISTER AS AN INSTALLER



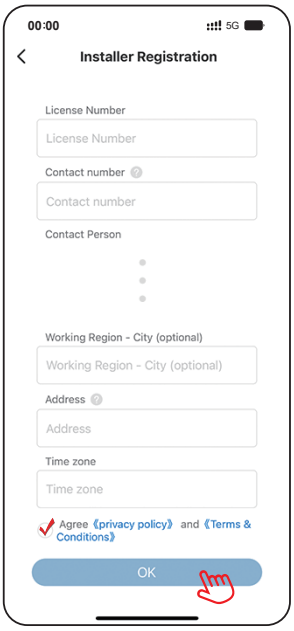
Step1 : Open the Zetara App and click “Register”



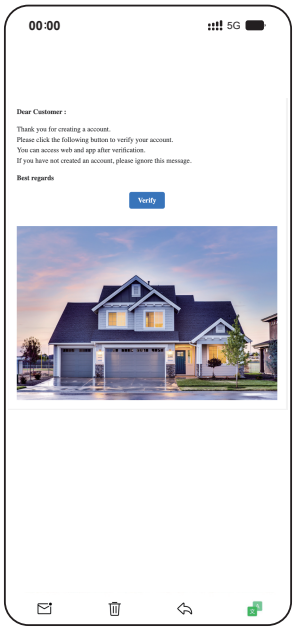
Step2 : Select “Installer Registration”



Step3 : Input your email and password. Click”Next”



Step4 : Input license number,contact number and other informations needed, then Click OK, Verify email



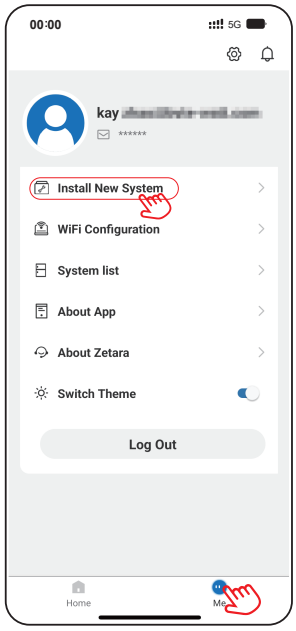
Step5 : After submitting your account information, you will receive a confirmation email.
Click “Verify” button in this email to complete the registration progress



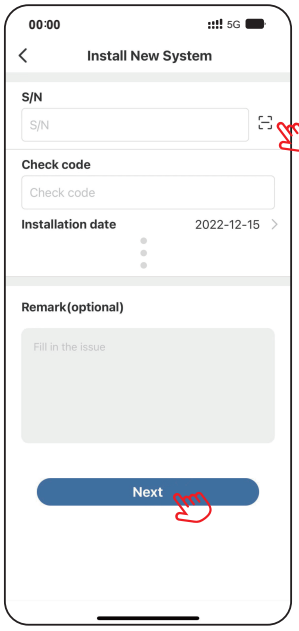
Step6 : You will receive an additional email to inform you if you have successfully completed the registration process.
Please return to the “Zetara” APP to continue

Note : If you don’t receive this email in your inbox, please contact our after-sales for assistance.

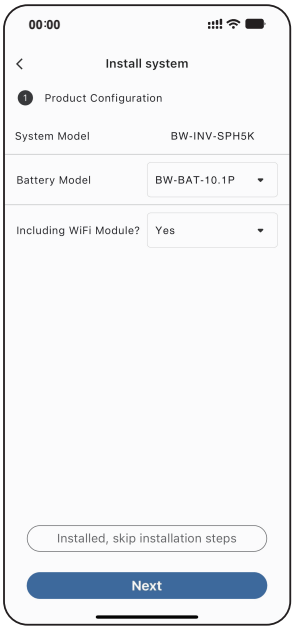
SECTION2 INSTALL NEW SYSTEM



Step1 : Click “Me”, then click “Install New System”



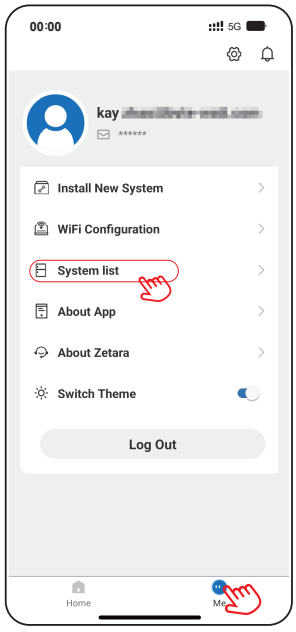
Step2 : Get your “S/N” and check code from the electrical parameter label, scan or input them then click “Next”



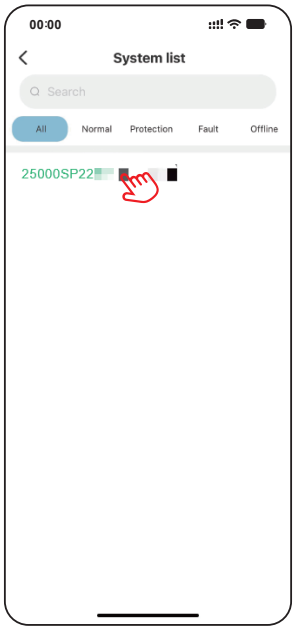
Step3 : If you have already complete the installation, Click “installed, skip”. Otherwise, input the further information step by step to complete the process

