NEOVOLTA™

Prior to turning on the inverters:

1. Verify the wiring
2. Check that there are no tones
    a. Tone means there's a short
3. Conduct a continuity test with a voltage meter
4. Turn each battery on, one by one
5. Don't turn the inverter on yet
6. Verify there is no tone between:
    a. L1 to neutral
    b. L2 to neutral
    c. L1 to L2

NEOVOLTA™

Parallel Systems Configuration

Parallel systems REQUIRE 2+ inverters.

If you only have ONE inverter, please keep the inverter OUT of parallel.

For Parallel System:

1. Turn on one inverter (the Master) with the batteries.
2. Do not connect to the grid yet.
3. Do not connect to solar yet.
4. Program the Master inverter, the last step will be parallel on the Master AFTER programming parallel on the slave.

NEOVOLTA™

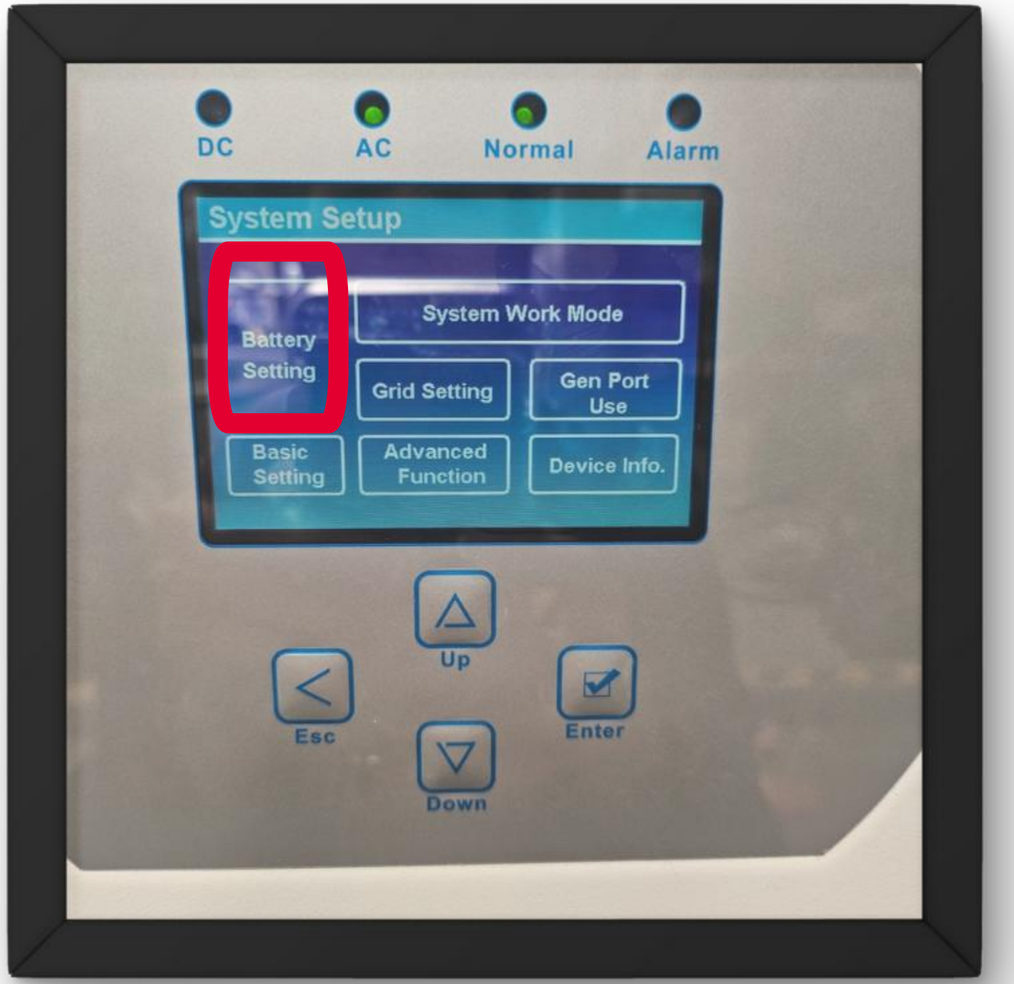
LCD Settings

- On the Master, select the gear icon

NEOVOLTA

LCD Settings

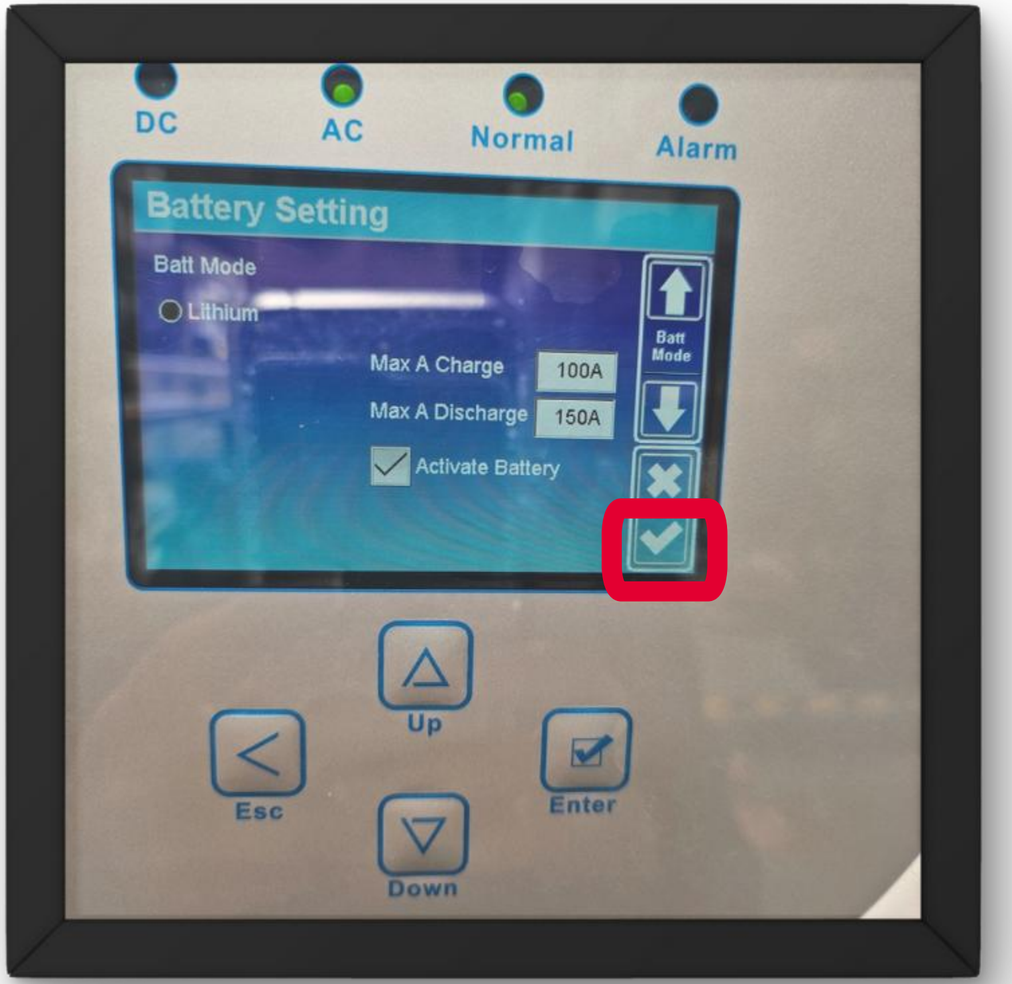
- Start with Battery Setting



NEOVOLTA

LCD Settings

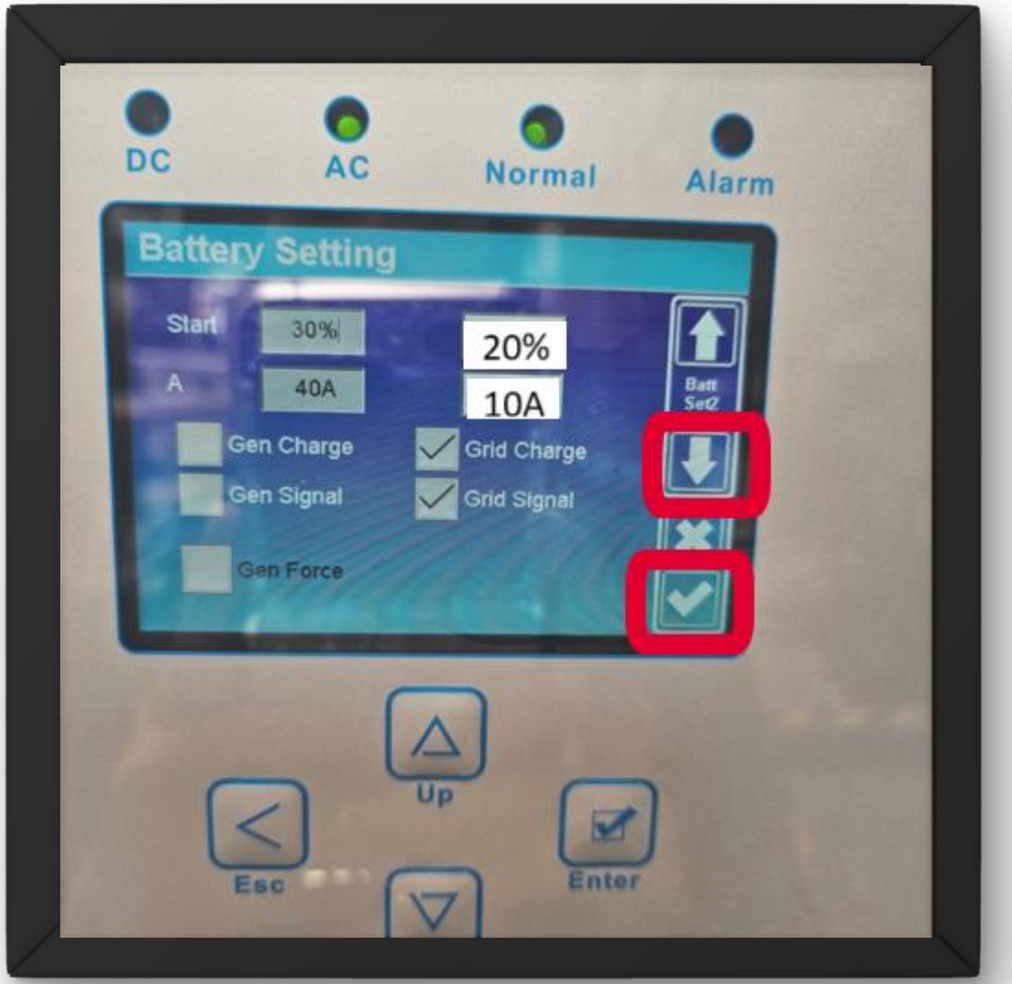
- Select Lithium
- For NV14 or NVPlus Single inverter program:
  - Max A Charge 100A
  - Max A Discharge 150A
- For Parallel inverters program:
  - Max A Charge 185A
  - Max A Discharge 185A
- Checkmark Activate Battery
- To save the settings, press the checkmark



NEOVOLTA

LCD Settings

- To return to Battery Setting after saving
- Select the gear icon->Battery Setting
- Scroll down to the next page, using the down arrow
- It will show Batt Set2
- This page is the same configuration for single or parallel inverters.
  - Start 30% 20%
  - A 40A 10A
- If there is no generator, leave Gen Charge, Gen Signal and Gen Force de-selected
- Select Grid Charge
- Select Grid Signal
- To save the settings, press the checkmark



NEOVOLTA

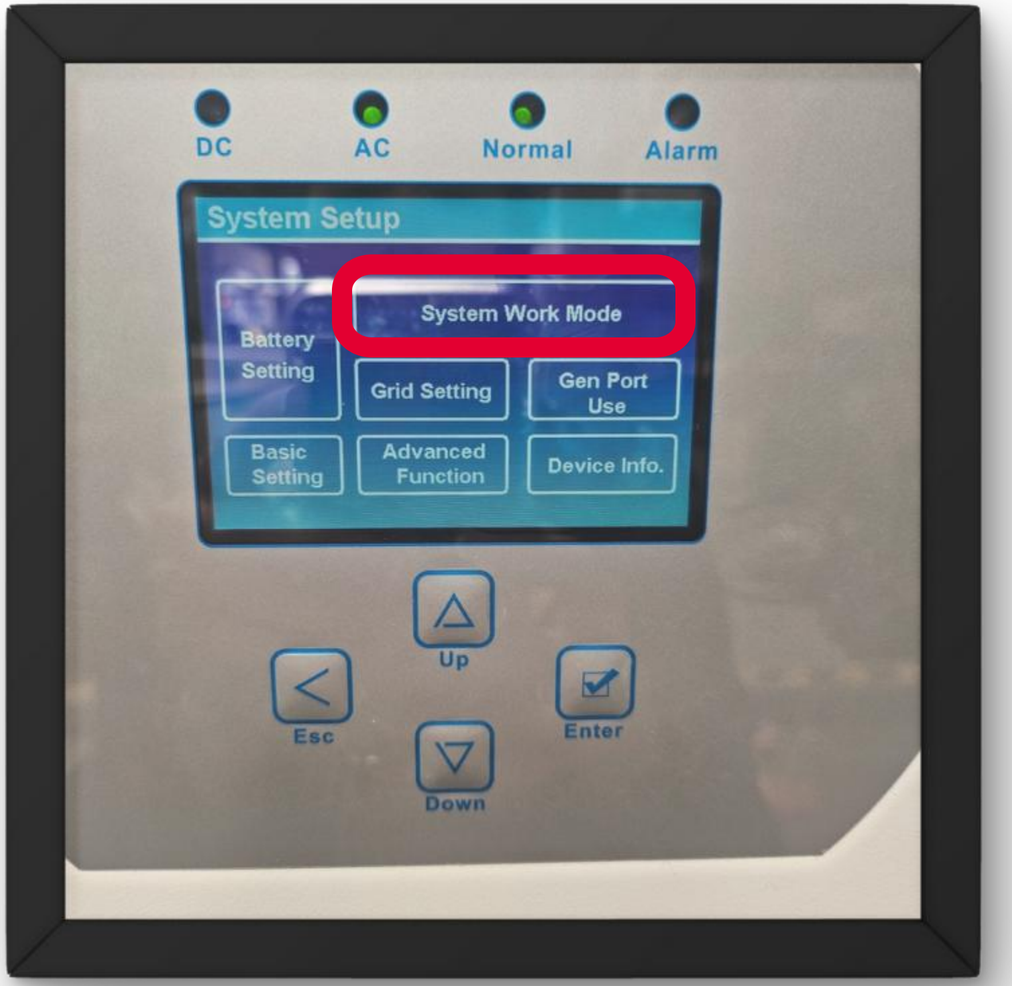
LCD Settings

- To return to Battery Setting after saving
- Select the gear icon->Battery Setting
- Scroll down to the third page, using the down arrow
- It will show Batt Set3
- This page is the same configuration for single or parallel inverters.
  - Lithium Mode 00 – for NV7600 (Lithium Mode 01 – for NV14)
  - Shutdown 10%
  - Low Batt 20%
  - Restart 22%
- To save the settings, press the checkmark

NEOVOLTA™

LCD Settings

- Select the gear icon
- Select System Work Mode



NEOVOLTA

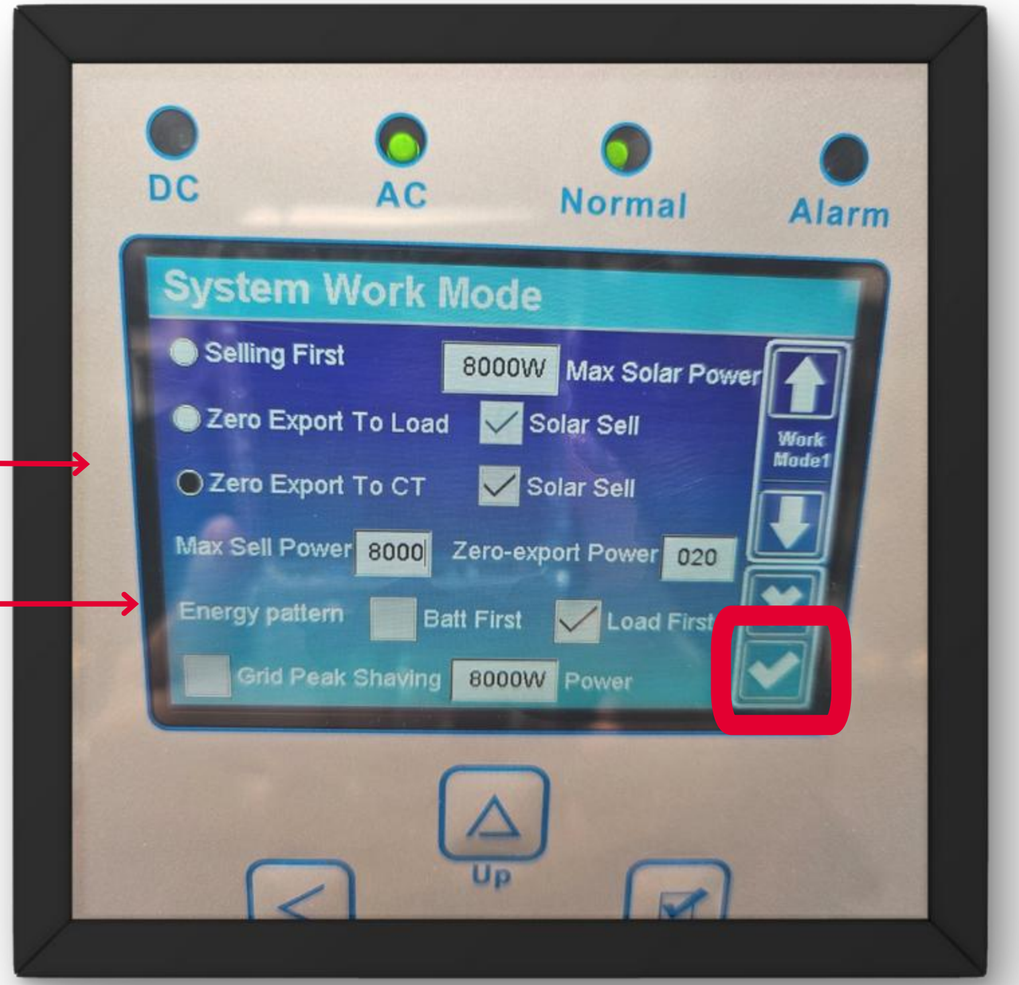
LCD Settings

- This page is the same configuration for single or parallel inverters.
- NO CTs - set to Zero Export to Load
- CTs- set to Zero Export to CT
- Checkmark Solar Sell
- Energy pattern:
  - Load First

Batt First: PV power is firstly used to charge the battery and then used to power the load. If PV power is insufficient, grid will make supplement for battery and load simultaneously.

Load First: PV power is firstly used to power the load and then used to charge the battery. If PV power is insufficient, grid will make supplement for battery and load simultaneously.

  - To save the settings, press the checkmark



NEOVOLTA

LCD Settings

- To return to System Work Mode after saving
- Select the gear icon->System Work Mode
- Scroll down to the next page, using the down arrow
- It will show WorkMode2

NEOVOLTA

LCD Settings

- This page is the same configuration for single or parallel inverters.
  - Select Time of Use
  - Select Grid Charge, 01:00-05:00 30%
  - Select Grid Charge, 05:00-08:00 30%
  - 08:00-12:00 100%
  - 12:00-16:00 100%
  - Select Grid Charge, 16:00-21:00 30%
  - Select Grid Charge, 21:00-01:00 30%
- To save the settings, press the checkmark

NEOVOLTA

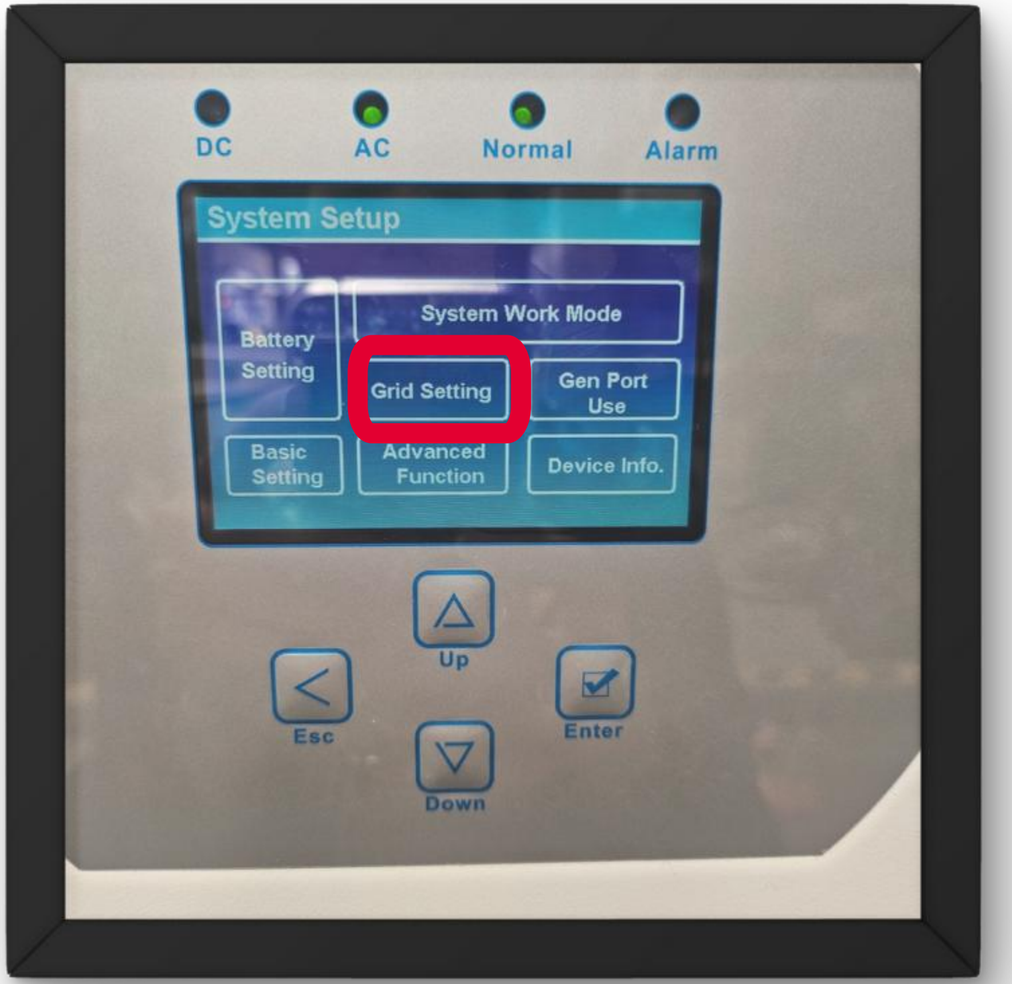
LCD Settings

- To return to System Work Mode after saving
- Select the gear icon->System Work Mode
- Scroll down to the next page, using the down arrow
- It will show WorkMode4
- This page is the same configuration for single or parallel inverters.
- Either select all the days or deselect all the days.
- To save the settings, press the checkmark

NEOVOLTA

LCD Settings

- Select the gear icon
- Select Grid Setting



NEOVOLTA

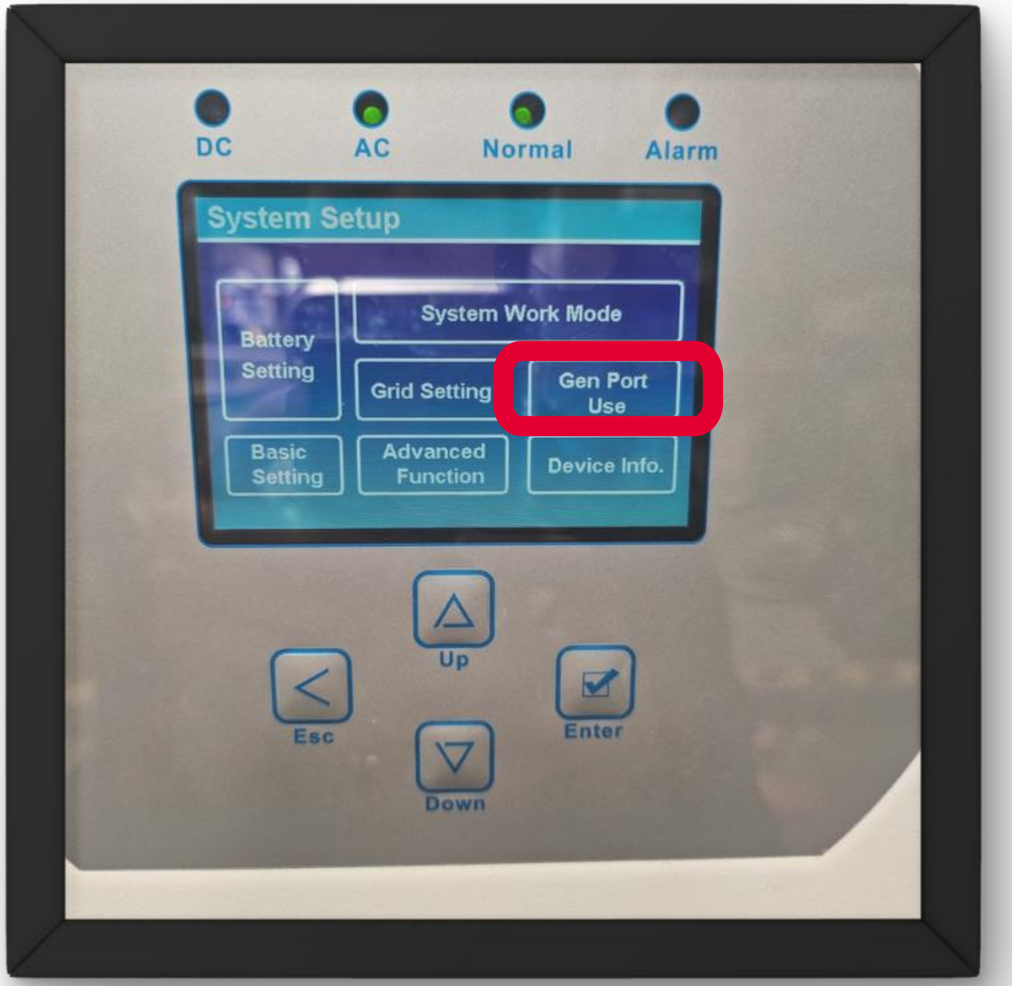
LCD Settings

- This page is the same configuration for single or parallel inverters.
  - Grid Mode: CPUC RULE21
  - For USA, Grid Frequency 60Hz
  - Grid Type:
  - If using 240V, select 120/240V Split Phase
  - If using 208V, select 120/208V 3 Phase
- To save the settings, press the checkmark

NEOVOLTA

LCD Settings

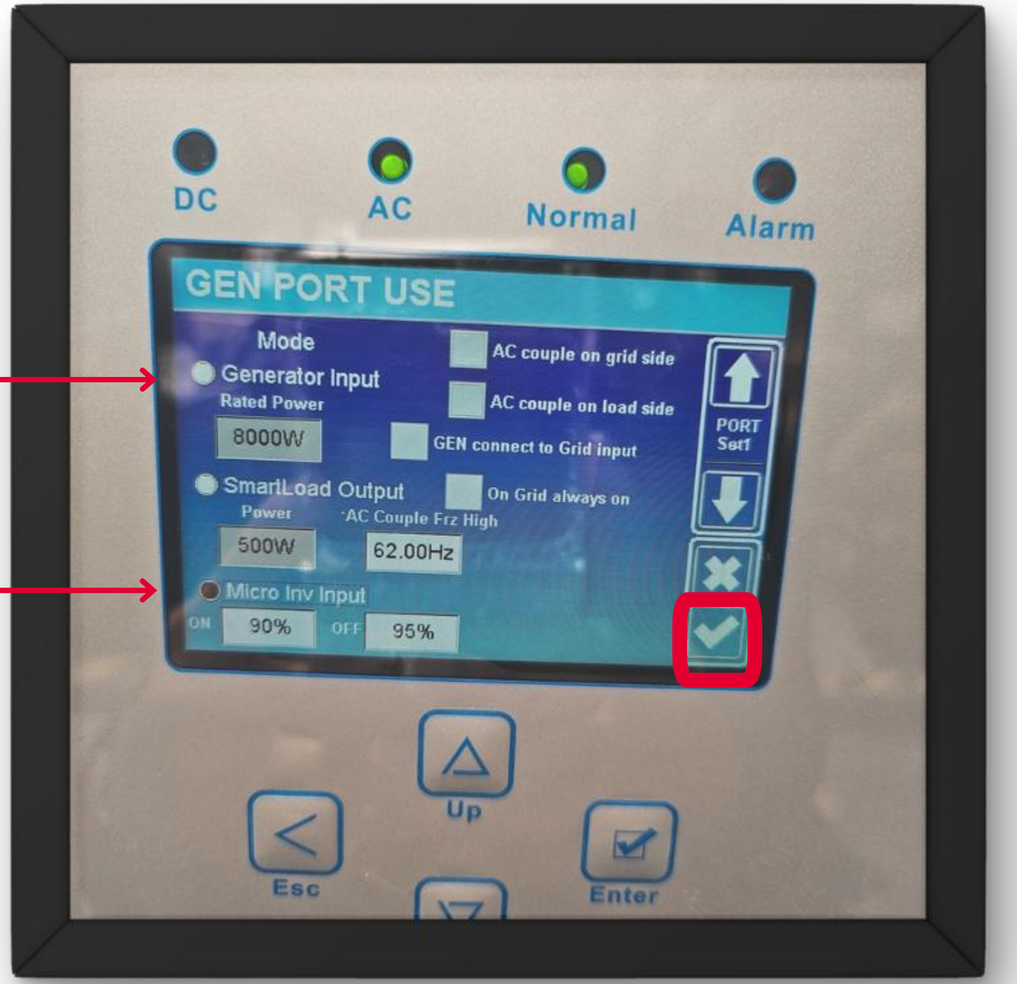
- For AC Solar or Programming a Generator
- Select Gen Port Use



NEOVOLTA

LCD Settings

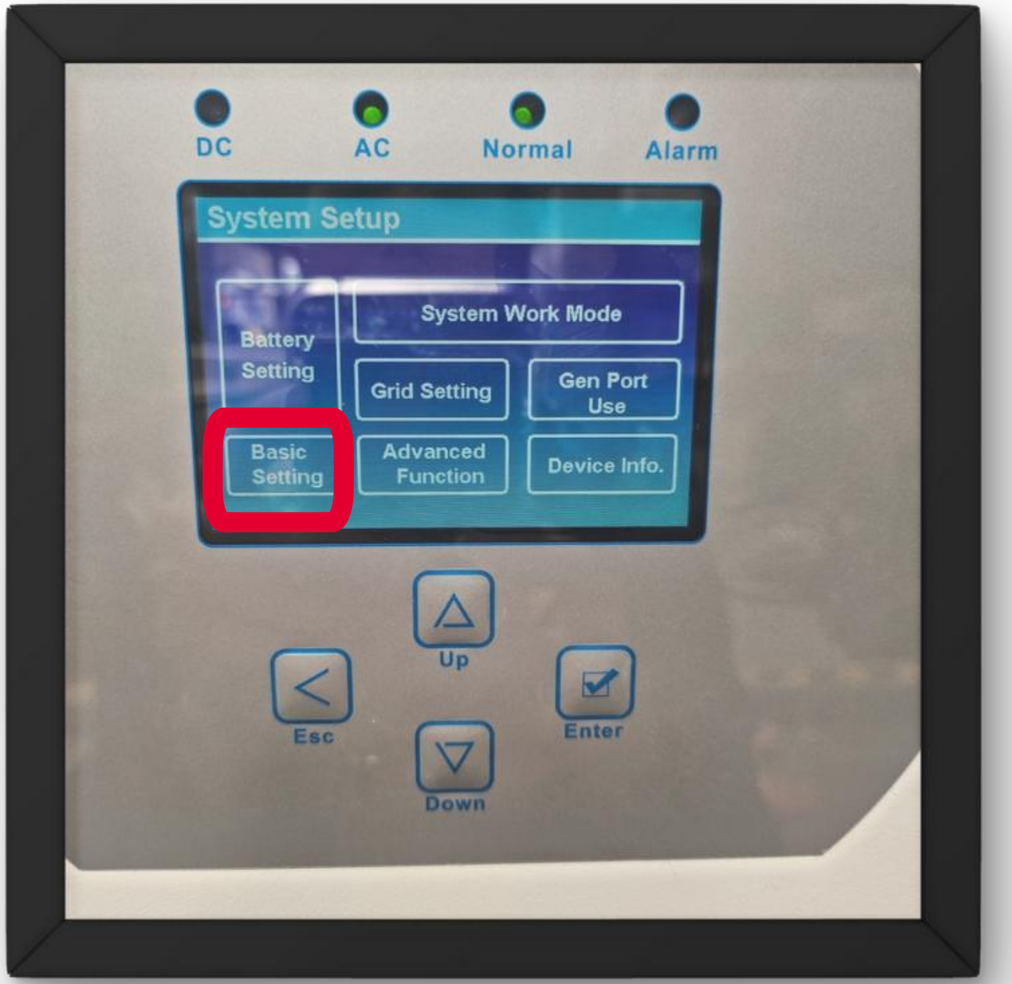
- This page is the same configuration for single or parallel inverters.
- For Programming a Generator
  - Select Generator Input
  - Enter 7600W
- For AC Solar
  - Select Micro Inv Input
  - ON 90%
  - OFF 95%
- To save the settings, press the checkmark



NEOVOLTA

LCD Settings

- Select the gear icon
- Select Basic Setting



NEOVOLTA

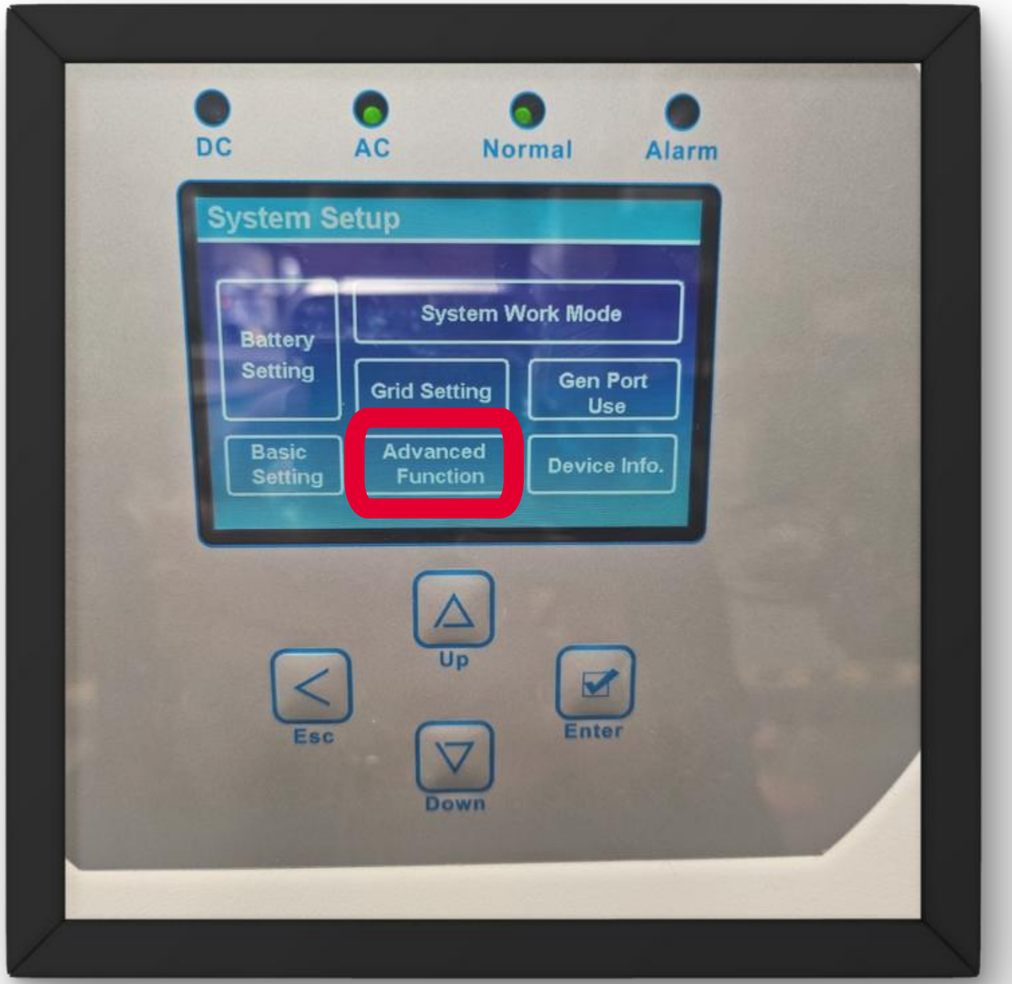
LCD Settings

- This page is the same configuration for single or parallel inverters.
- Program the date and time.
- Please ensure Beep is de-selected.
- Please ensure Auto Dim is selected.
- To save the settings, press the checkmark

NEOVOLTA

LCD Settings

- To program parallel inverters
- Select Advanced Function



NEOVOLTA™

LCD Settings

- For Parallel Configurations,
- Program parallel on the slave inverter first.

- Select the gear icon, select Advanced Function

- Select Parallel, Slave, Modbus SN 02, A Phase

- To save the settings, press the checkmark

NEOVOLTA™

LCD Settings

- For Parallel Configurations,
- Program parallel on the master inverter.

- Select the gear icon, select Advanced Function

- Select Parallel, Master, Modbus SN 01, A Phase

- To save the settings, press the checkmark

NEOVOLTA™

Parallel Systems Configuration

1. Turn off the slave first.
2. Turn off the master next.

After 5 minutes:

- Restart slave first then the master.
- The inverter should show Green LED, normal.

If normal doesn’t come on, it means there are 0 V on the load.

Verify the slave has the same parameters from the master.

- For example, check to see if the slave inverter has the same settings as the Master.
- Gear icon->Battery Settings-> First page (Batt Mode)
- Max A Charge 185A
- Max A Discharge 185A

It’s a good way to check the parallel system is working.

Then turn on solar, verify all is functional, with the grid off.

Once that has successfully been configured, turn the grid on.

NEOVOLTA™

Prior to commissioning:

1. Please obtain the WiFi information for the plant.
2. The email address that will be used for commissioning.
    a. If the homeowner’s email will be used, please note a verification code will be sent to the email address when the account is registered.
    b. The account can be created prior to going onsite. This allows for requesting the verification code from the homeowner ahead of time.

NEOVOLTA™

Selecting the Correct Solarman App

Both homeowner and installer require an account. They are created in different apps.

- Solarman Smart - Homeowner
- Solarman Business - Installer
- Solarman Pro - Europe/Non-U.S.

The system should be commissioned using the system owner’s account.

NEOVOLTA™

Selecting the Correct Solarman App

Determining the owner of the system

The owner would be classified as:

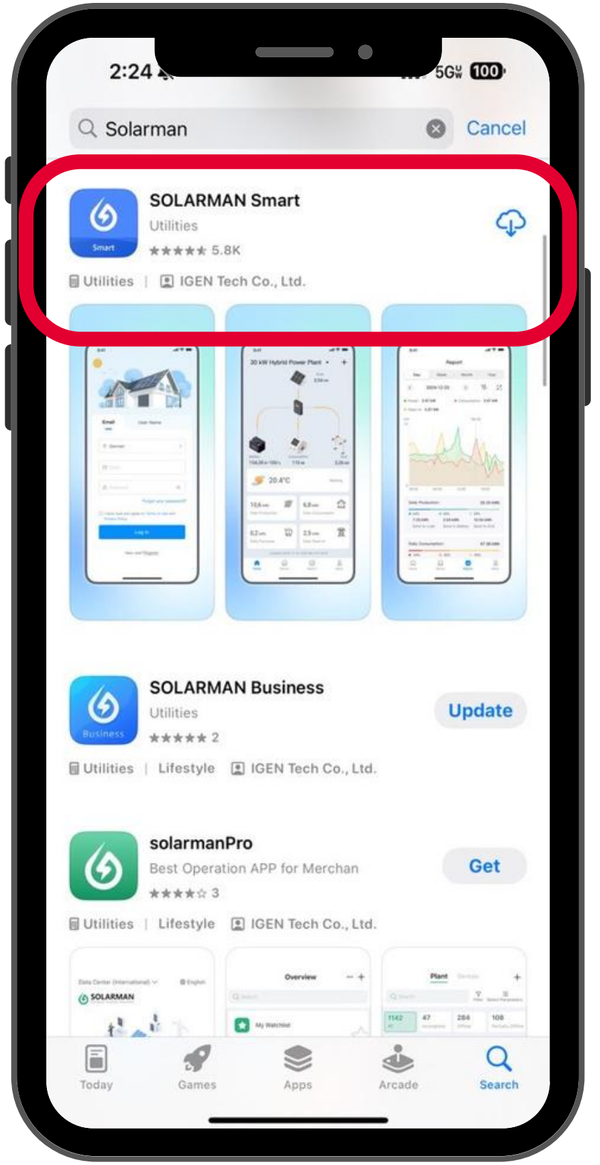
- **The homeowner purchased the system -> Use Solarman SMART.**
- **The installer purchased the system and is leasing the system to the homeowner -> Use Solarman Business.**
- **Third party, such as HDM, San Diego Community Power, etc. –> this is at the discretion of the third party/installer/homeowner. NeoVolta has primarily seen it commissioned through the installer's account through Solarman Business. Commissioning through the installer's account allows the installer to manage the system if there's a change to WiFi, etc.**

NEOVOLTA™

App Store

Search Solarman

- Solarman Smart - Homeowner
- Solarman Business - Installer
- Solarman Pro - Europe/Non-U.S.



NEOVOLTA™

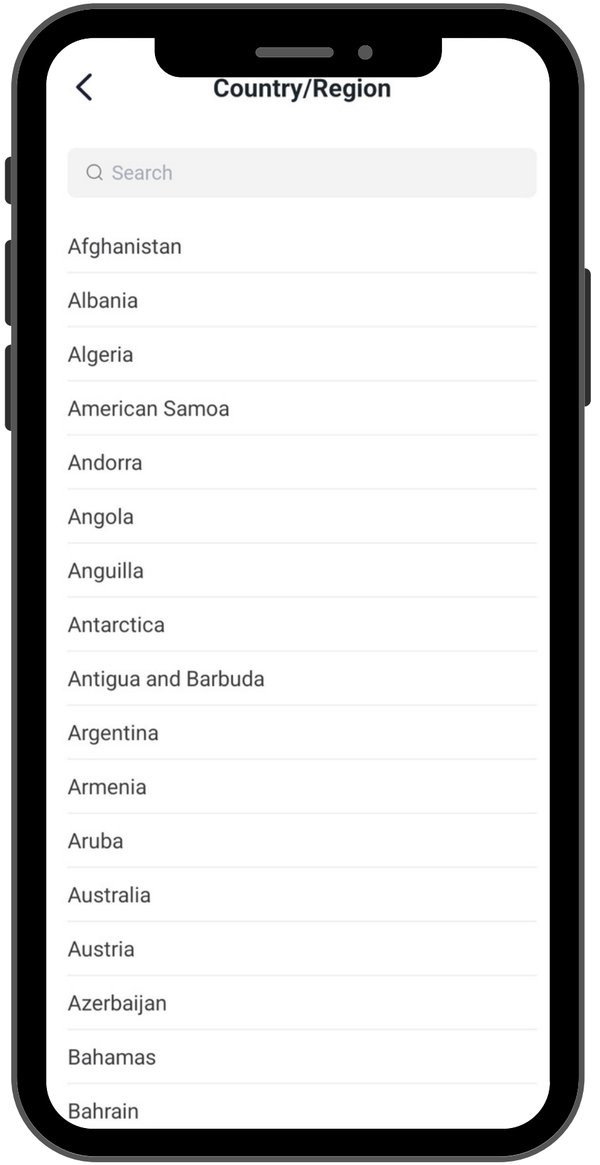
Commission Using Solarman Smart

- Solarman Smart - Homeowner

NEOVOLTA™

Chose region

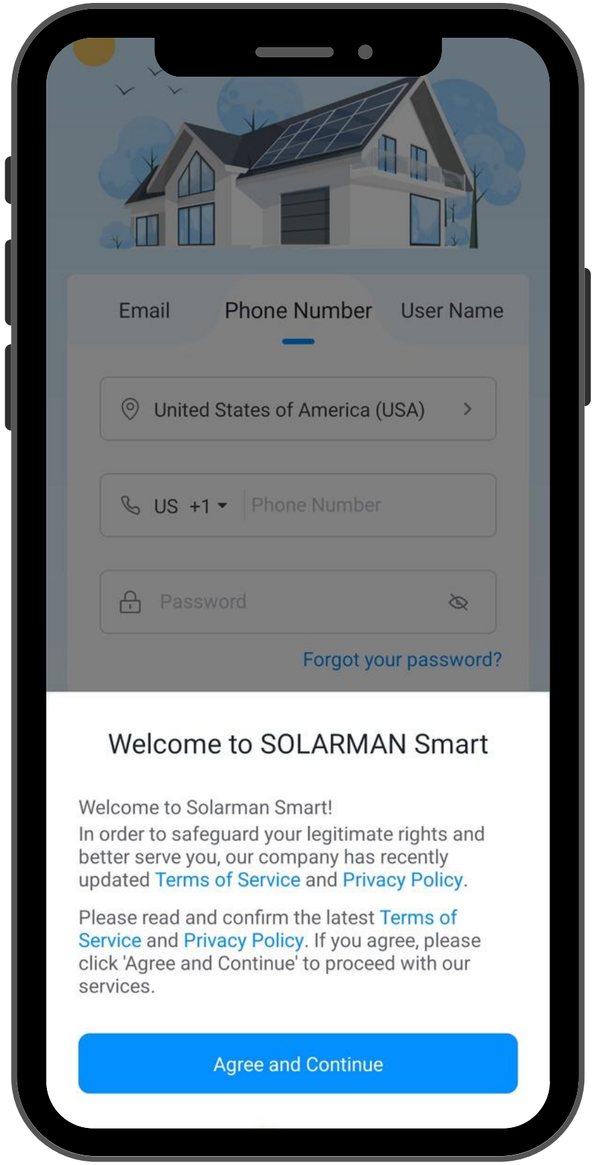
- Select your region



NEOVOLTA

Service Agreement and Privacy Policy

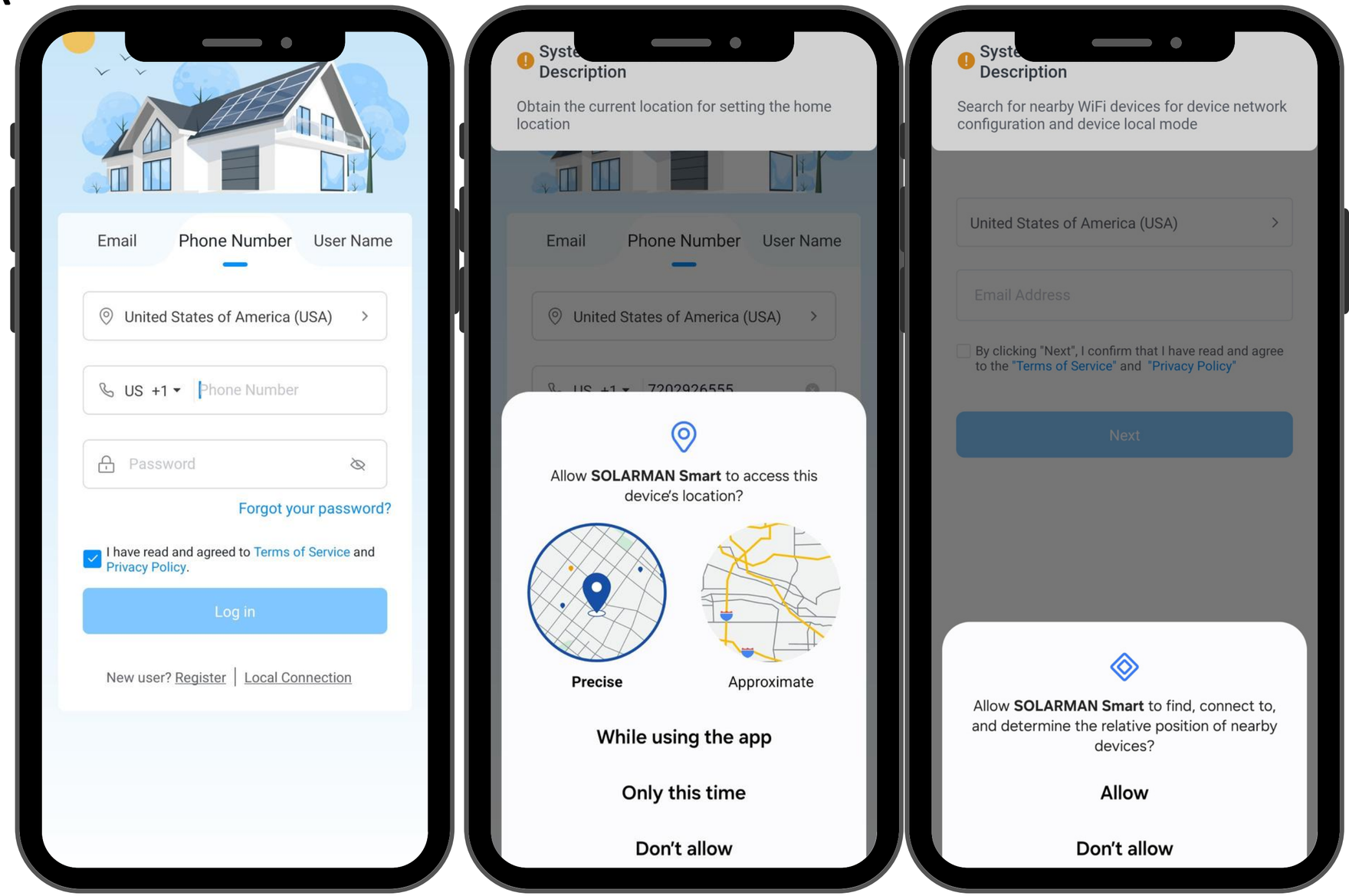
- Please read
- Once you have read,
- Select the blue ‘Agree’ button