04 CHECK THE RUNNING STATE ONLINE

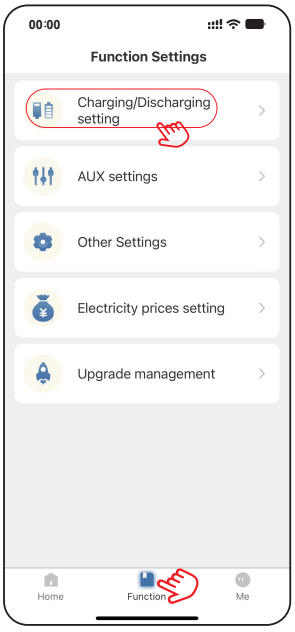
Step1 : Check the Charging Function of the Product.



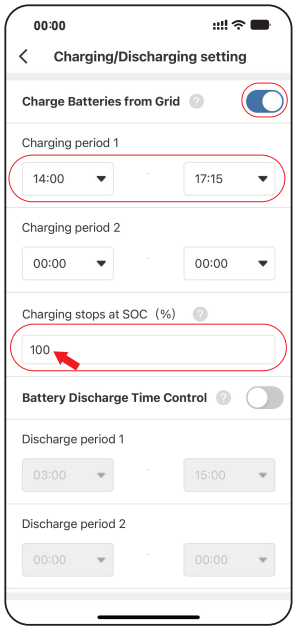
① Click “Me”, then Click “System List”



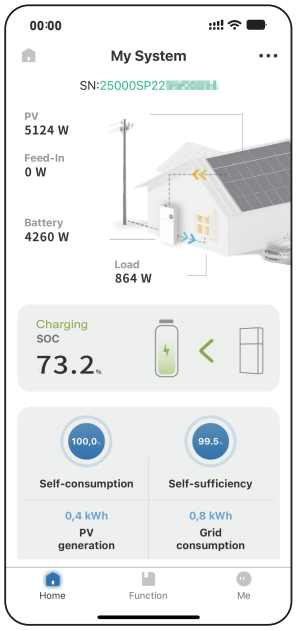
② Choose your system (SN)



③ Click “Function”, then click “Charging / Discharging setting”



④ Switch the button on to Charge Batteries from Grid, set “Charging Period 1”and Charging stops at SOC



⑤ Make sure the setting is correct

If the value is negative, please check the CT or meter installed direction of both grid and PV side

TIPS :

The relative value should be like this :

Load = PV ± GRID-Battery.;

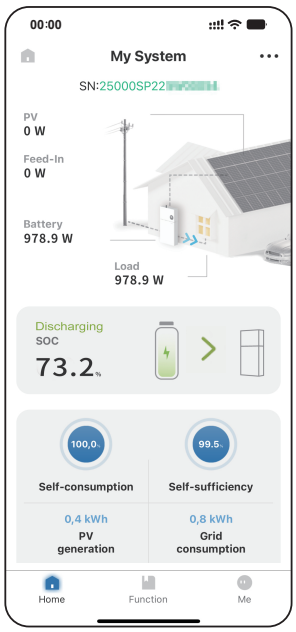
Battery should be in charging status;

PV arrow should be as shown in the picture;

± :

>> absorbing from grid: +;

<< feed-in to grid - .



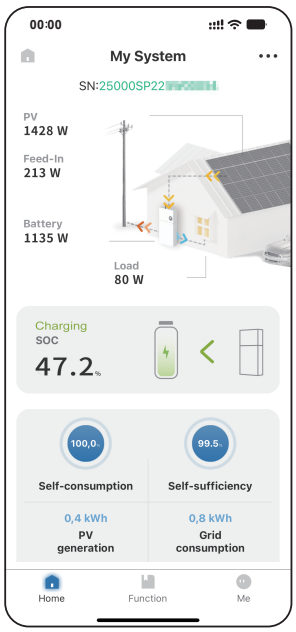
Step1 : Check the battery discharging status

① Switch off the PV;
② Switch on the energy storage inverter;
③ Switch on the AC breaker on the PV inverter if there is any.

TIPS :

The relative value should be like this:

Load = GRID + Battery.



Step2 : Check the system running status

① Switch on the PV;
② Switch on the energy storage inverter;
③ Switch on the AC breaker on the PV inverter if there is any.

TIPS :

The relative value should be like this :

Load = PV ± GRID ± Battery;

± : charging : - ; discharging : + ;

PV arrow should be as the picture shows;

± :

>>absorbing from grid : +;

<< feed-in to grid : -.

Note : During commissioning, if the LED indictors on the display panel of the inverter or the battery pack show red, please refer to troubleshooting.

Tip : Please don’t forget to switch on all of the breakers.