NEOVOLTA™

Solarman SMART

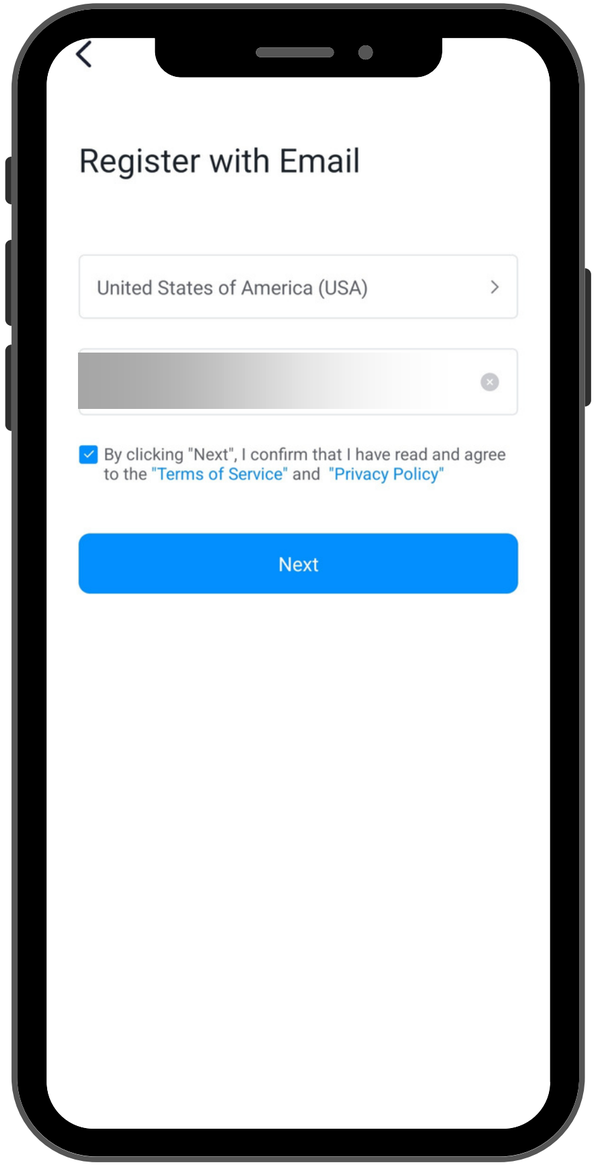
- App will request to use location
- Accept ‘Allow While Using App’
- This will help find the install address faster



NEOVOLTA™

Solarman SMART

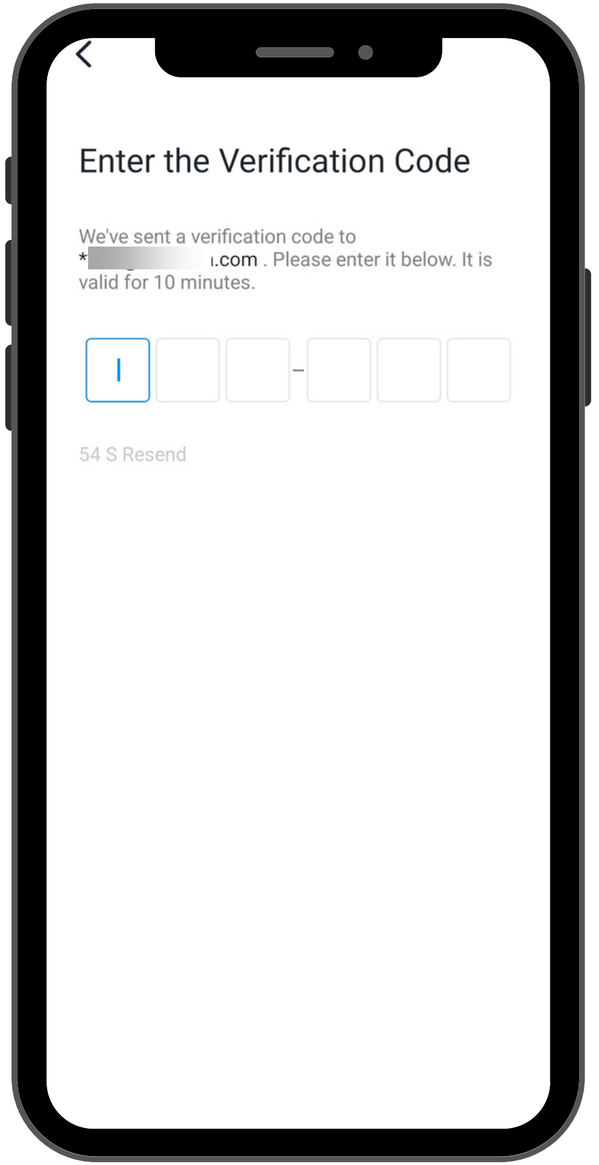
- Register with Email on the App
- Select Next



NEOVOLTA™

Solarman SMART

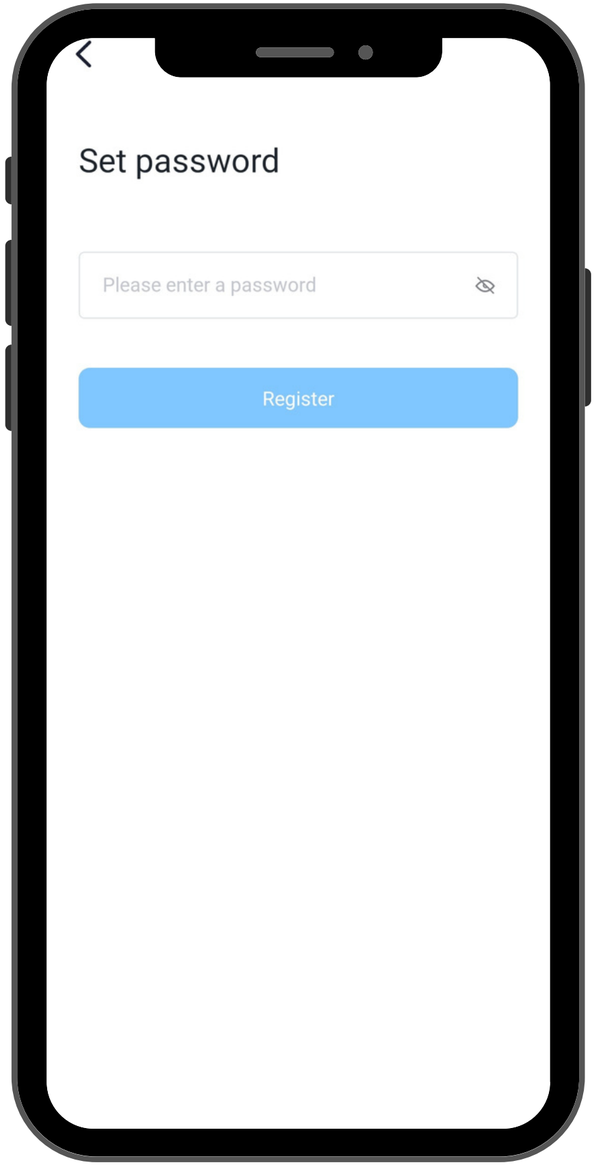
- A Verification Code will be sent the email provided
- Enter the Verification Code



NEOVOLTA™

Solarman SMART

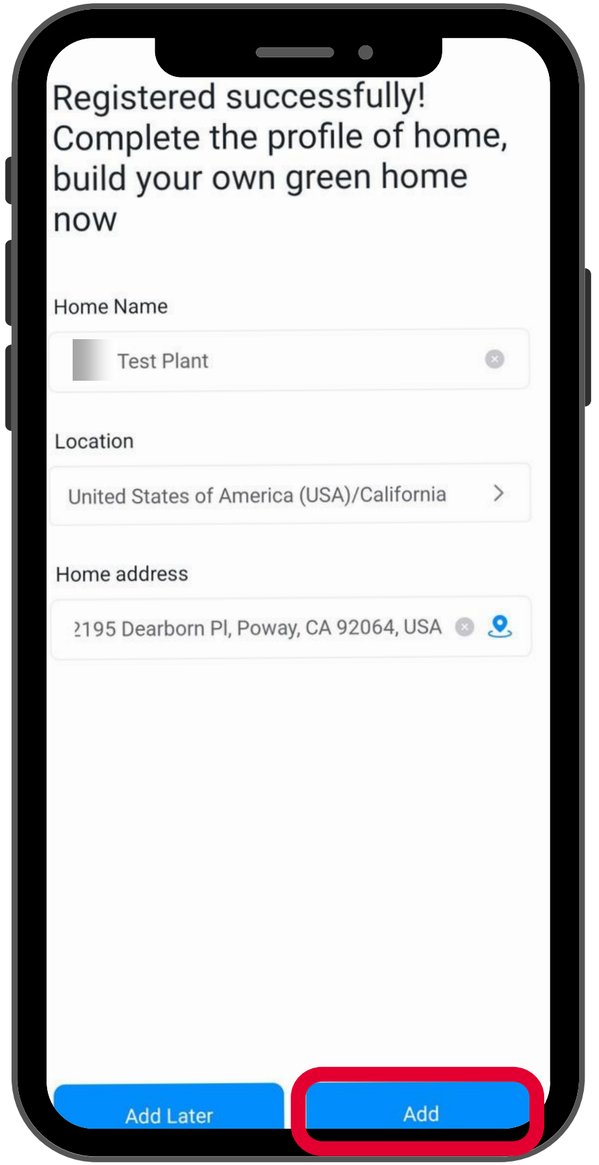
- Set a password
- Select Register



NEOVOLTA

Solarman SMART

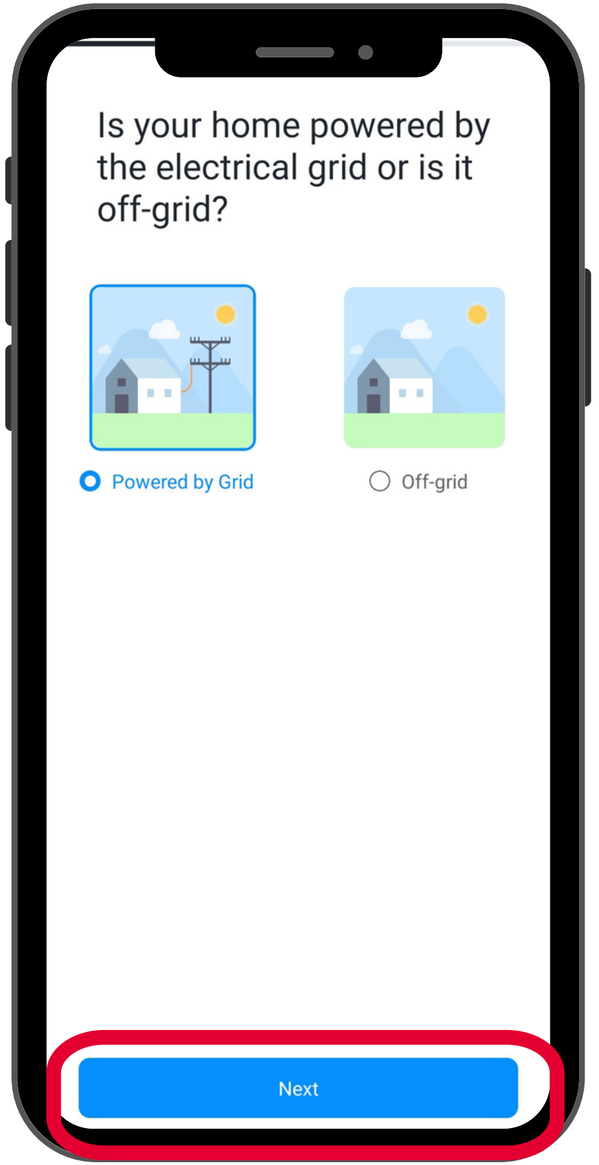
- A Register successfully! Prompt should appear.
- Select Add



NEOVOLTA™

Solarman SMART

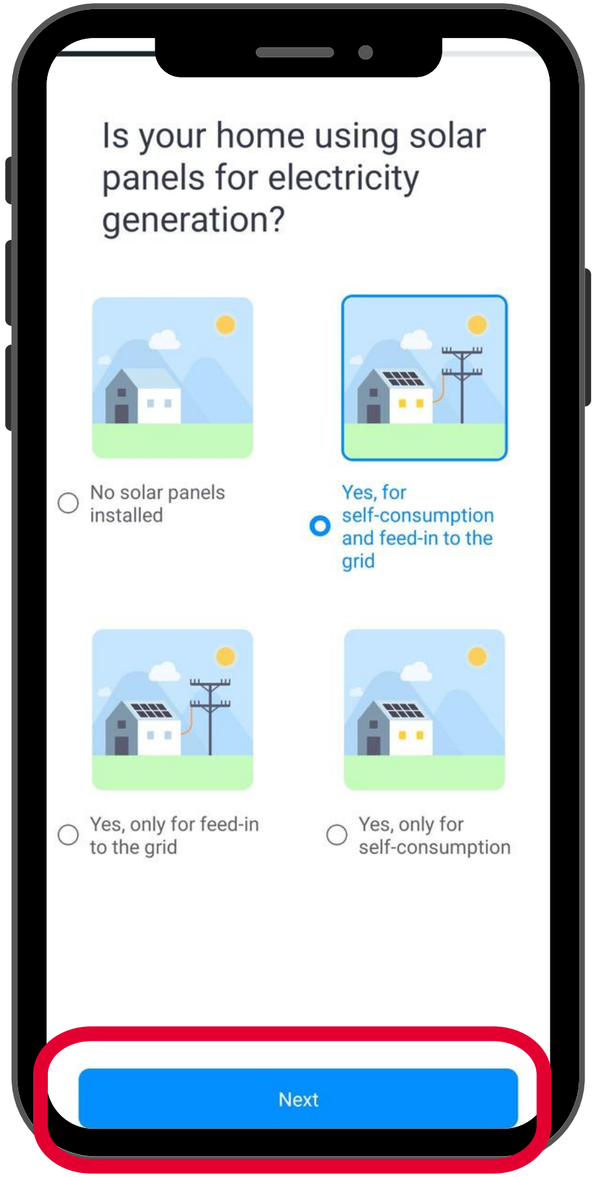
- Answer the prompts and select Next



NEOVOLTA™

Solarman SMART

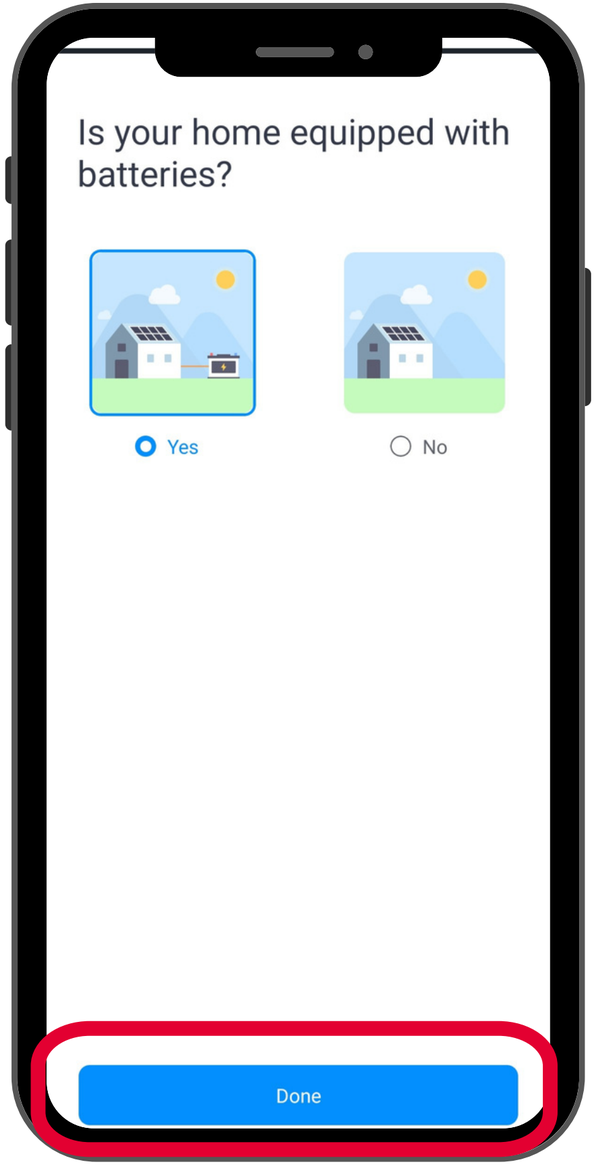
- Answer the prompts and select Next



NEOVOLTA™

Solarman SMART

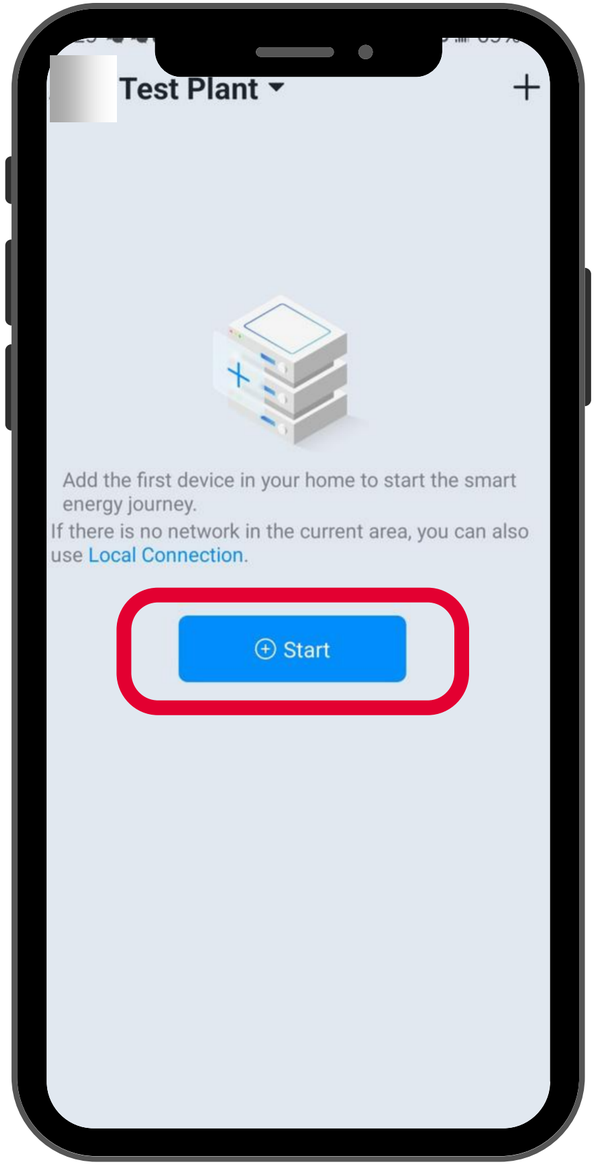
- Answer the prompts and select Done



NEOVOLTA

Solarman SMART

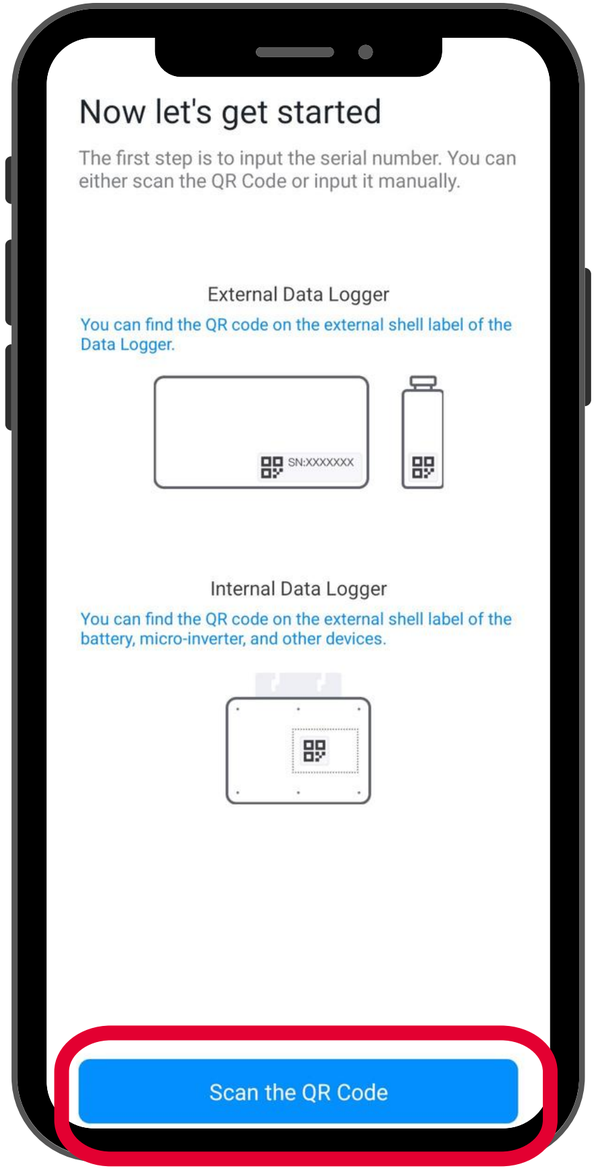
- The Plant has been created
- Select Start



NEOVOLTA™

Solarman SMART

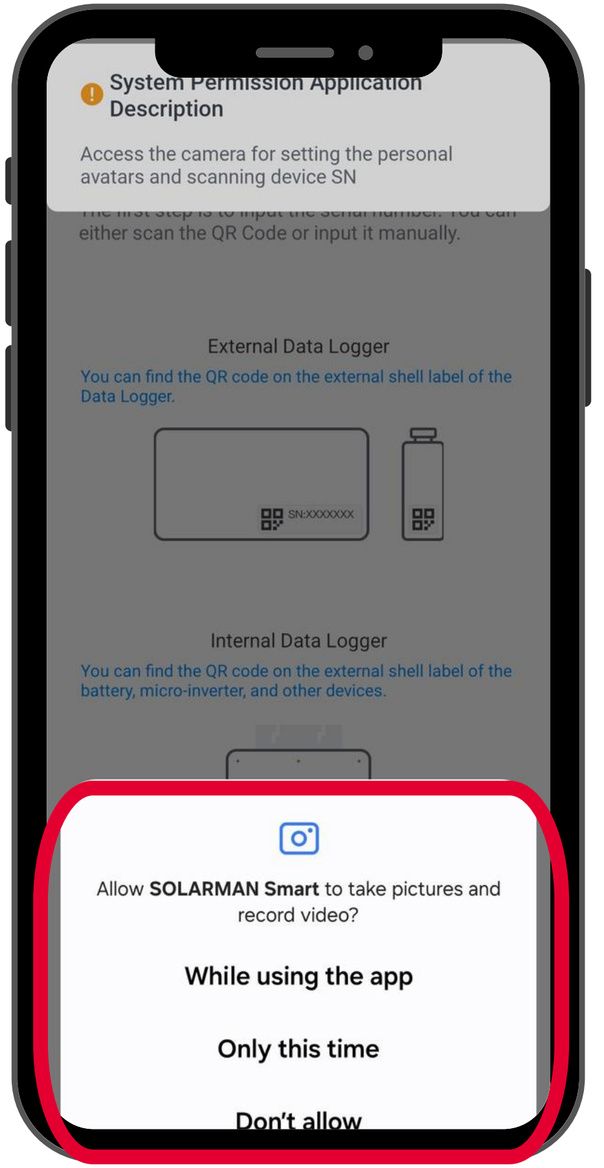
- Add Data Logger
- Scan the QR Code



NEOVOLTA™

Solarman SMART

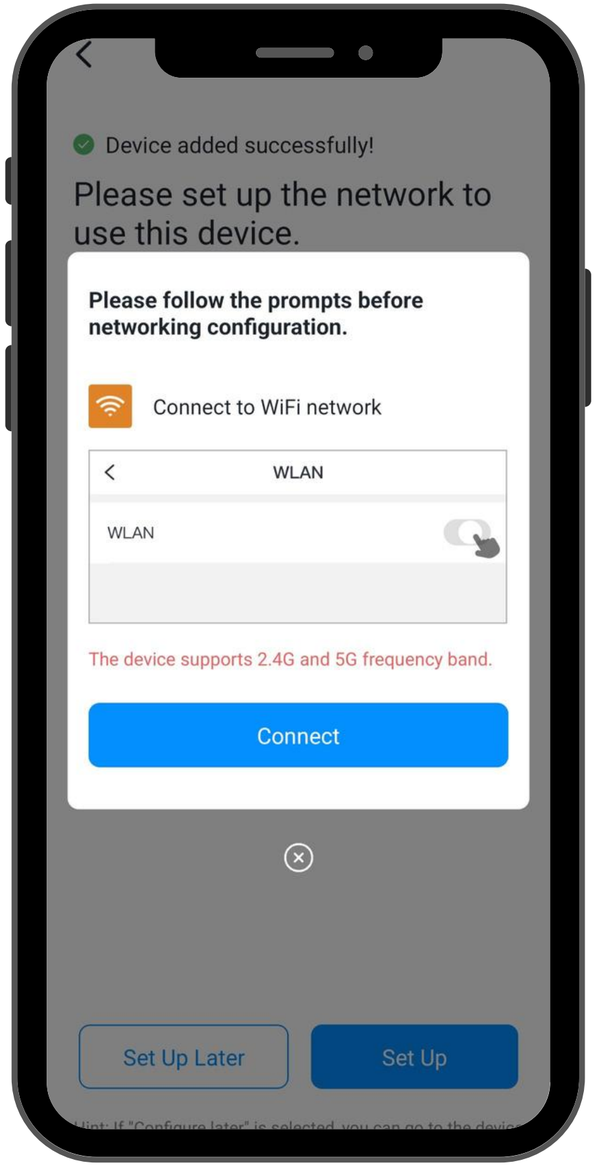
- Grant Access based on preference



NEOVOLTA™

Solarman SMART

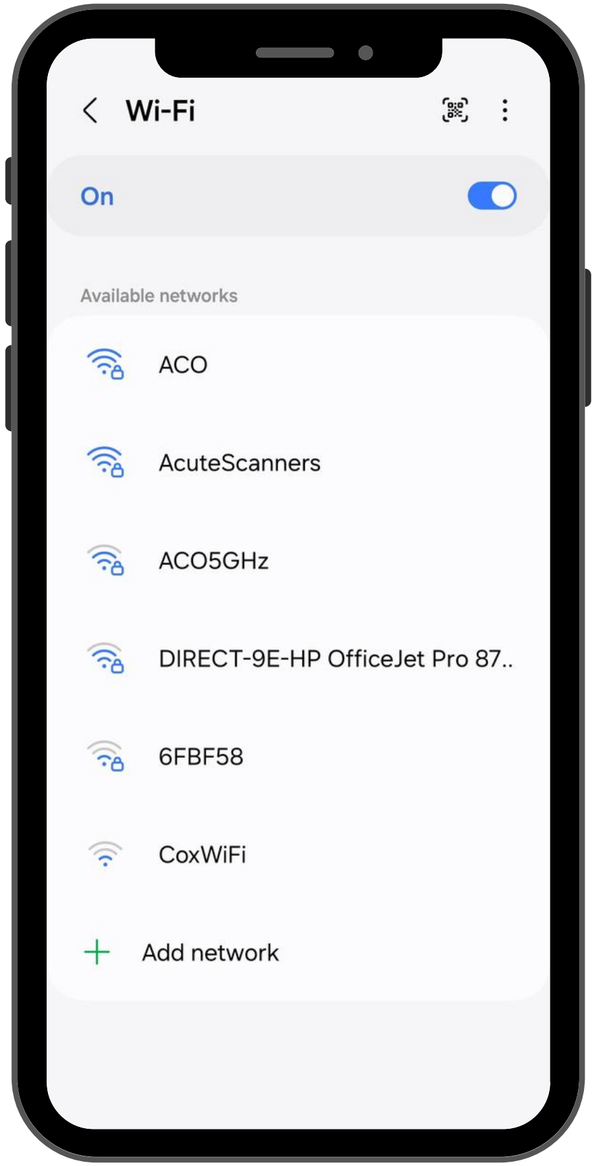
- Connect to the Homeowner’s WiFi



NEOVOLTA™

Solarman SMART

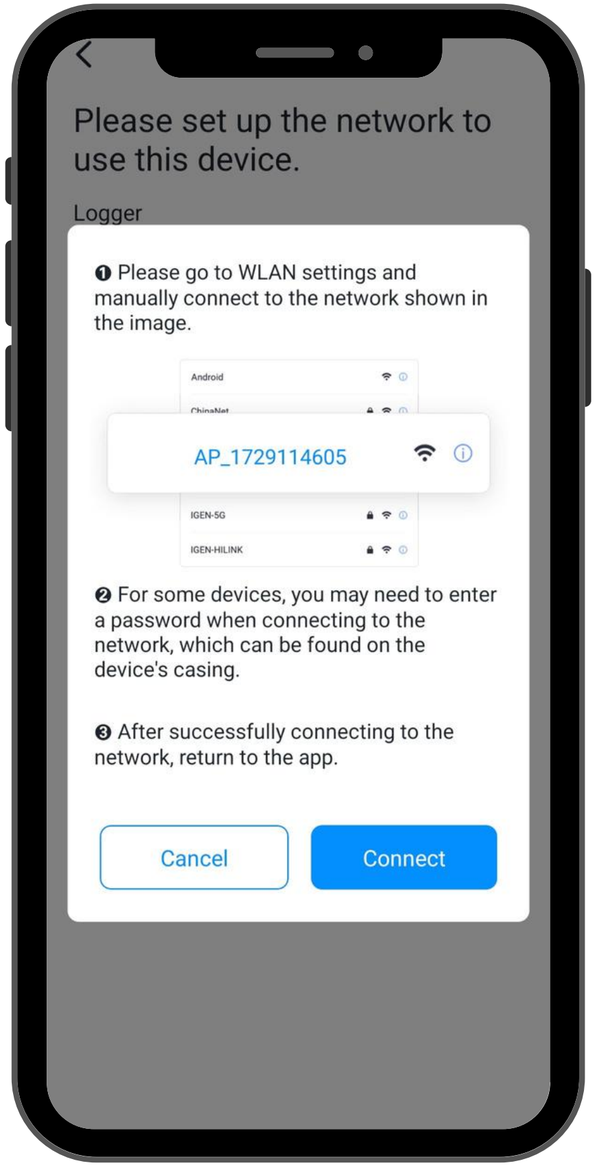
- It will open the cell phone WiFi settings.
- Connect to the homeowner’s WiFi settings.
- Return to the Solarman SMART app.



NEOVOLTA™

Solarman SMART

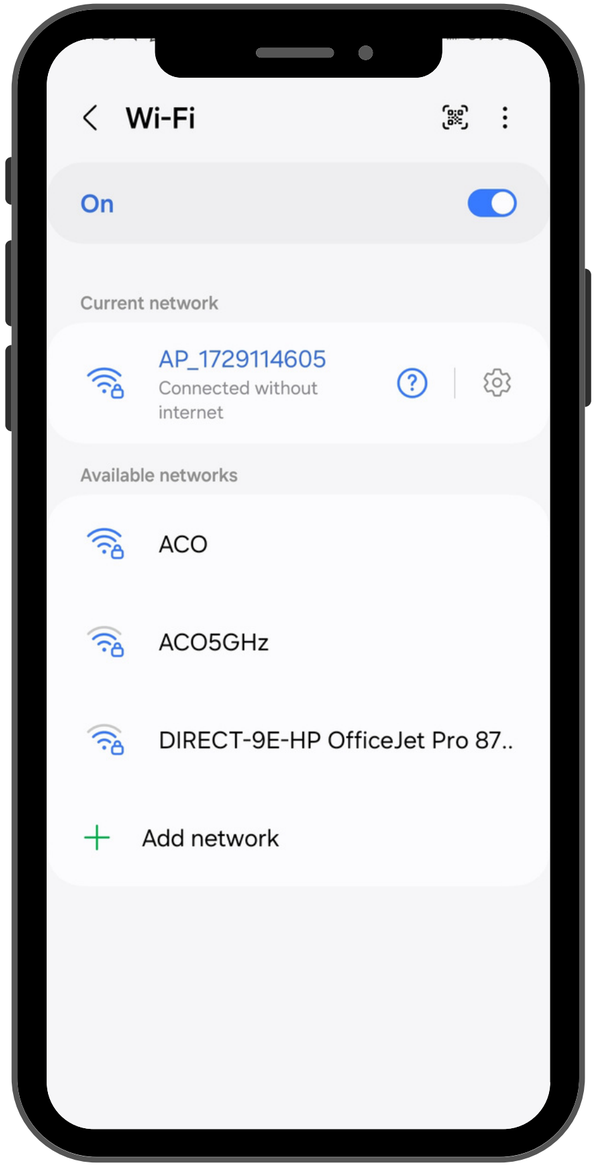
- The app will request connecting to the DataLogger.
- Select Connect.



NEOVOLTA

Solarman SMART

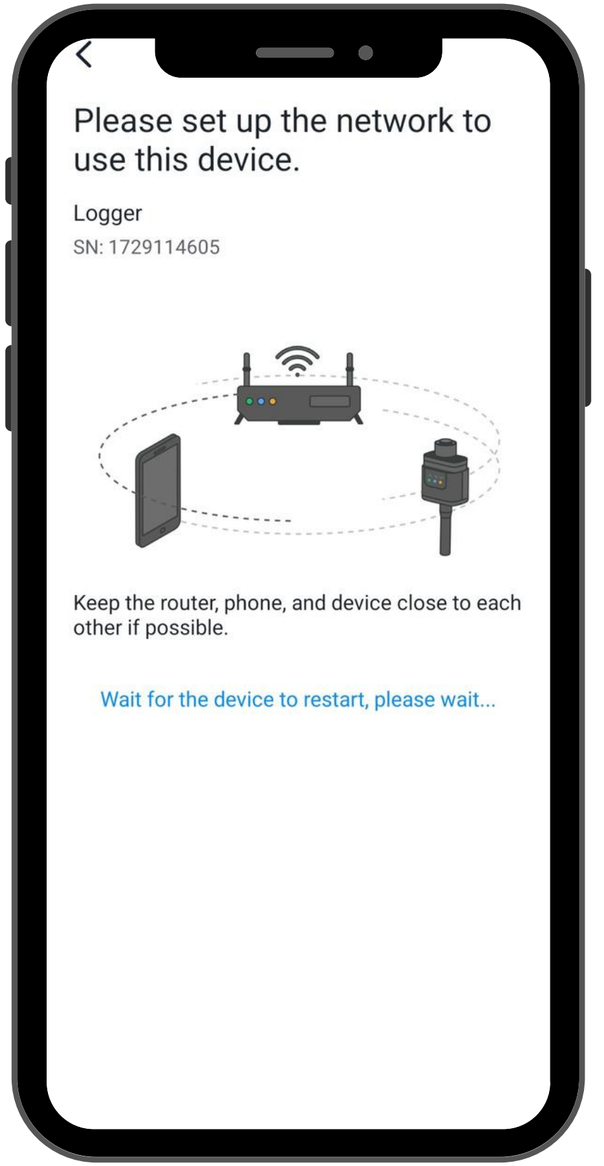
- Open the Cell Phone WiFi settings.
- Select the AP_loggerserialnumber.
- Enter password, if it was not scanned with QR Code.
- It will connect and my provide the message “Connected without internet”
- Return to the Solarman SMART app.



NEOVOLTA™

Solarman SMART

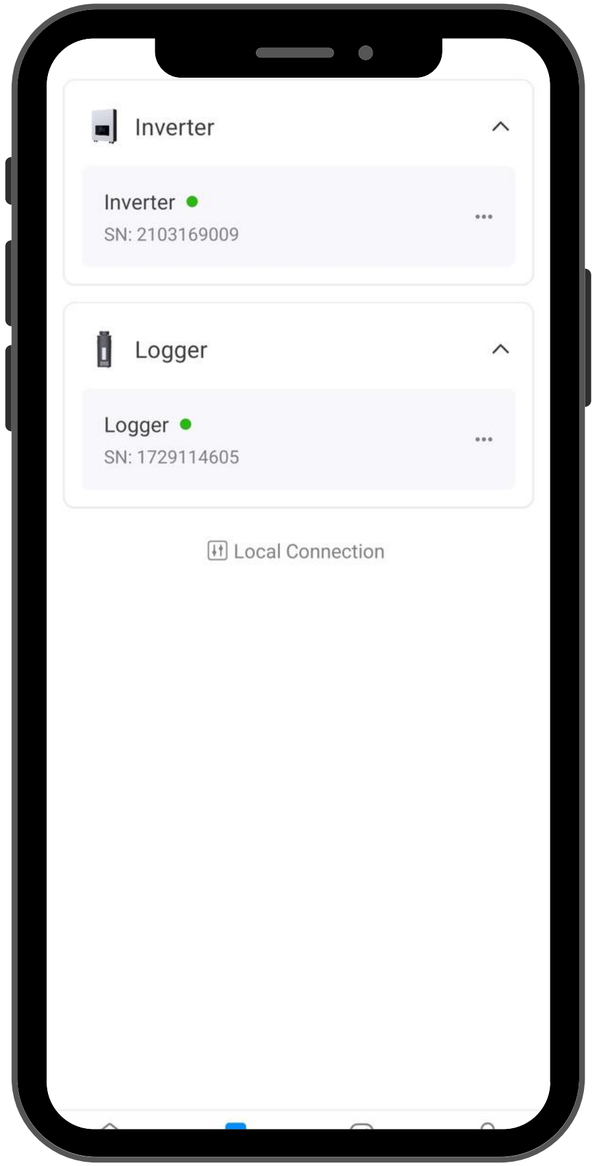
- The app should start automatically connecting.



NEOVOLTA™

Solarman SMART

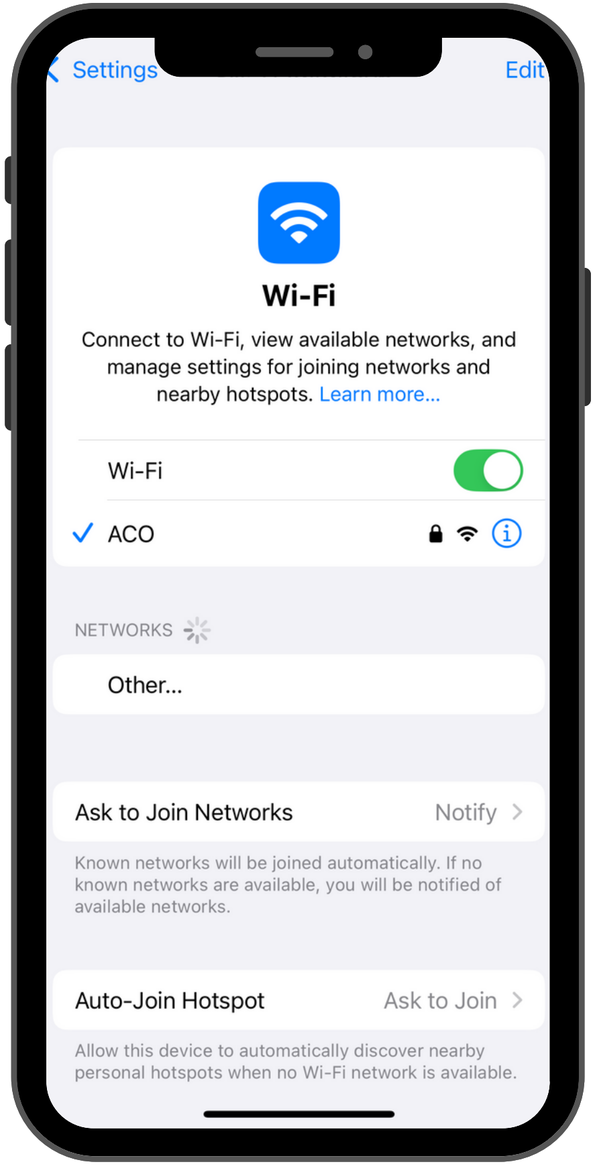
- Once complete, the inverter and logger should be visible on the plant.



NEOVOLTA™

Create a Plant

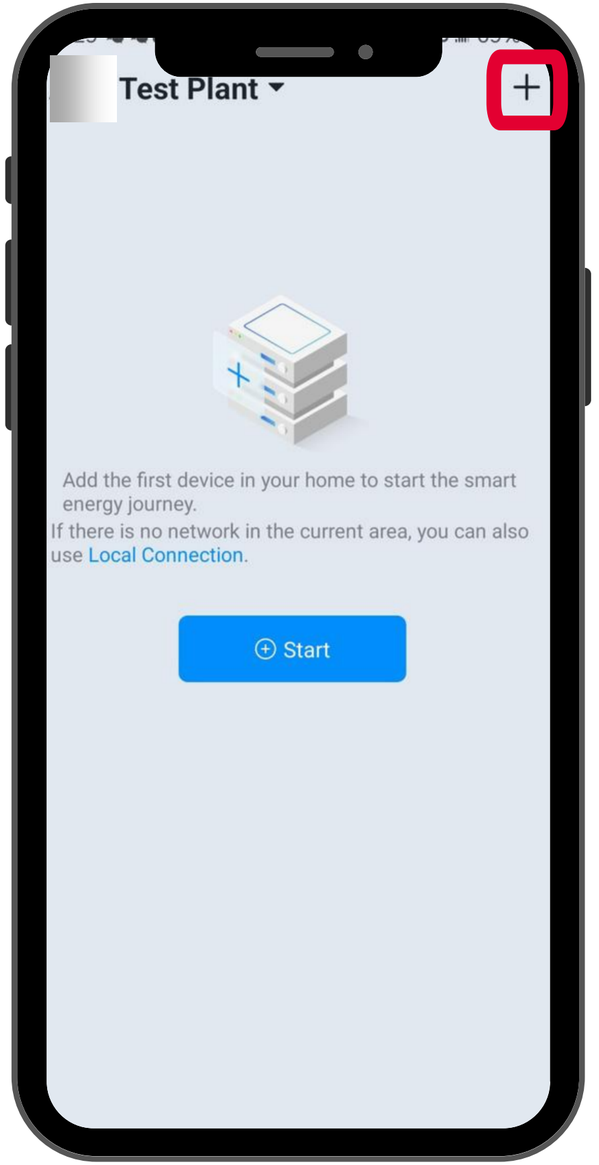
- After it has successfully connected, please return to the cellphone settings and change the WiFi from the logger.



NEOVOLTA

Solarman SMART

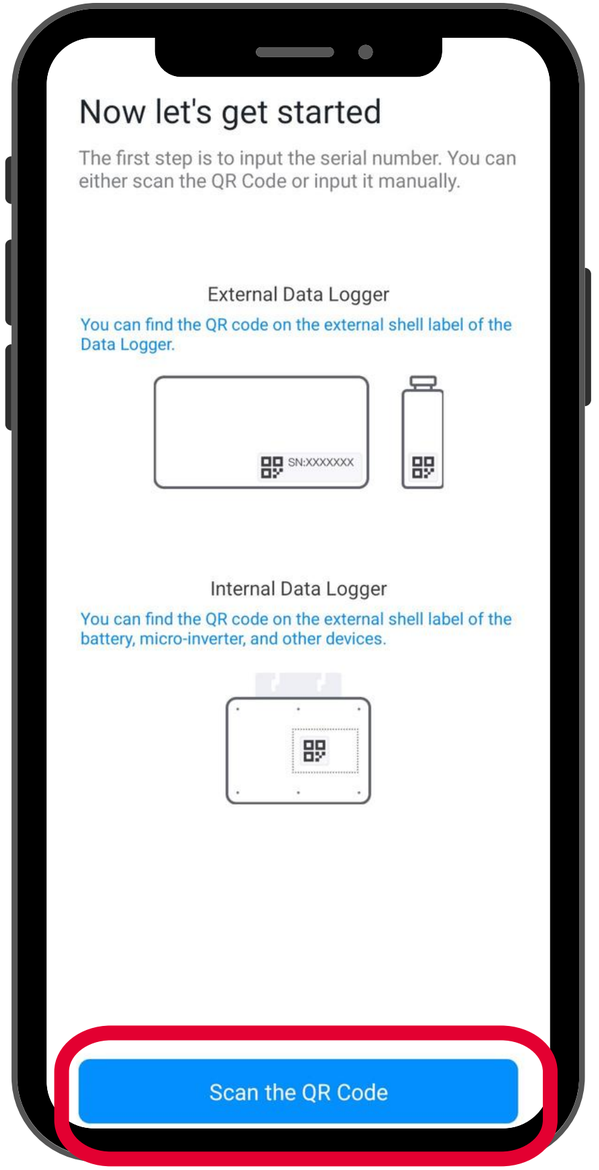
- Add slave device, by selecting “+”
- Select “Add Device”



NEOVOLTA™

Solarman SMART

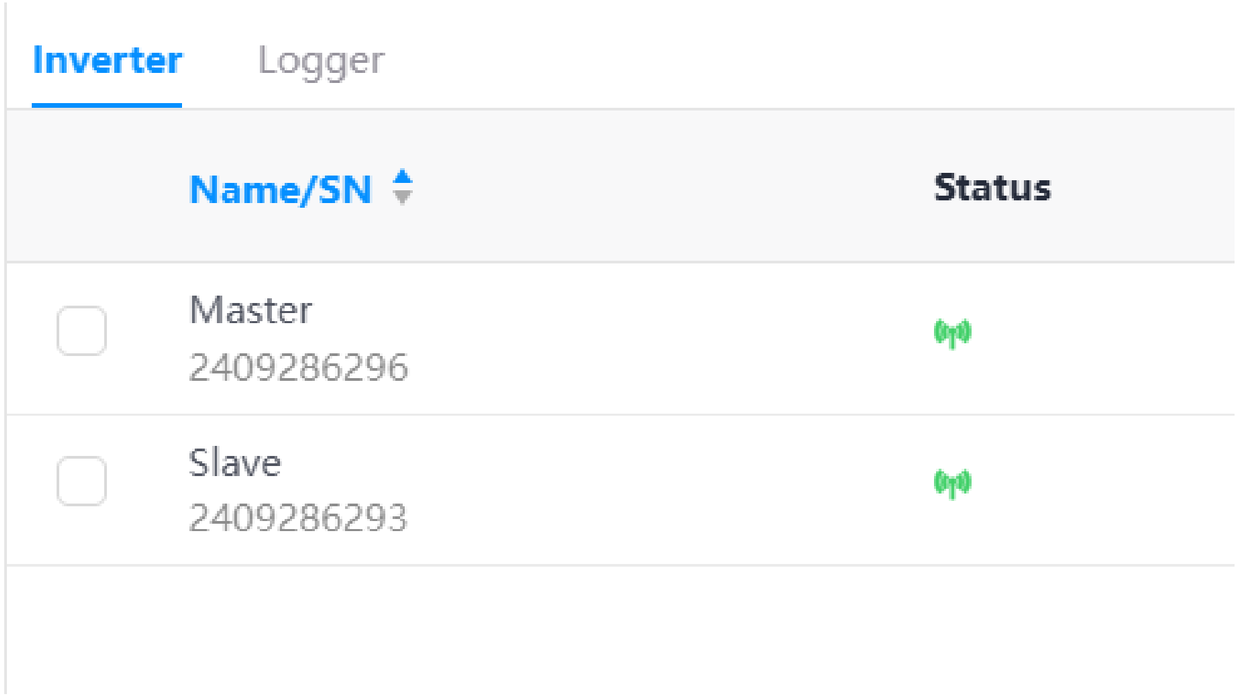
- It will prompt to add Data Logger
- Scan the QR Code
- Repeat the same steps



NEOVOLTA

Solarman Smart Settings for Parallel Inverters

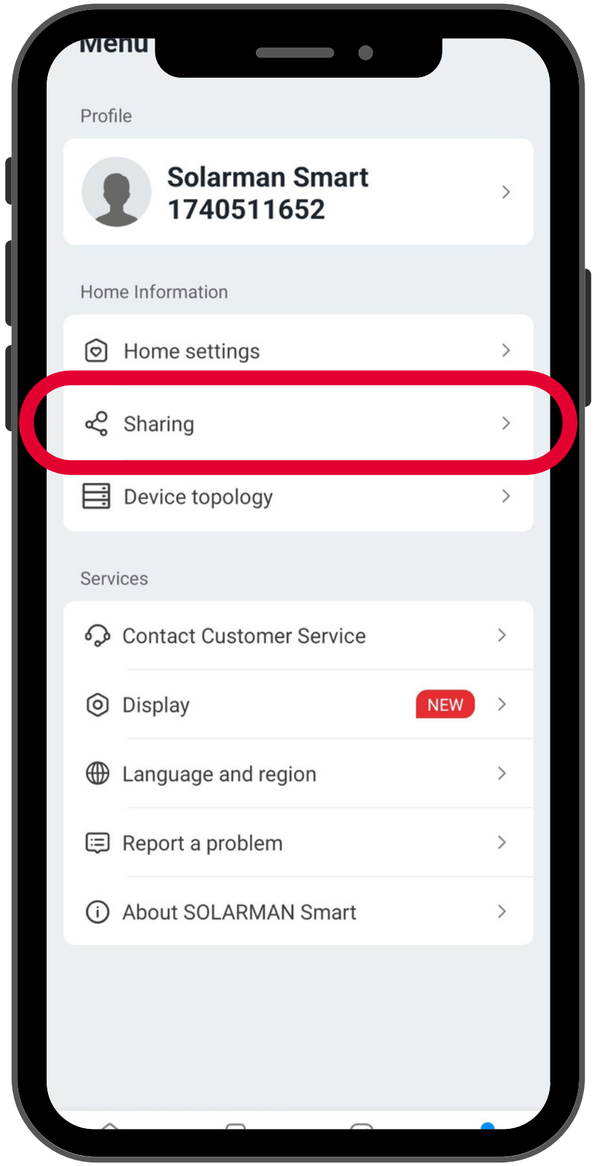
Label as Primary (Master) and Secondary (Slave) accordingly



NEOVOLTA

Solarman SMART

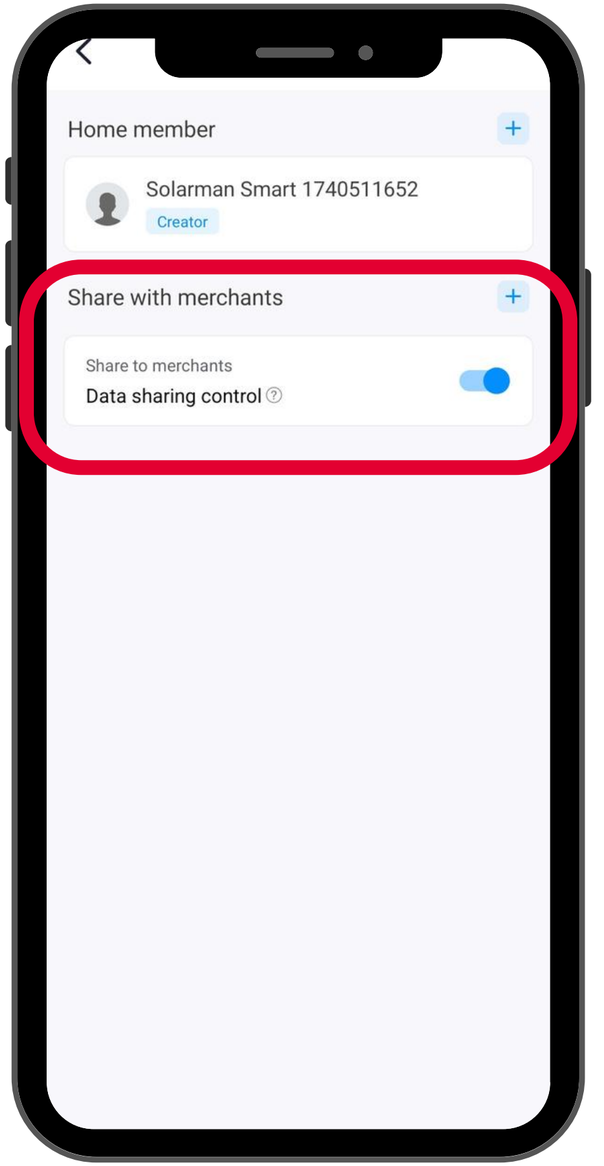
- Authorize NeoVolta and Installer
- Select Sharing



NEOVOLTA

Solarman SMART

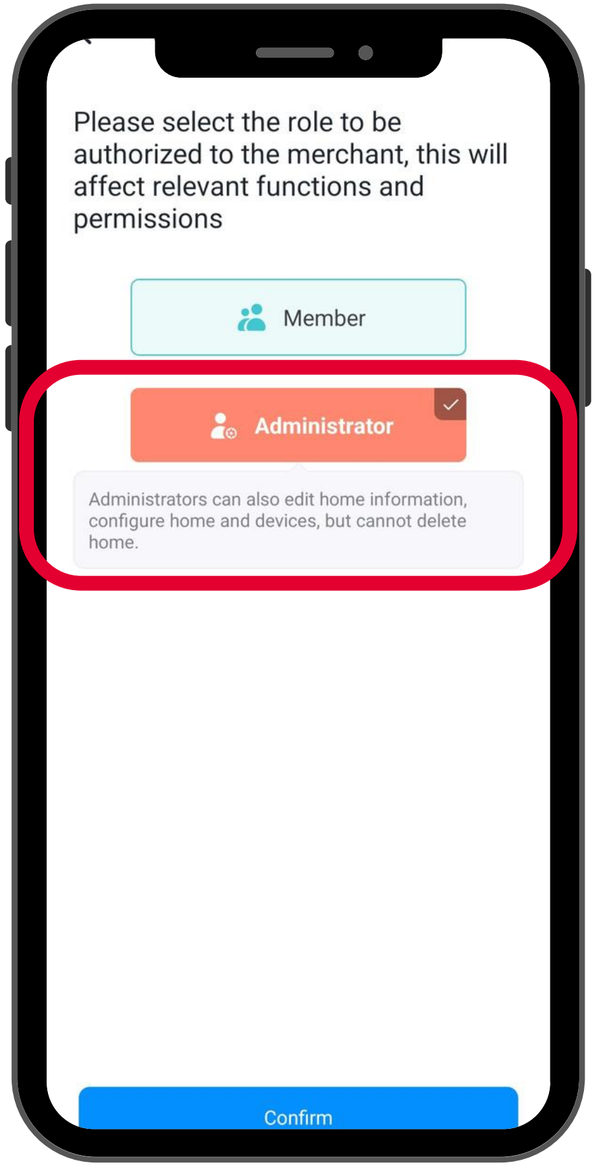
- Select Share with merchants



NEOVOLTA™

Solarman SMART

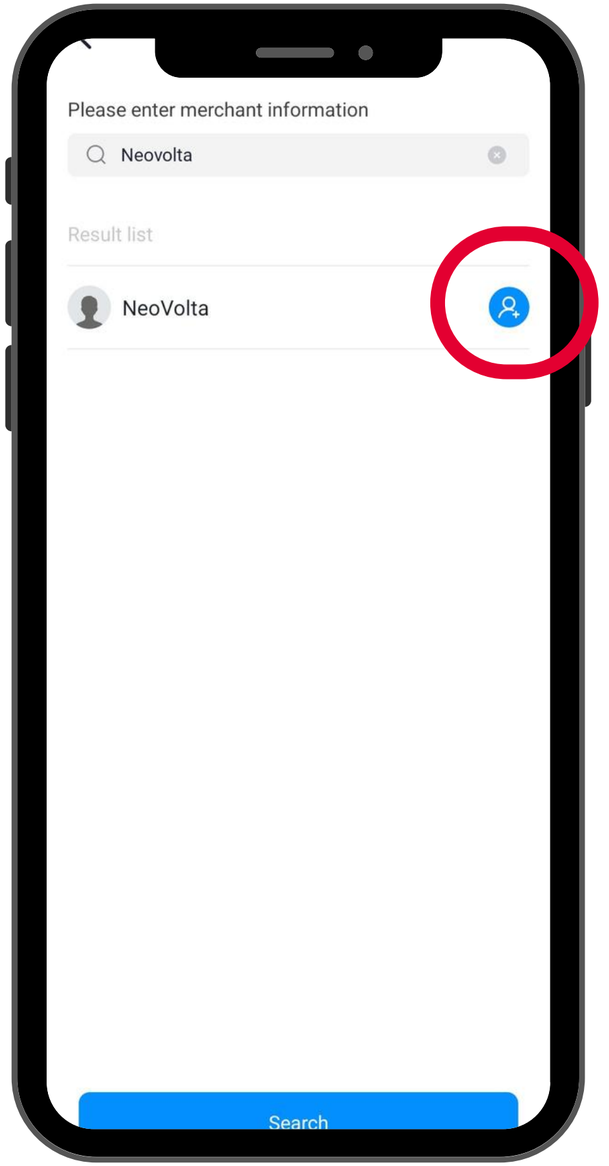
- Select Administrator



NEOVOLTA

Solarman SMART

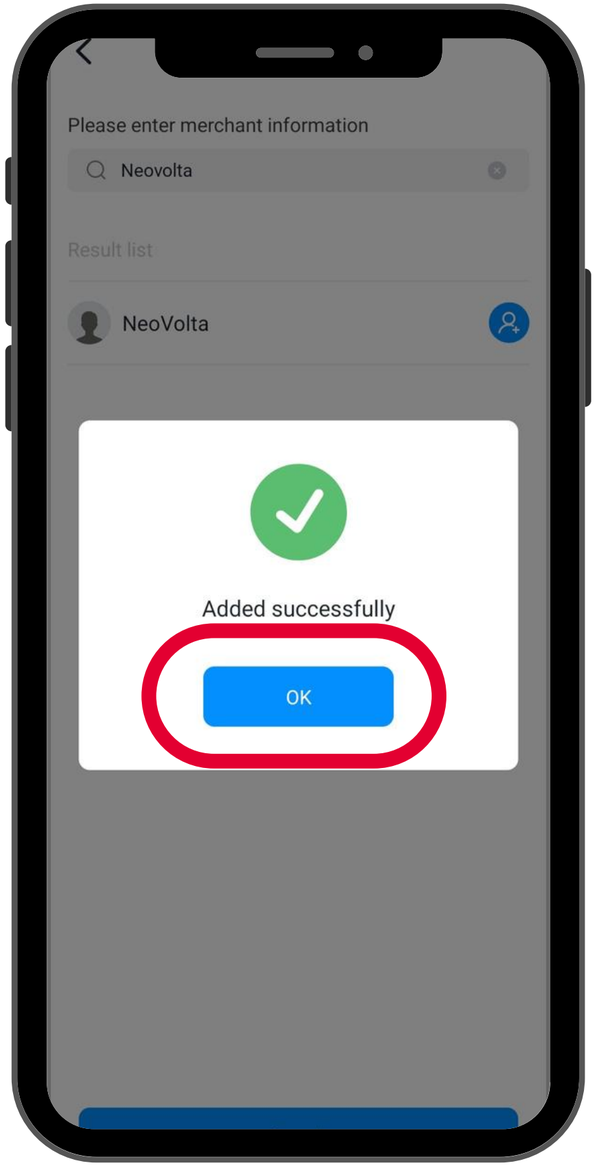
- Enter NeoVolta in the search box
- Click the add icon
- Select Search



NEOVOLTA

Solarman SMART

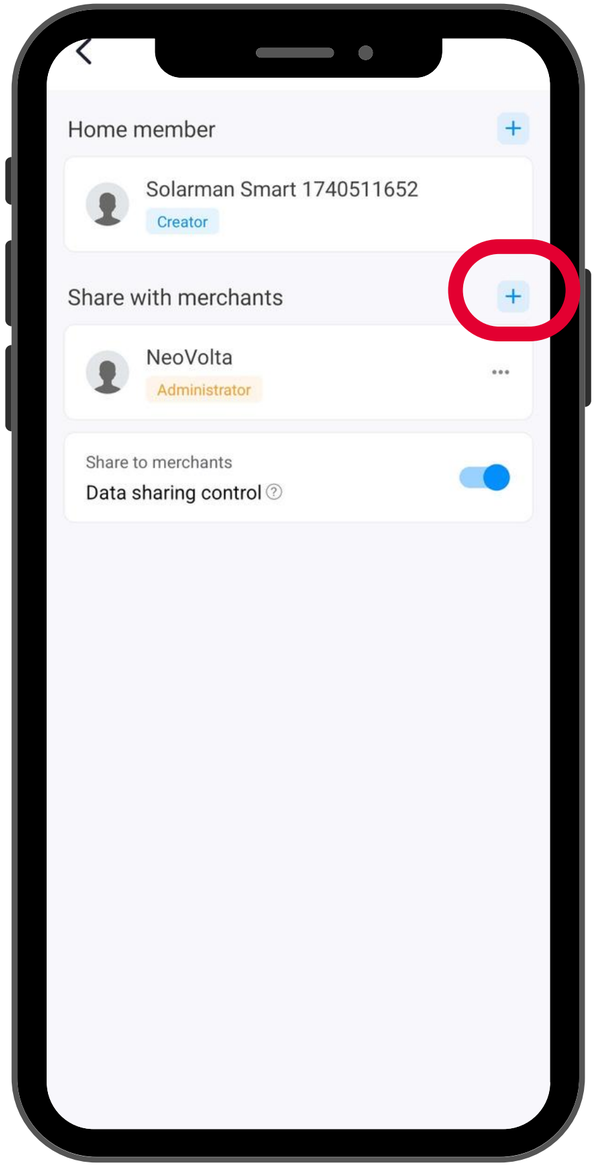
- The prompt “Added successfully” will appear.
- Select OK.



NEOVOLTA™

Solarman SMART

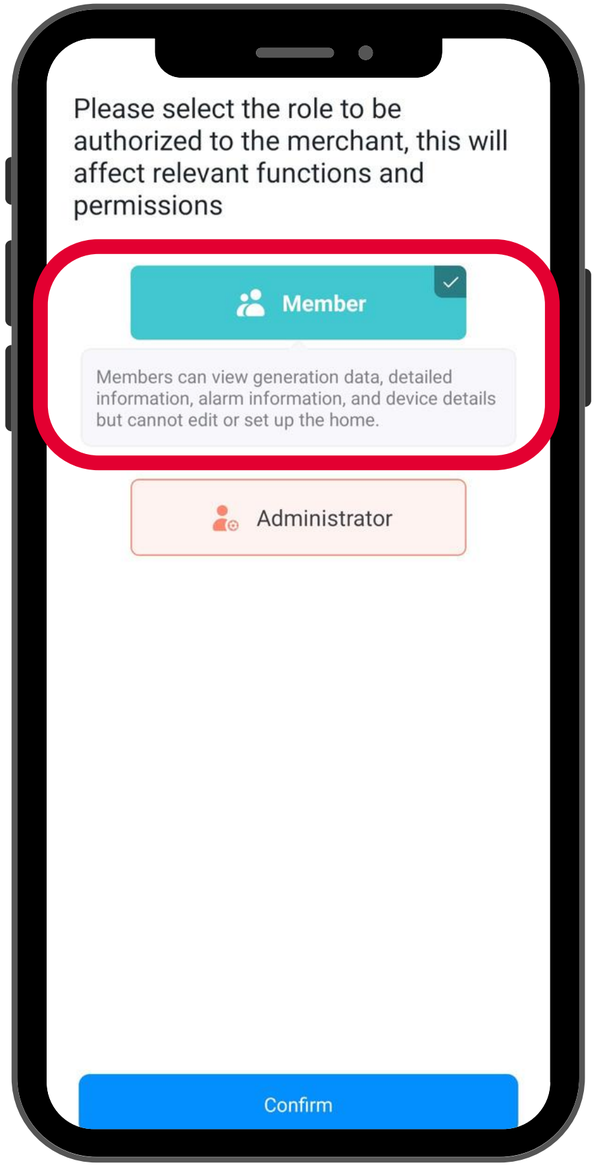
- Add the installer.
- Select “+” next to Share with merchants.



NEOVOLTA™

Solarman SMART

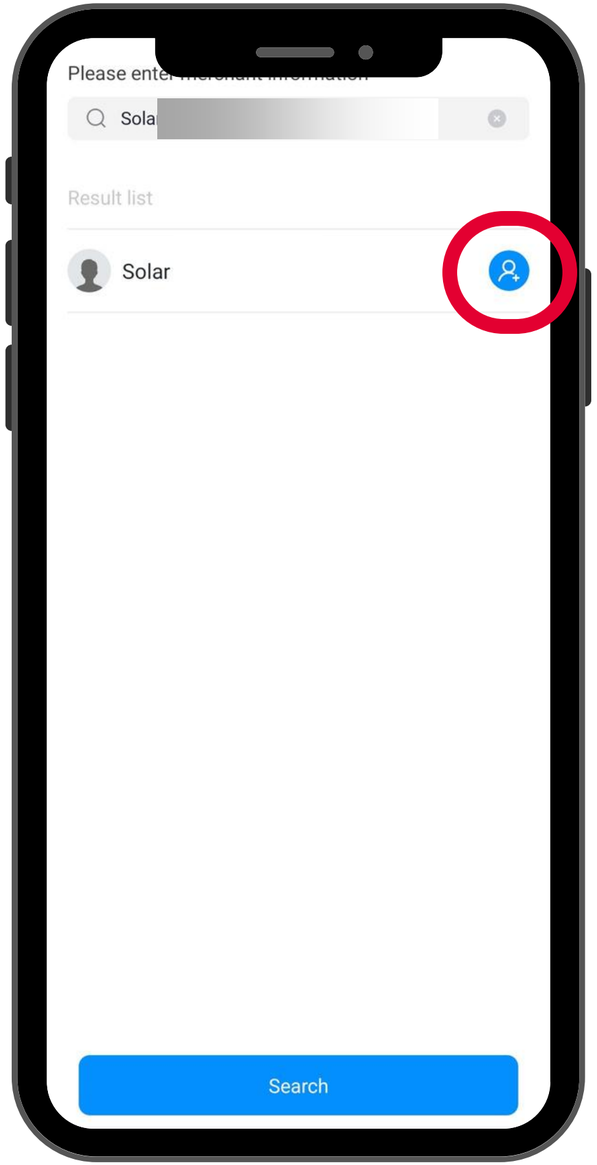
- Select Member.
- Select Confirm.



NEOVOLTA™

Solarman SMART

- Search for the installer.
- Click the add icon
- Select Search



NEOVOLTA™

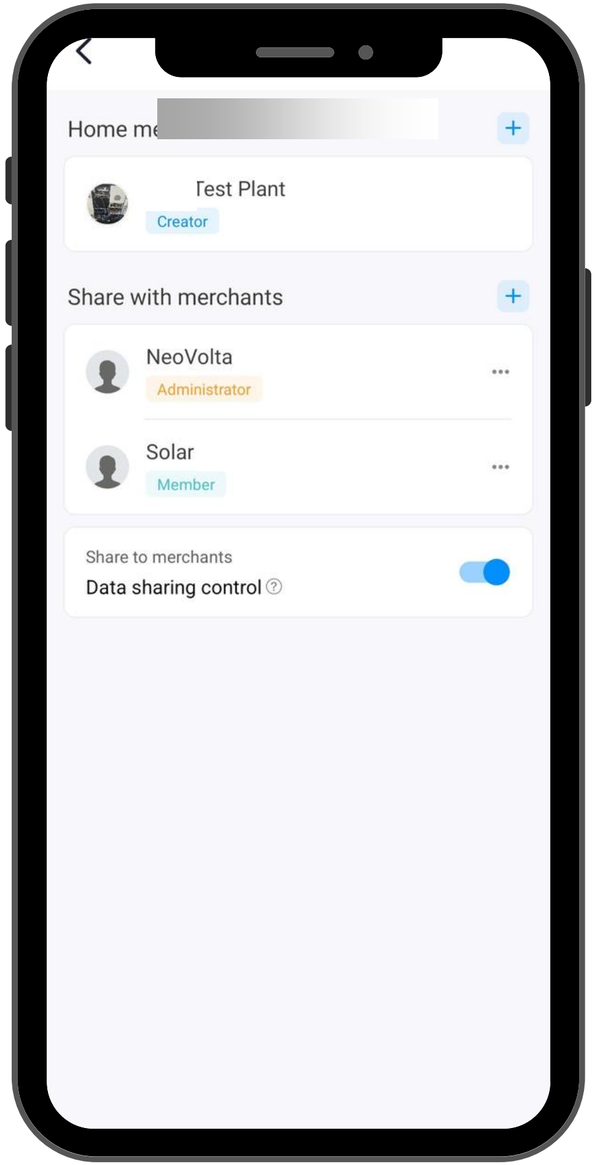
Solarman SMART

- The homeowner will be listed as the owner of the

plant.

- NeoVolta and the installer have been granted

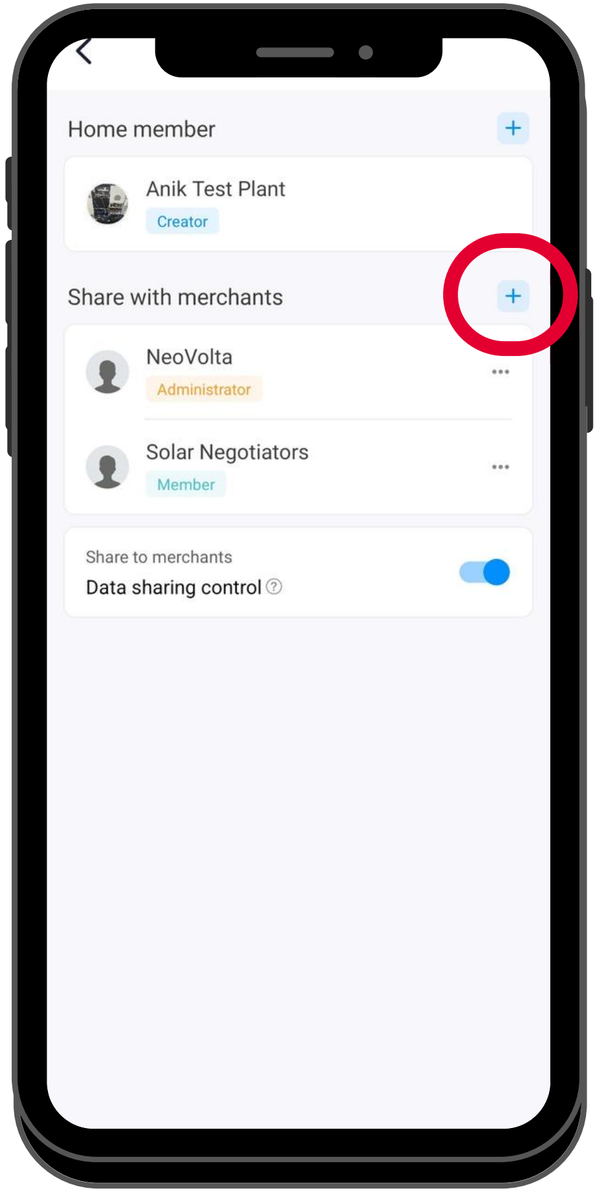
access to remotely monitor the plant.



NEOVOLTA™

Solarman SMART

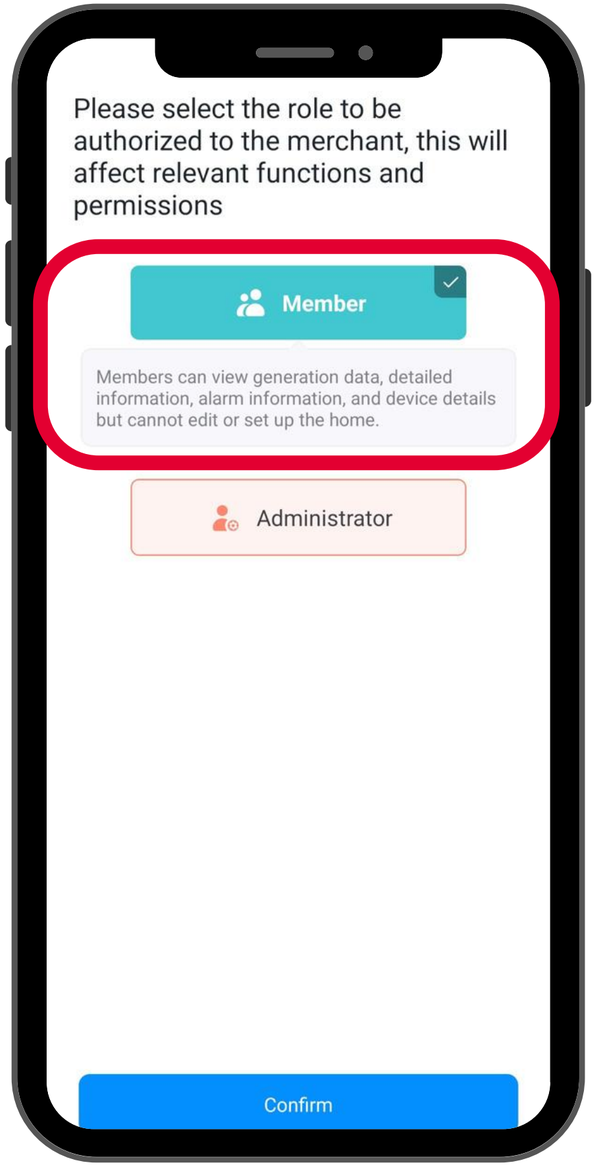
- If additional business third parties need to be added, for example, HDM, San Diego Community Power, etc.
- Select “+” next to Share with merchants.



NEOVOLTA™

Solarman SMART

- Select Member.
- Select Confirm.



NEOVOLTA

Solarman SMART

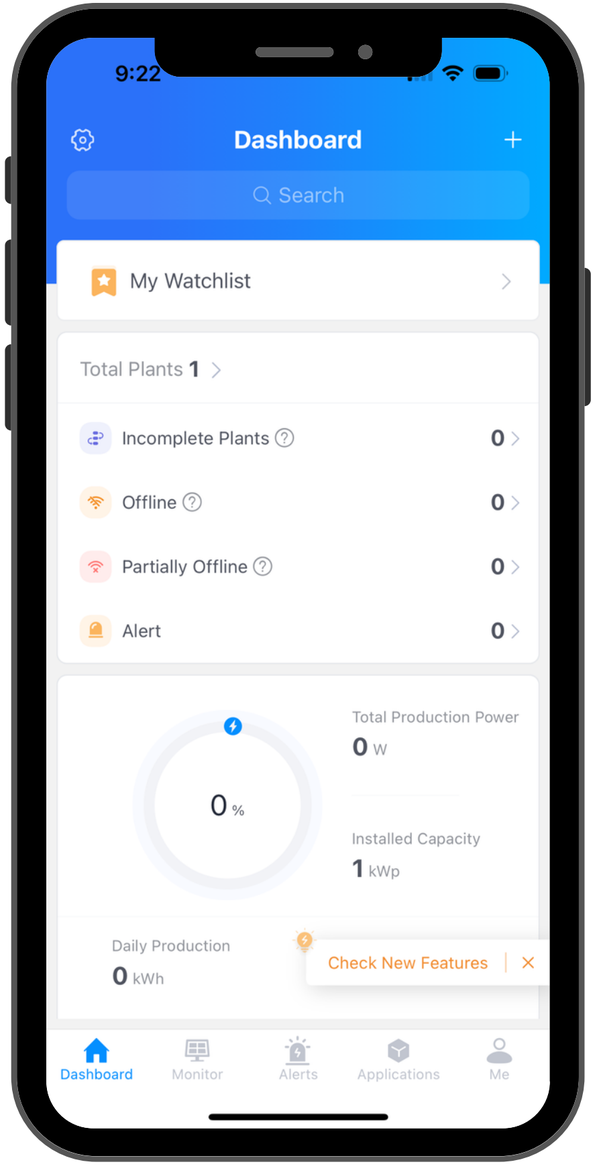
- Search for the third party business.
- Click the add icon
- Select Search

NEOVOLTA™

Complete

Dashboard

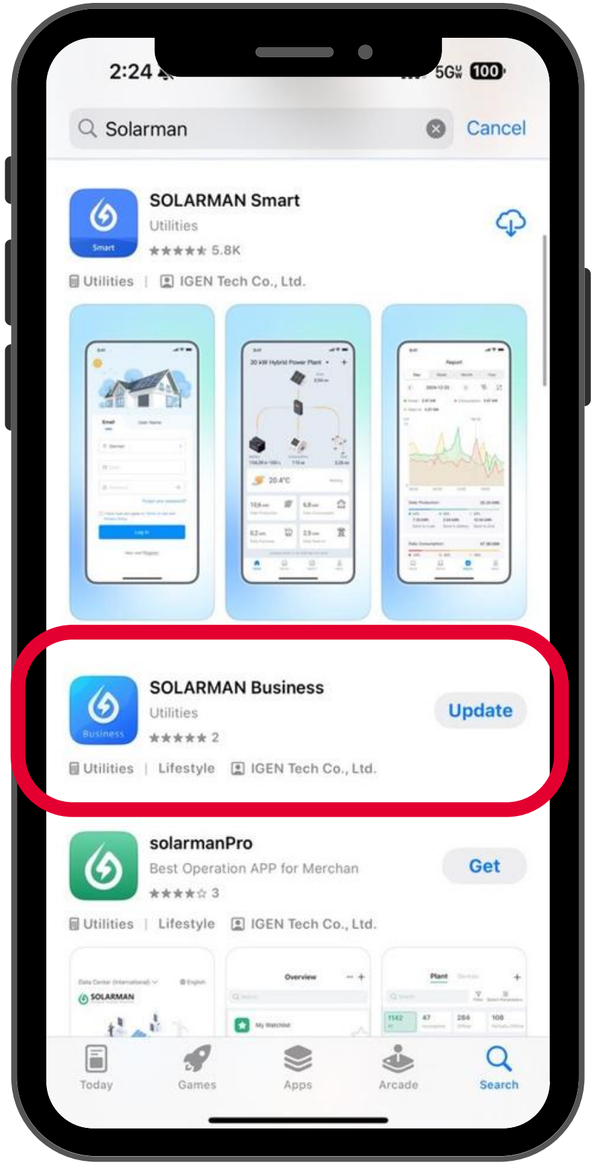
- 1 Plant now displays



NEOVOLTA™

Commission Using Solarman Business

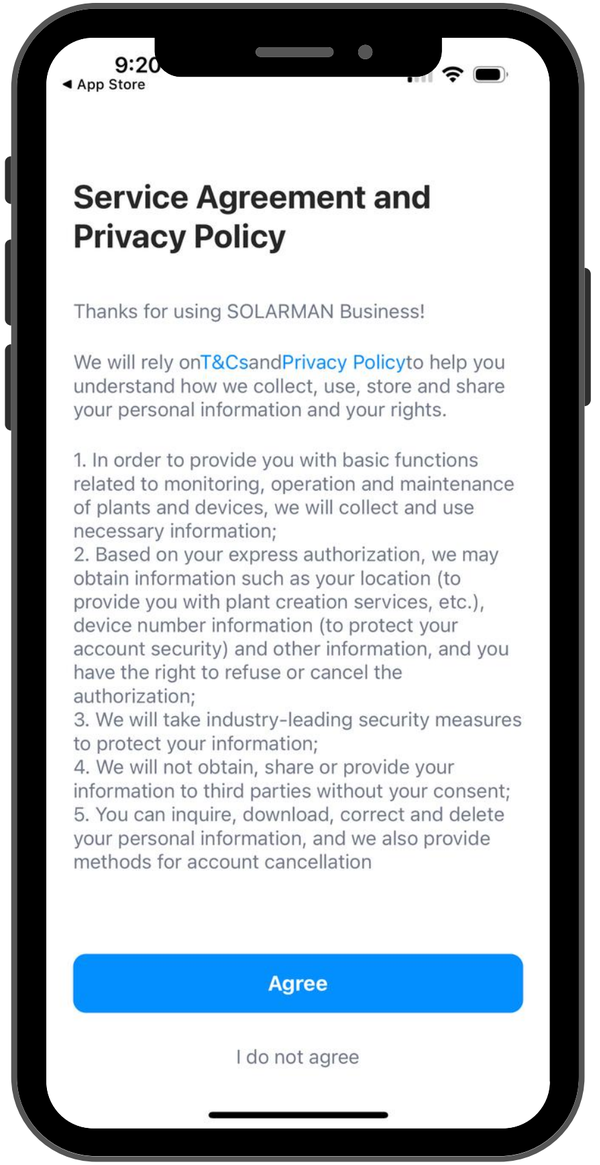
- Solarman Business - Installer



NEOVOLTA™

Service Agreement and Privacy Policy

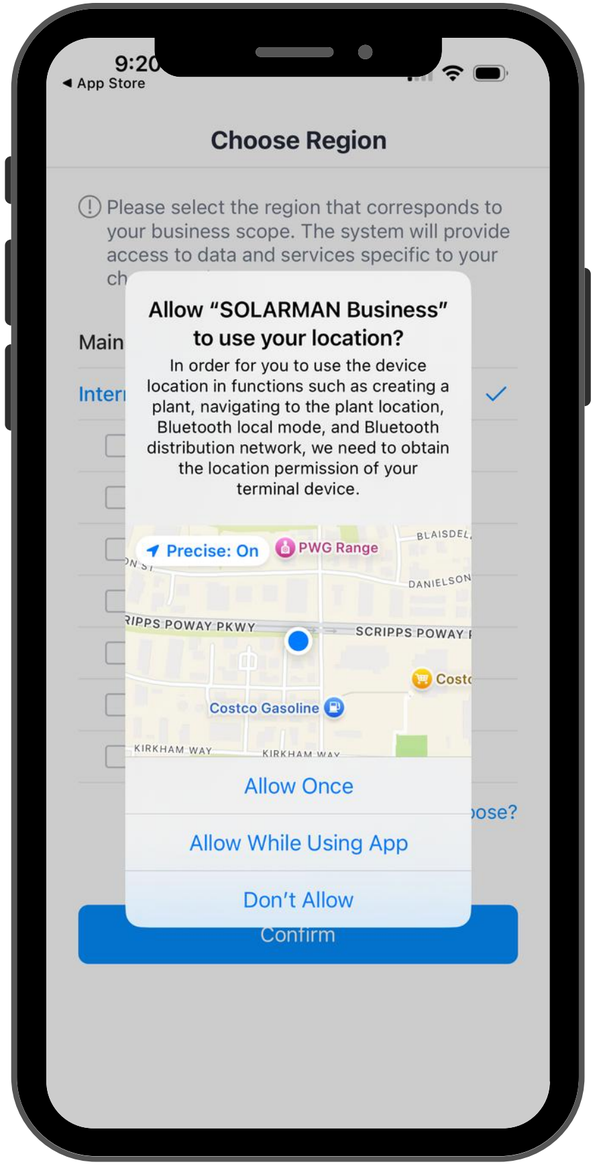
- Please read
- Once you have read, select the blue ‘Agree’ button



NEOVOLTA™

Solarman Business App

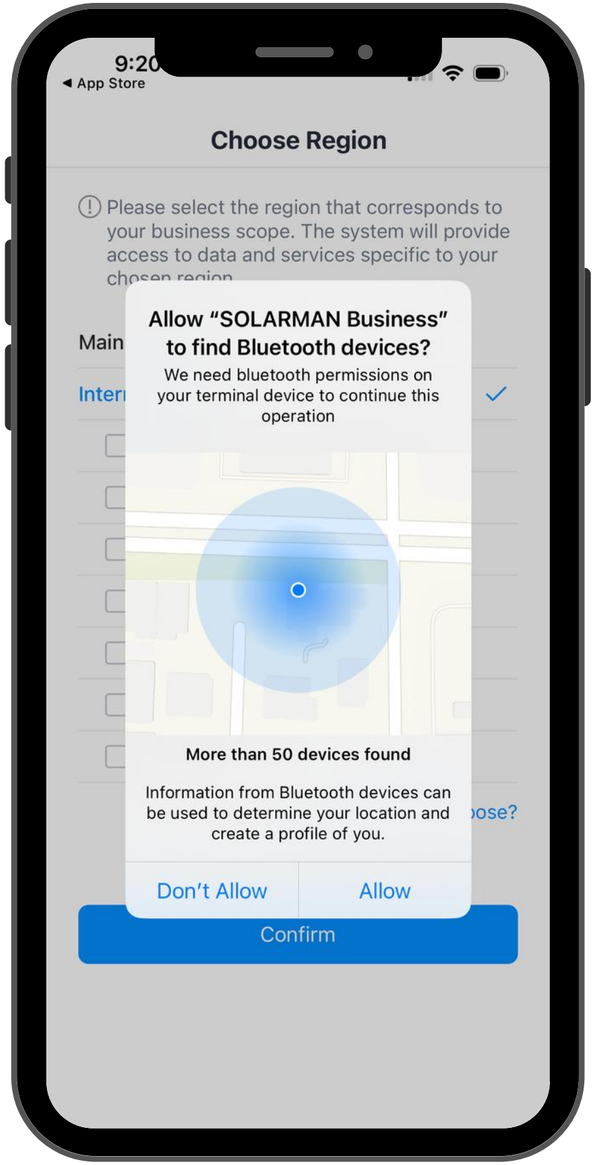
- App will request to you use your location
- Grant access based on preference.
- This will help find the install address faster.



NEOVOLTA™

Solarman Business

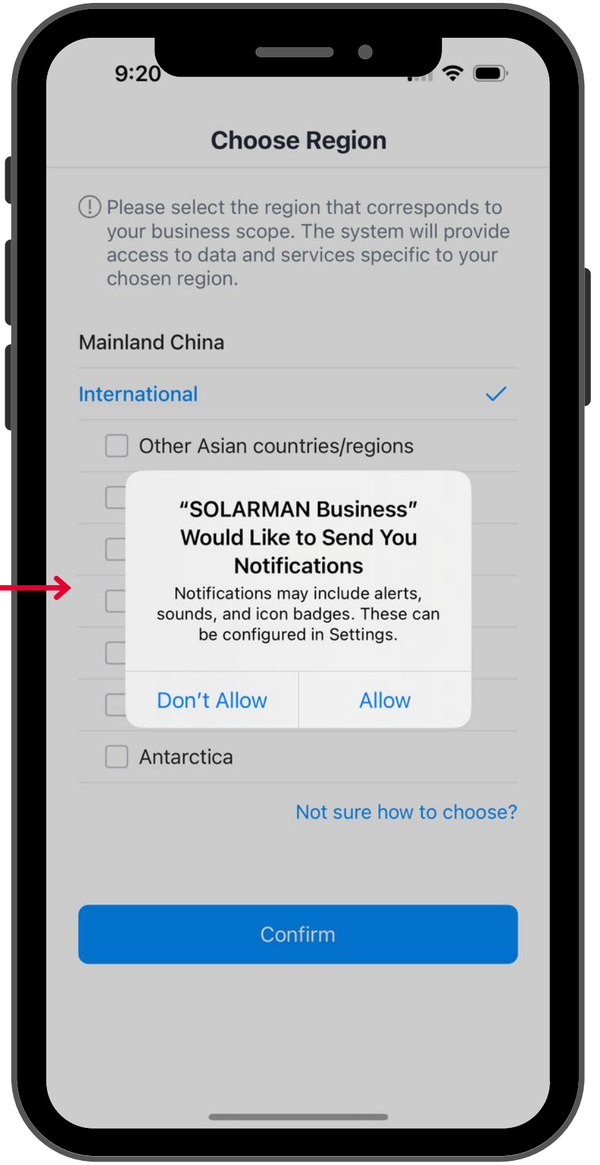
- App will request to ‘Allow Bluetooth’ with Solarman
- You can select either, but we do not use this feature



NEOVOLTA™

Solarman Business App

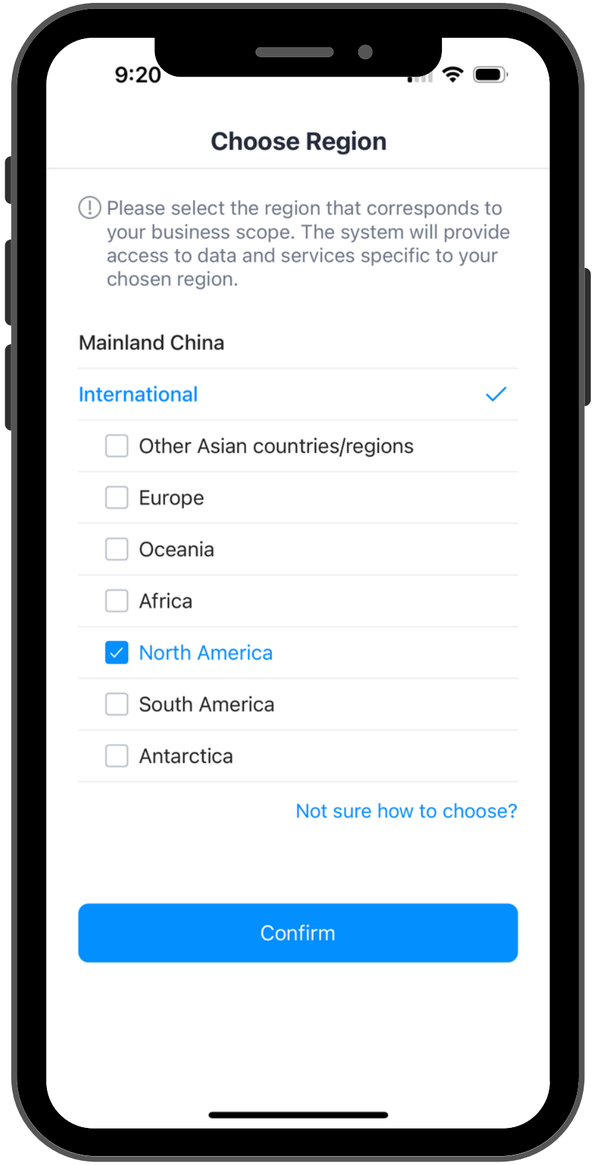
- App will request to send you notifications
- Select ‘Allow’
- This will notify you when the system is under going maintenance



NEOVOLTA™

Choose Region

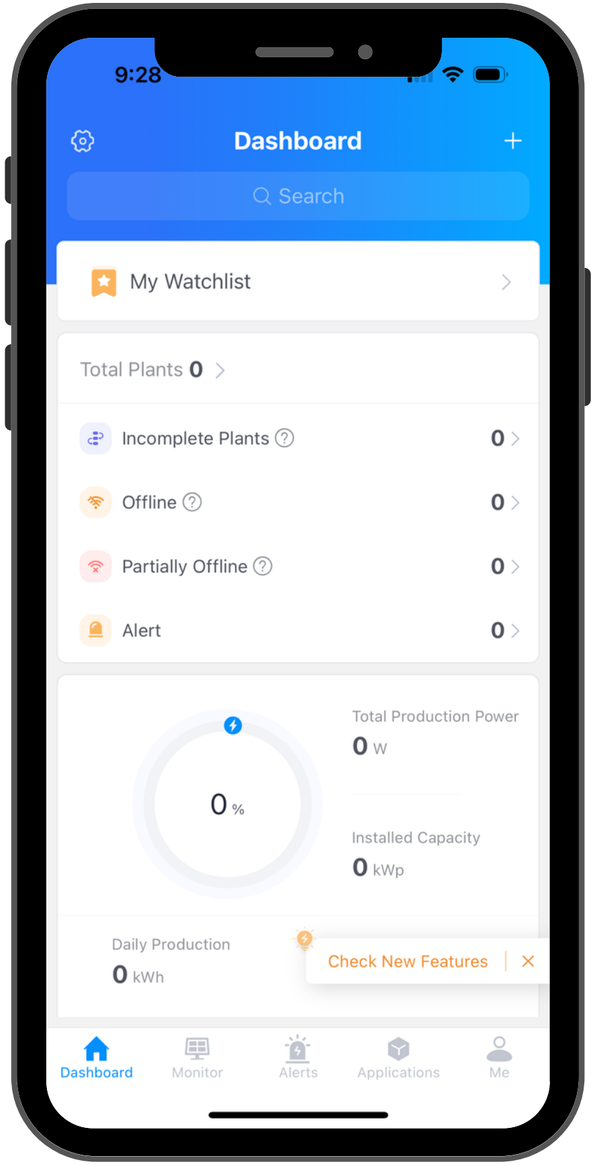
- Select your region



NEOVOLTA™

Dashboard

- Overview of plants
  - Incomplete
  - Offline
  - Partially Offline
  - Alerts

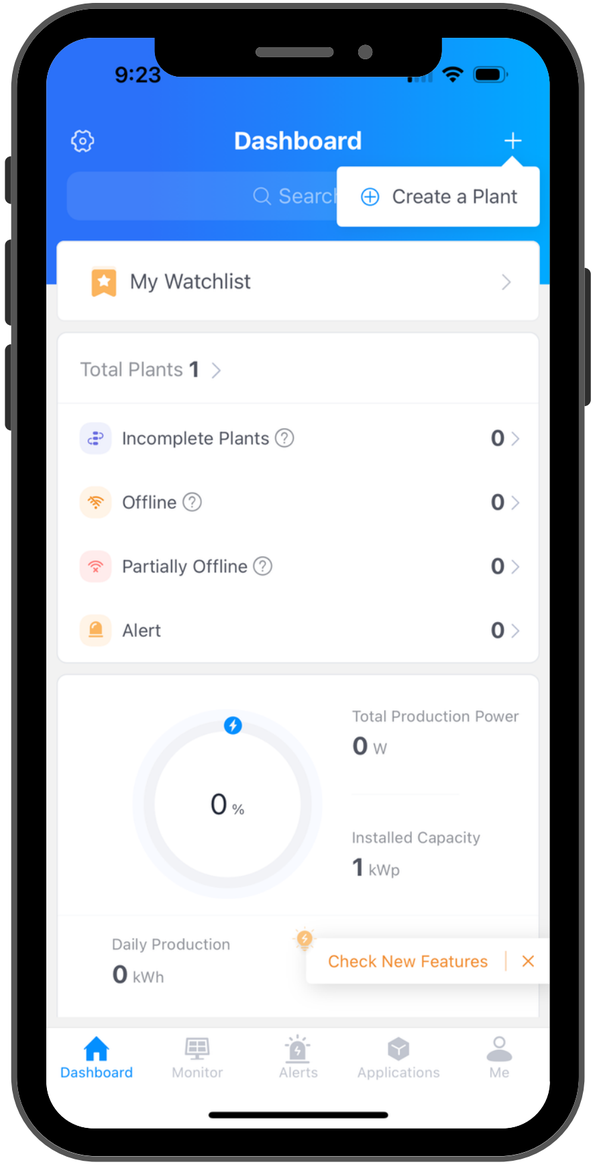


NEOVOLTA

Creating your plant

Plus Sign in the top right corner

- Click the plus sign
- Tap ‘Create a Plant’

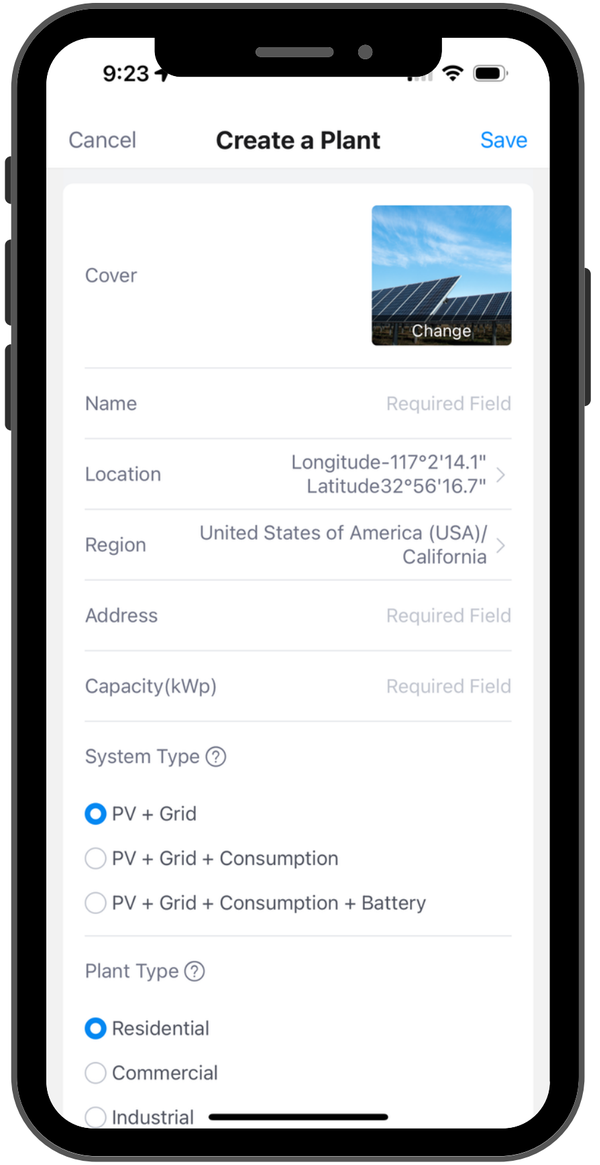


NEOVOLTA™

Create a Plant

First Step

- Change cover photo

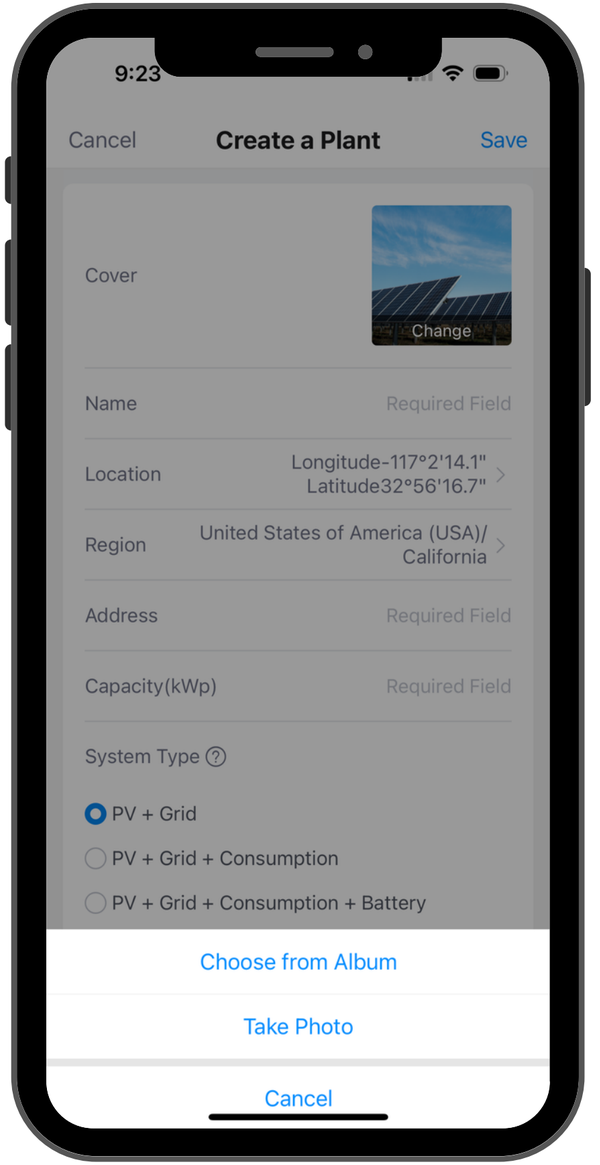


NEOVOLTA™

Add photo of home

Cover Section

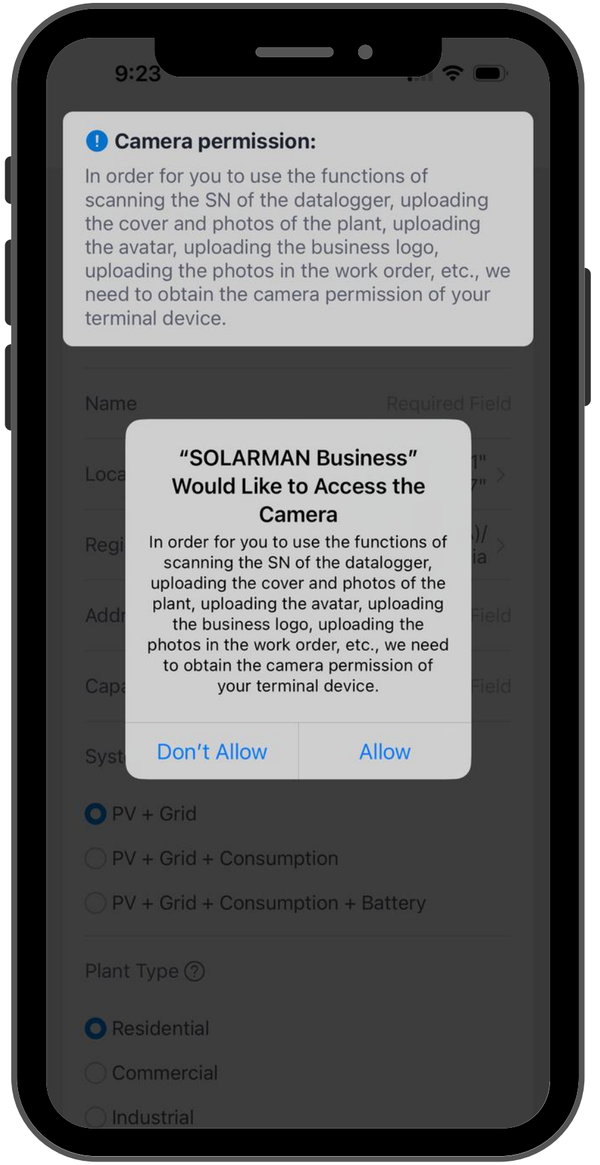
- Select the default photo
- App will ask you to ‘Take Photo’



NEOVOLTA™

Permissions

- Grant Access based on preference.



NEOVOLTA

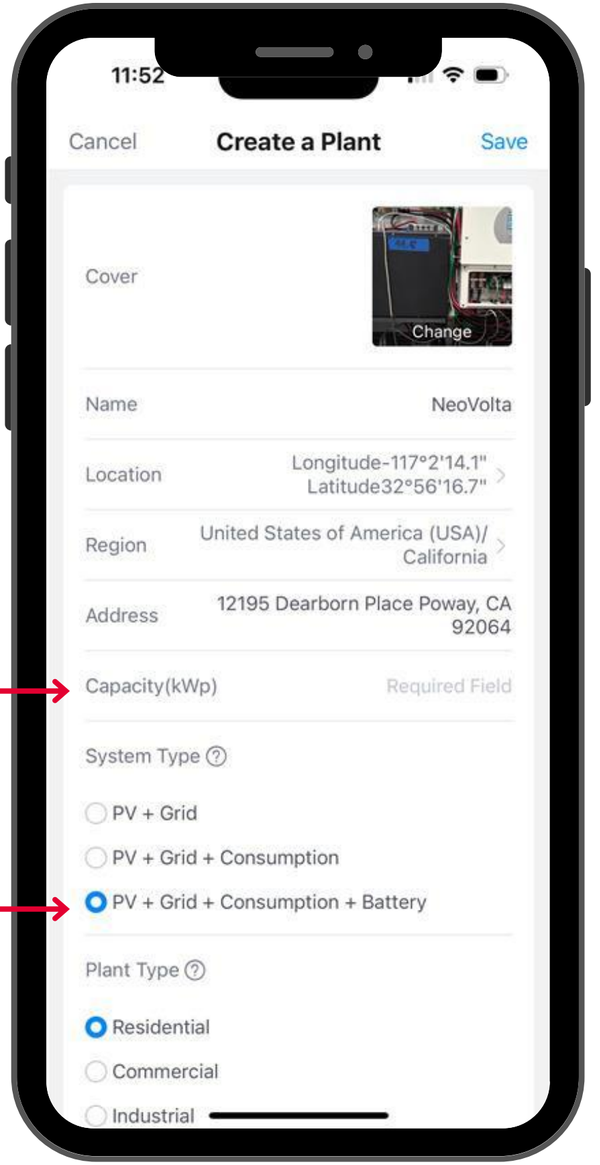
Plant Settings

Capacity

- Manually enter the system size in kW

System Type

- PV + Grid + Consumption + Battery

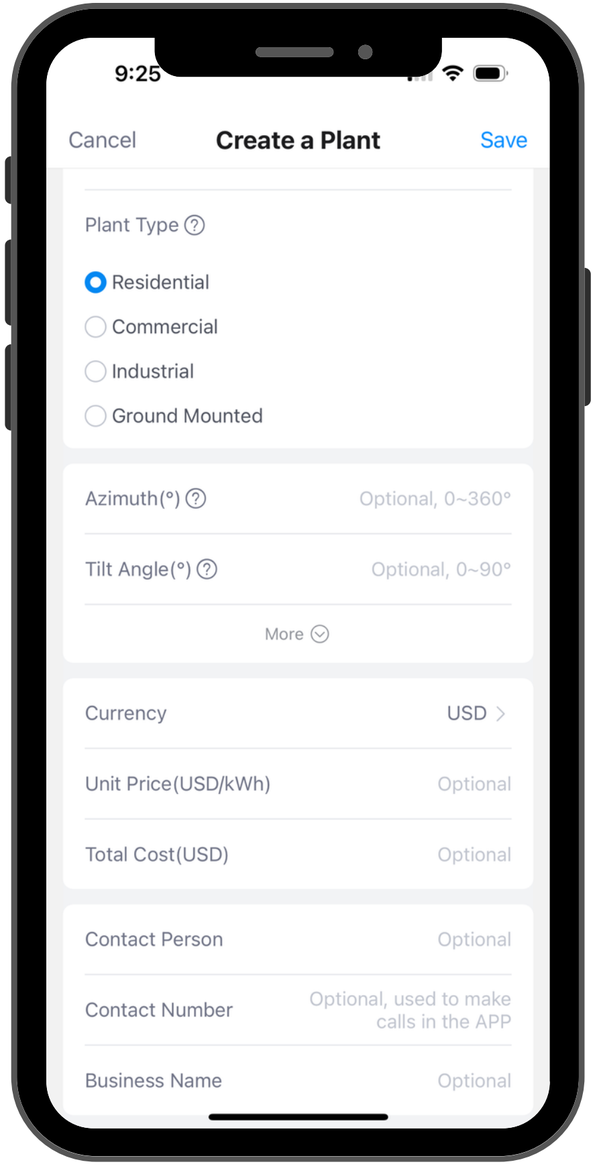


NEOVOLTA™

Plant Type

Pick the plant type

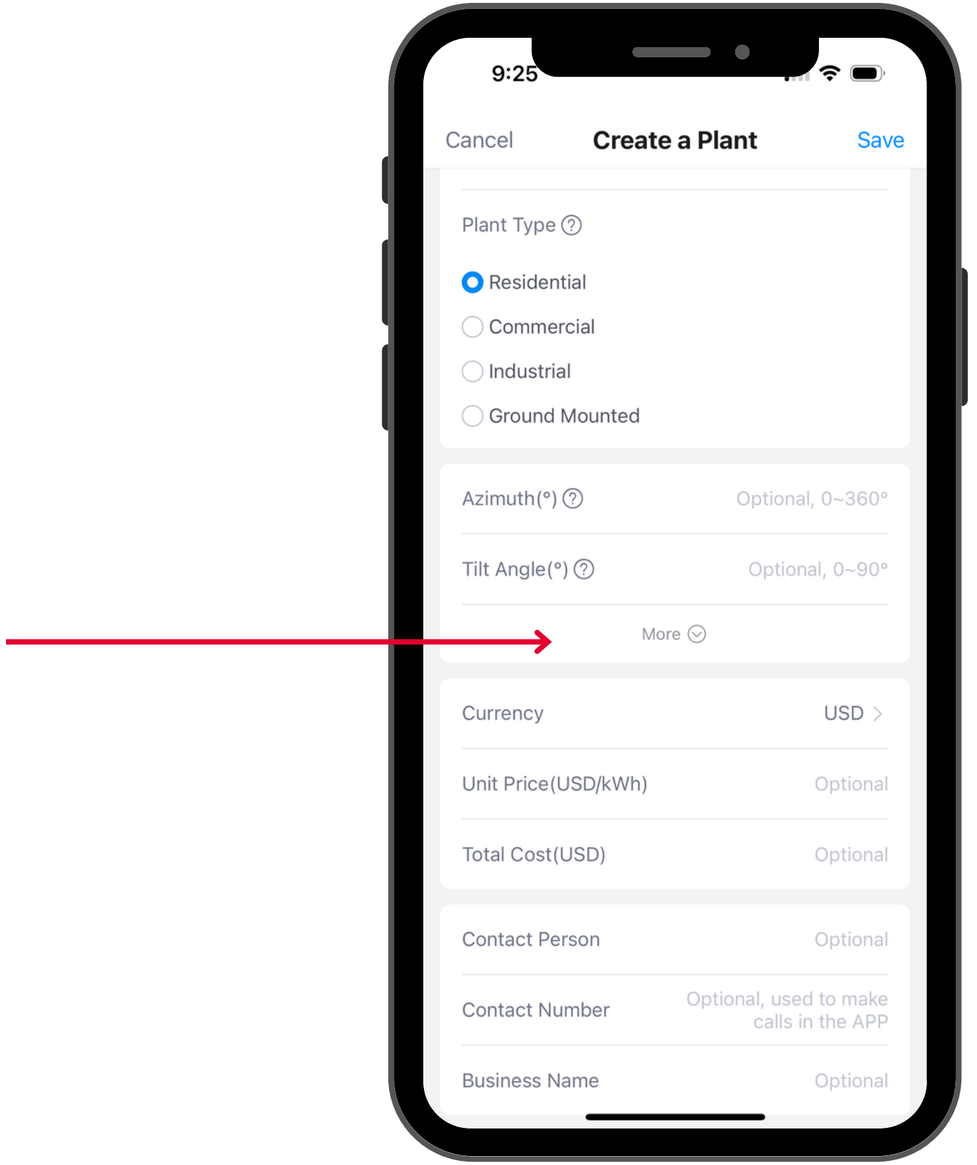
- Residential
- Commercial
- Industrial
- Ground Mounted



NEOVOLTA™

Time Zone

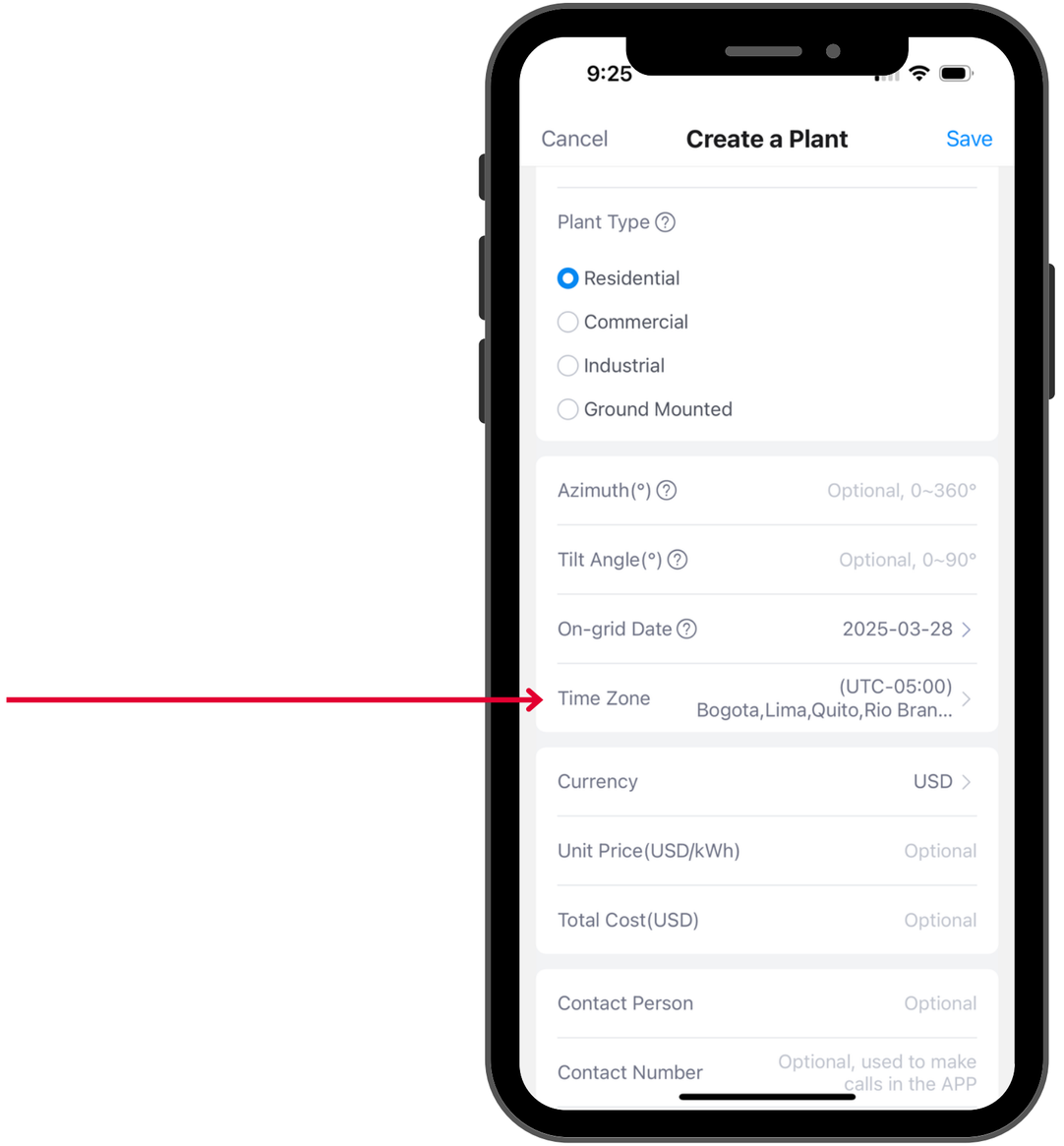
Select the ‘More’ option



NEOVOLTA

Time Zone

Tap Time Zone

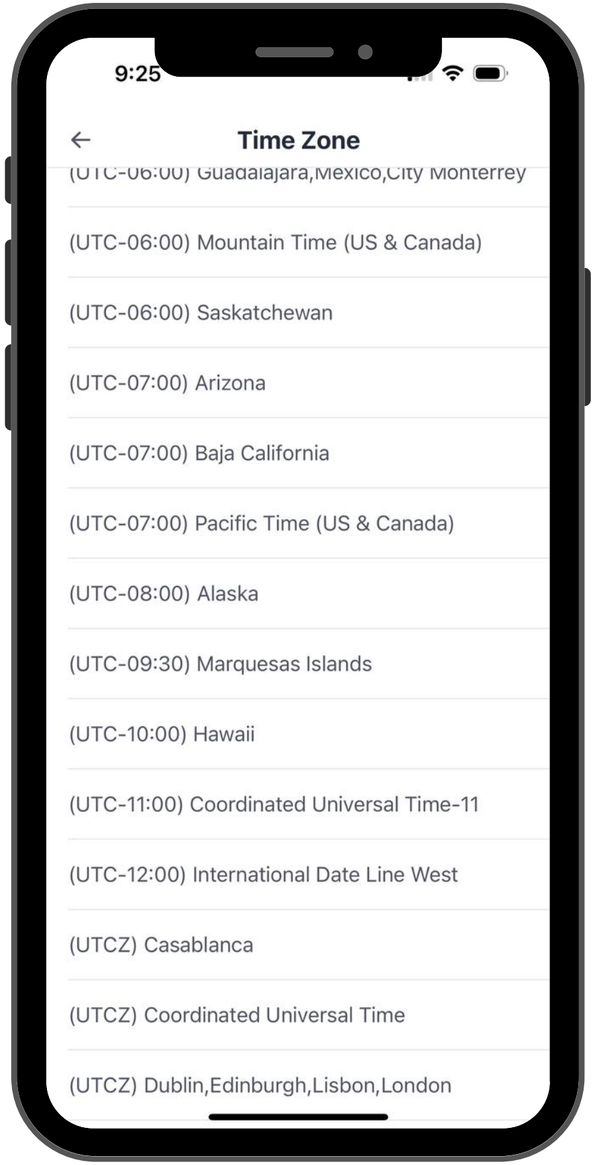


NEOVOLTA™

Time Zone

Find and select the correct time zone

- Important for ‘Time of Use’ and other settings

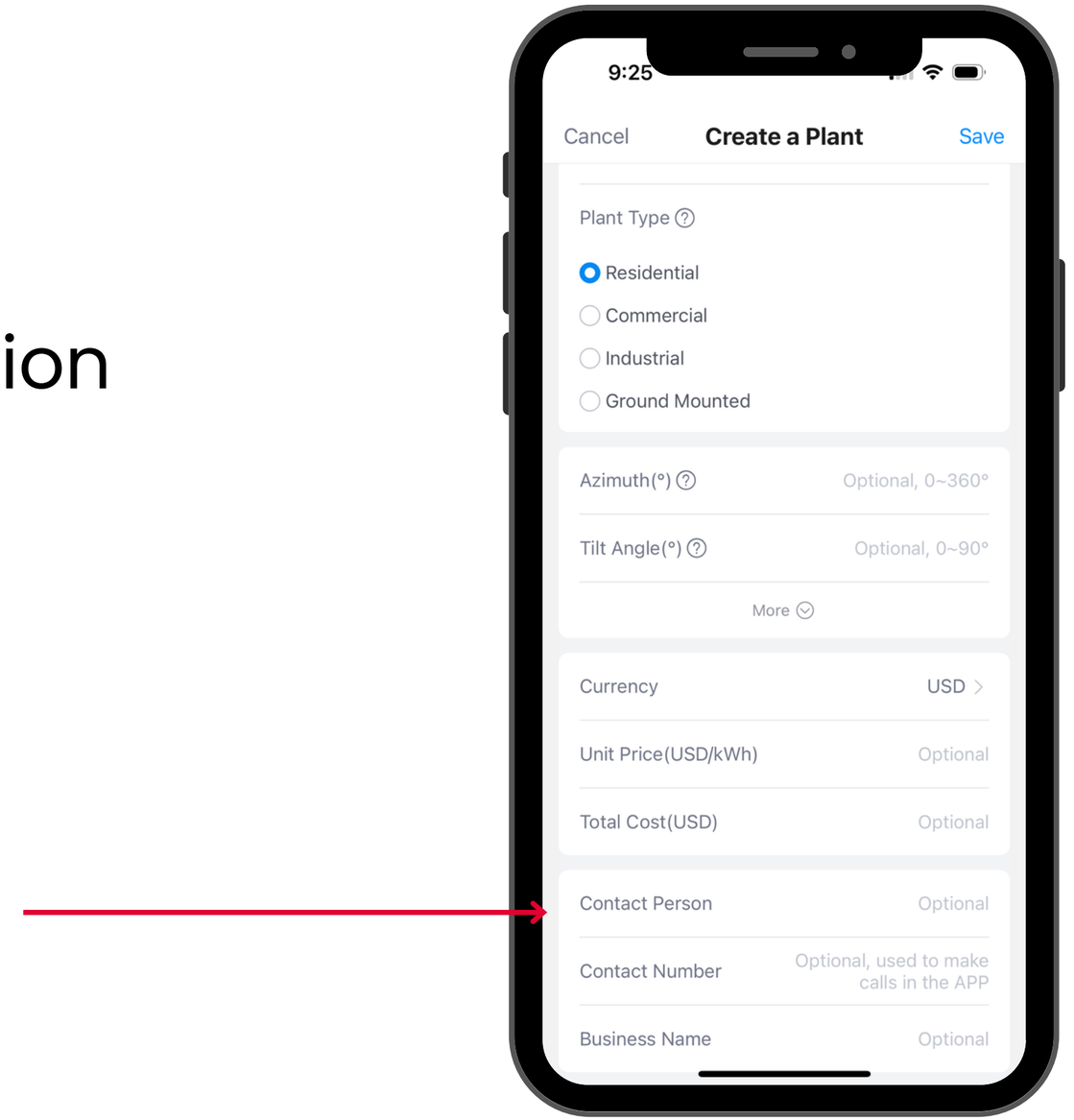


NEOVOLTA™

Contact Person

Please add in the information for the homeowner owner.

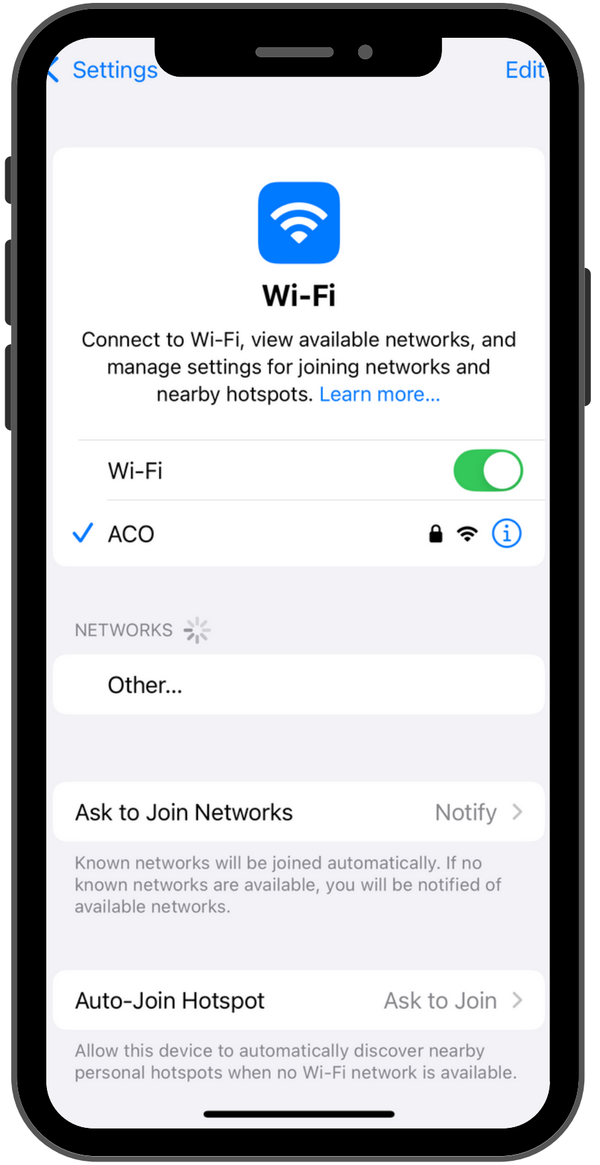
Add their Name and Best Contact Number.



NEOVOLTA

Create a Plant

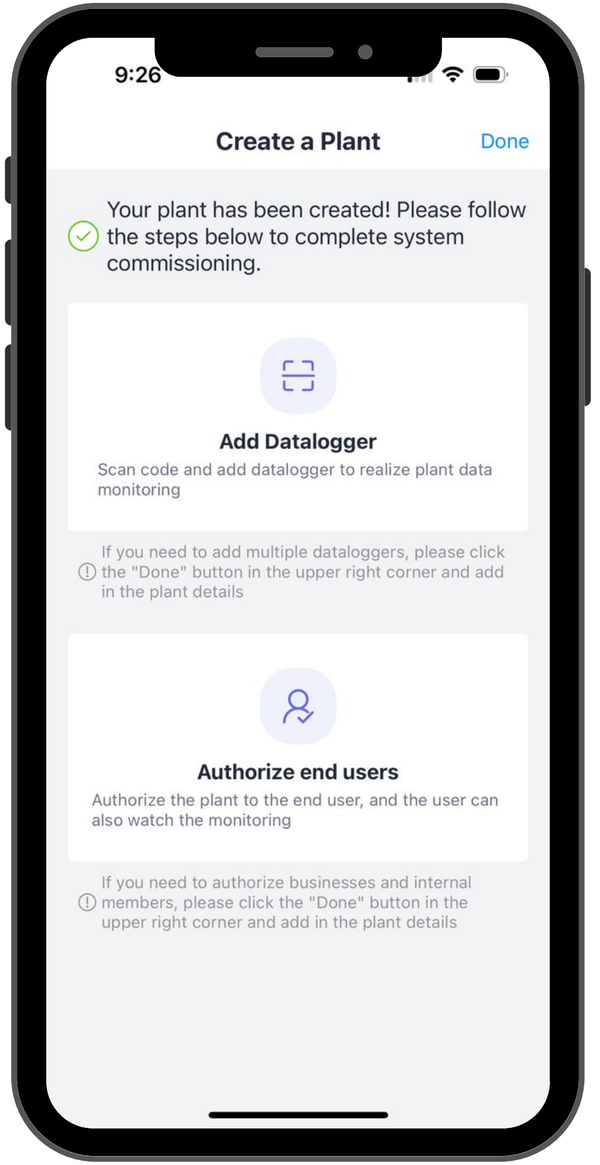
- Connect to the homeowner's WiFi on your cell phone settings



NEOVOLTA™

Create a Plant

- Add Datalogger



NEOVOLTA

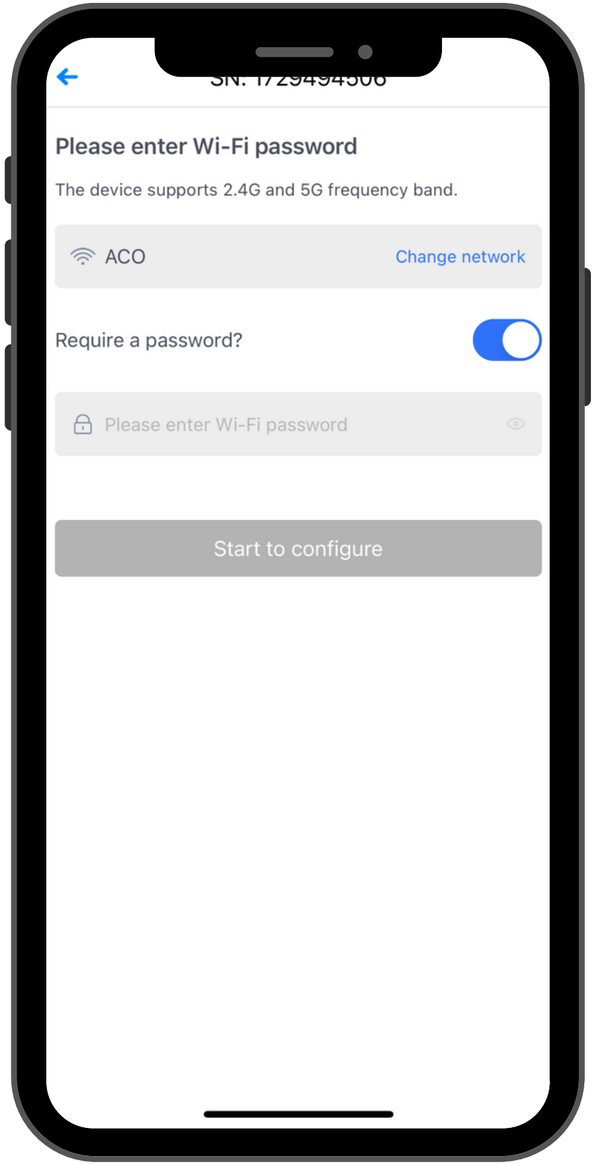
Create a Plant

- Scan QR Code
- If that does not work, you can manually enter the password

NEOVOLTA

Create a Plant

- To manually connect, connect to the homeowner's WiFi in the Solarman Business App

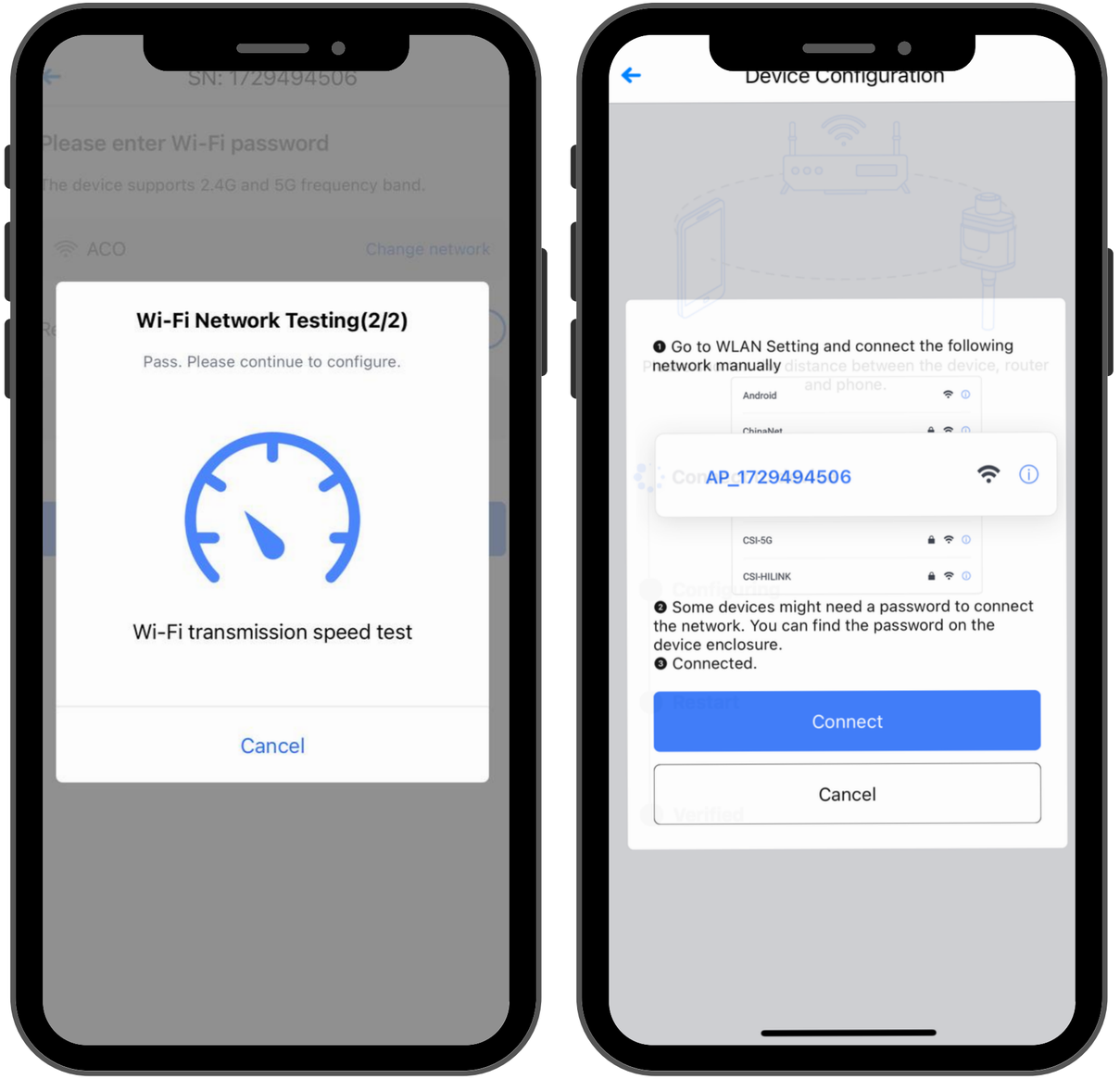


NEOVOLTA™

Create a Plant

- You will see the following screens

- Select Connect



NEOVOLTA

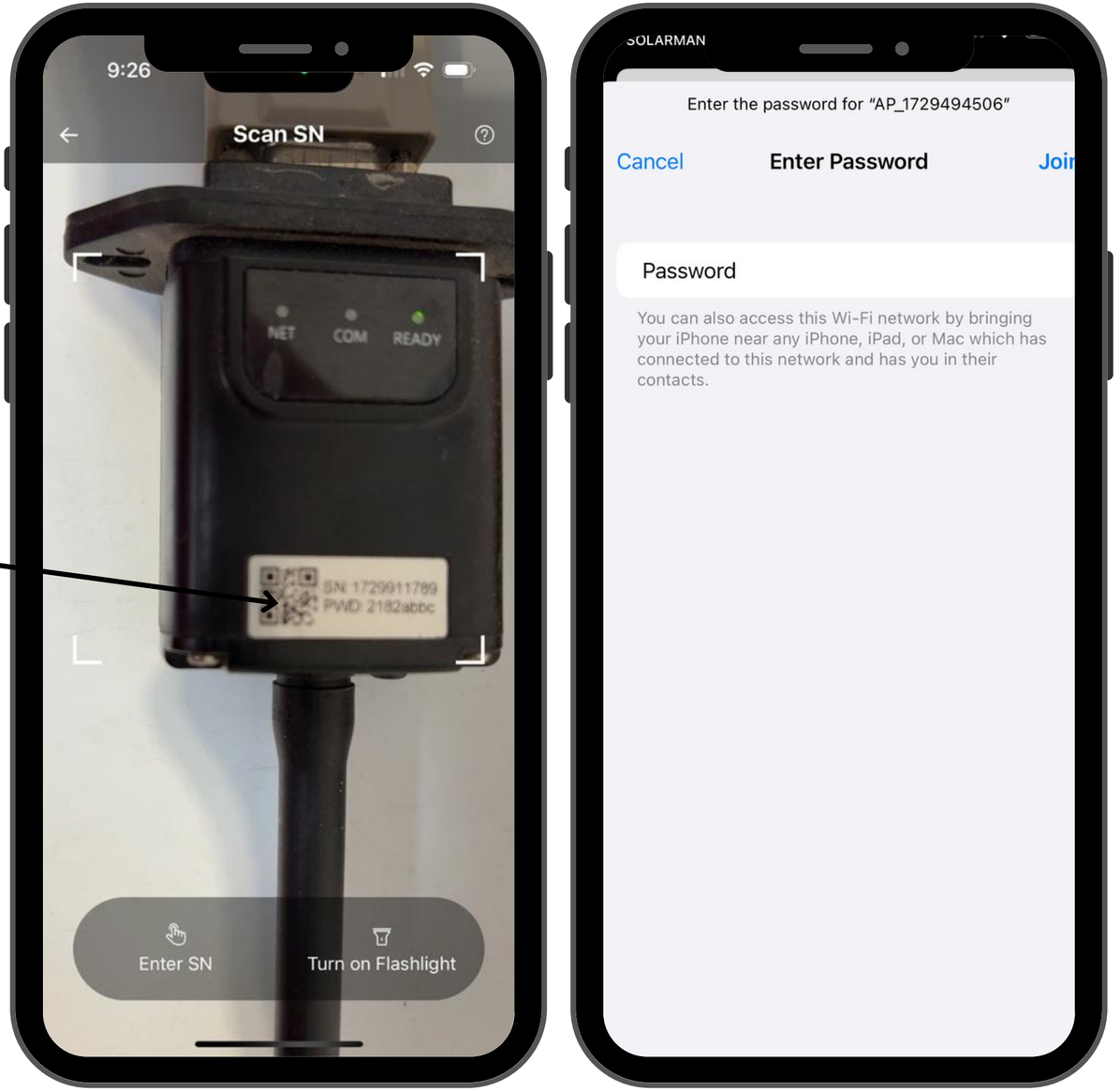
Create a Plant

- It will open the phone's WiFi settings
- Select the WiFi with the AP_LoggerSerialNumber

NEOVOLTA™

Create a Plant

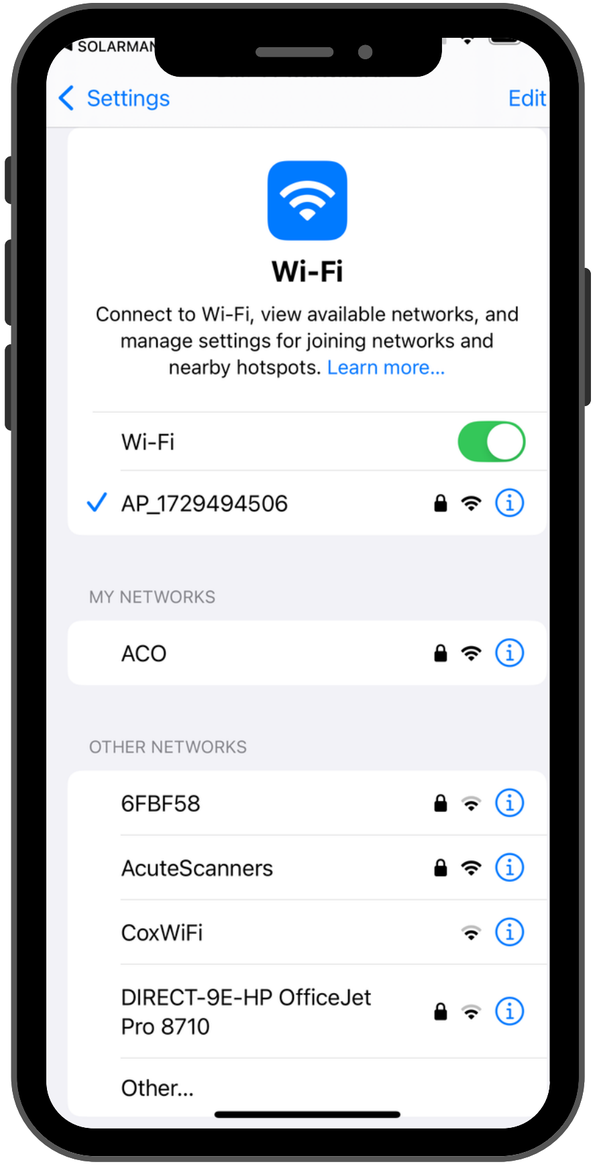
- Enter the password listed on the Logger. It is listed as PWD.



NEOVOLTA™

Create a Plant

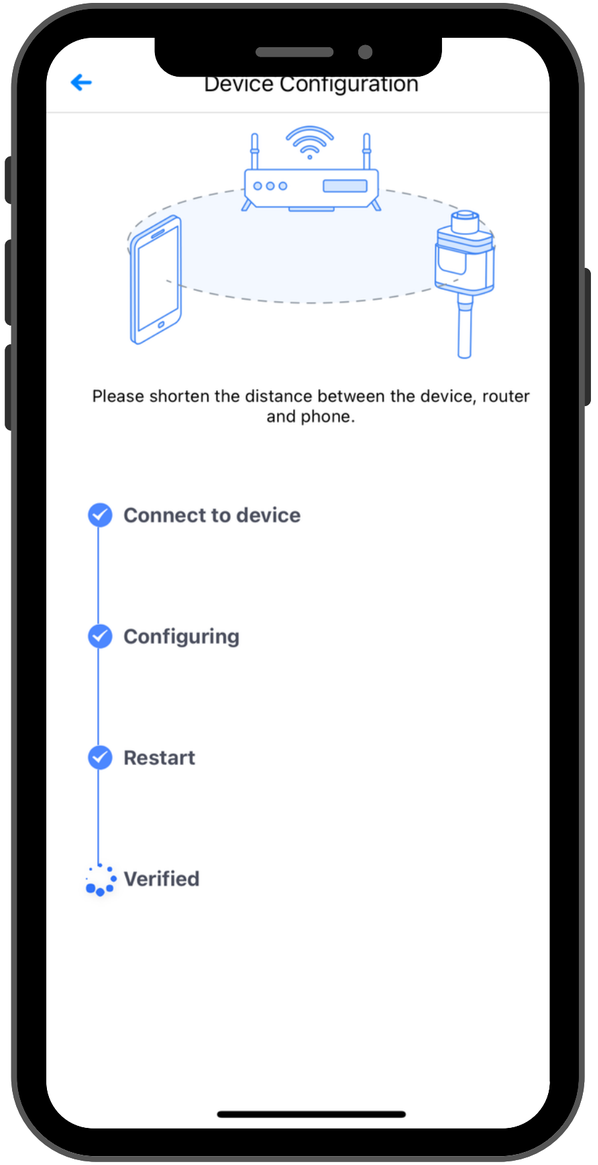
- The cellphone WiFi will connect to the logger. Please note it may display no internet connection message.



NEOVOLTA™

Create a Plant

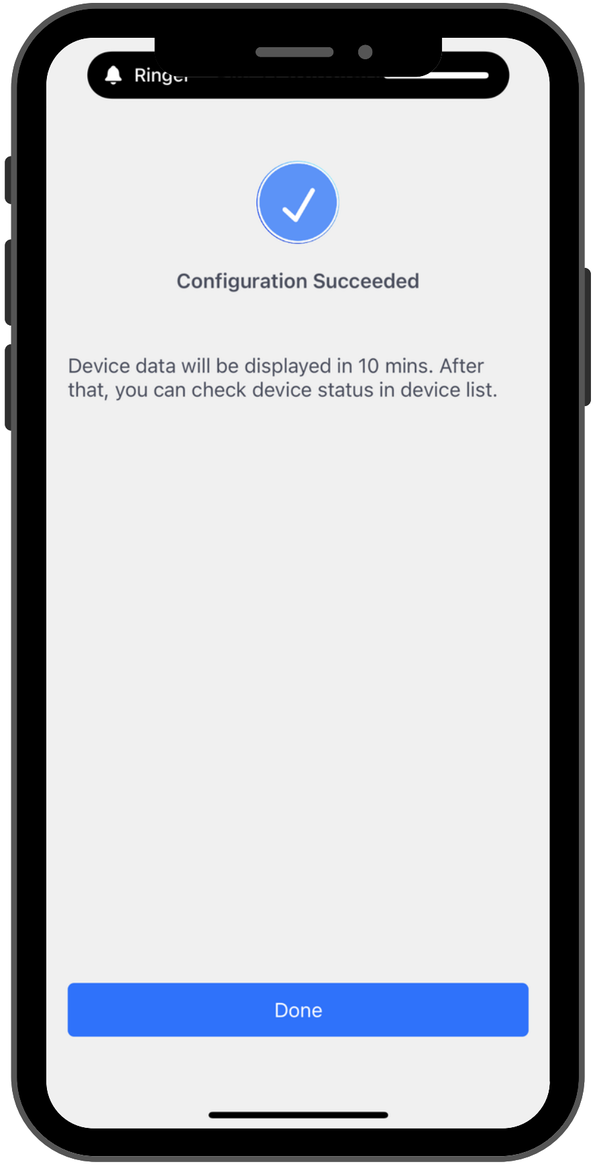
- Return to the Solarman Business App. It will go through the Device Configuration settings.



NEOVOLTA™

Create a Plant

- Once it has completed, it will display Configuration Succeeded.



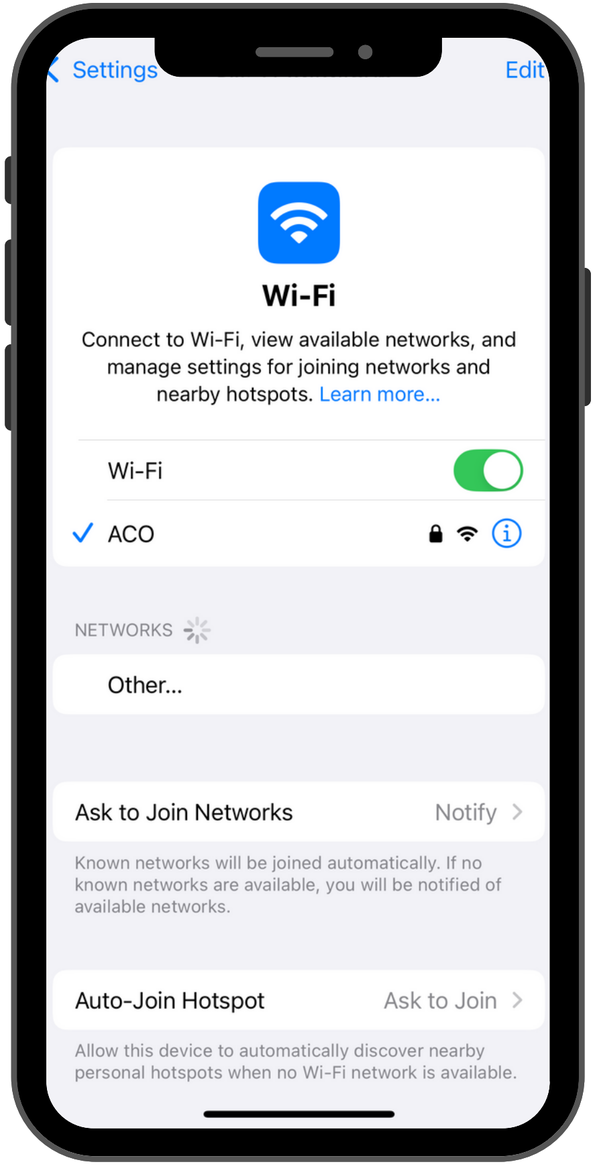
NET
COM
READY
SN:1729911789
PWD:2182abbc

NET
COM
READY
SN:1729114605
PWD:d8beed25

NEOVOLTA™

Create a Plant

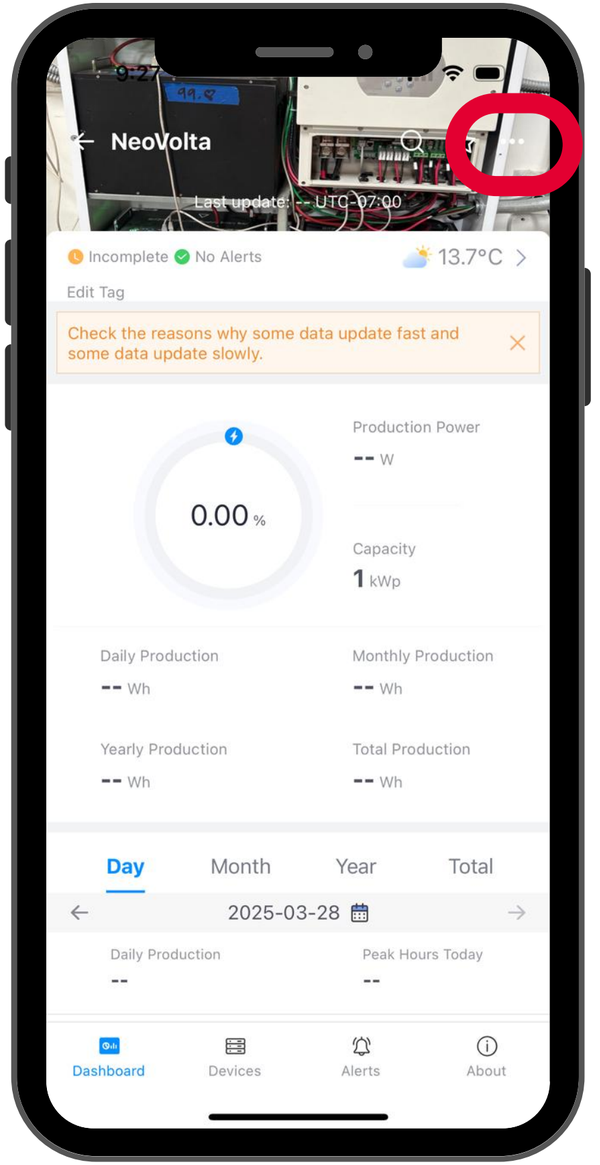
- After it has successfully connected, please return to the cellphone settings and change the WiFi from the logger.



NEOVOLTA

Plant

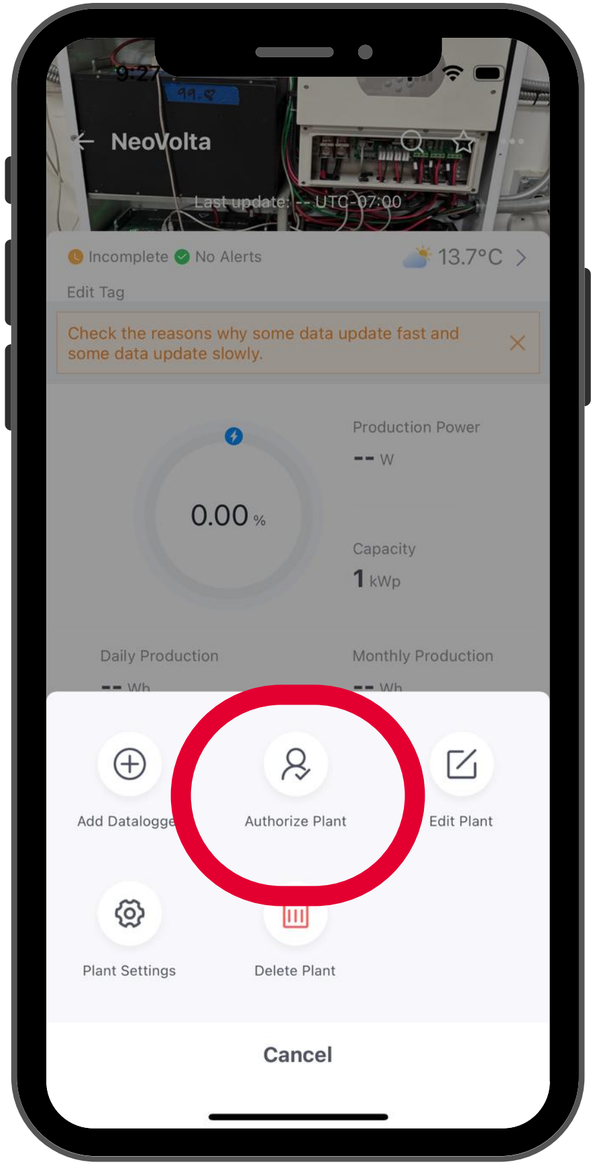
- Plant main page
- Top right hand of screen to add NeoVolta



NEOVOLTA

Authorize NeoVolta

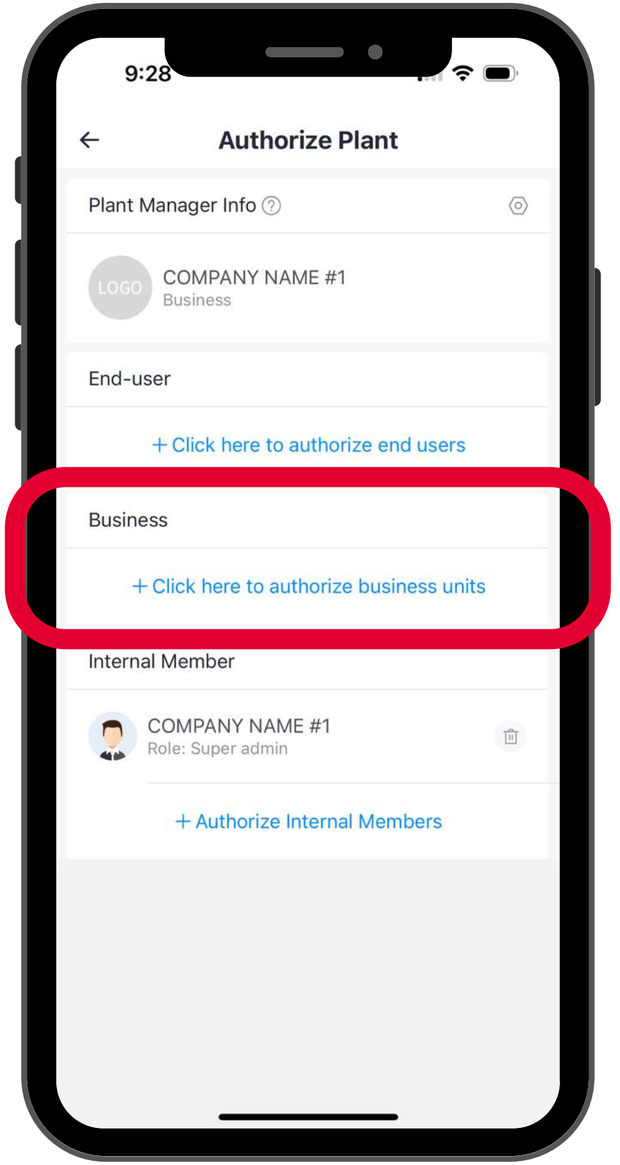
Authorize
Plant



NEOVOLTA™

Authorize Plant

Business
+ Click here to authorize business units

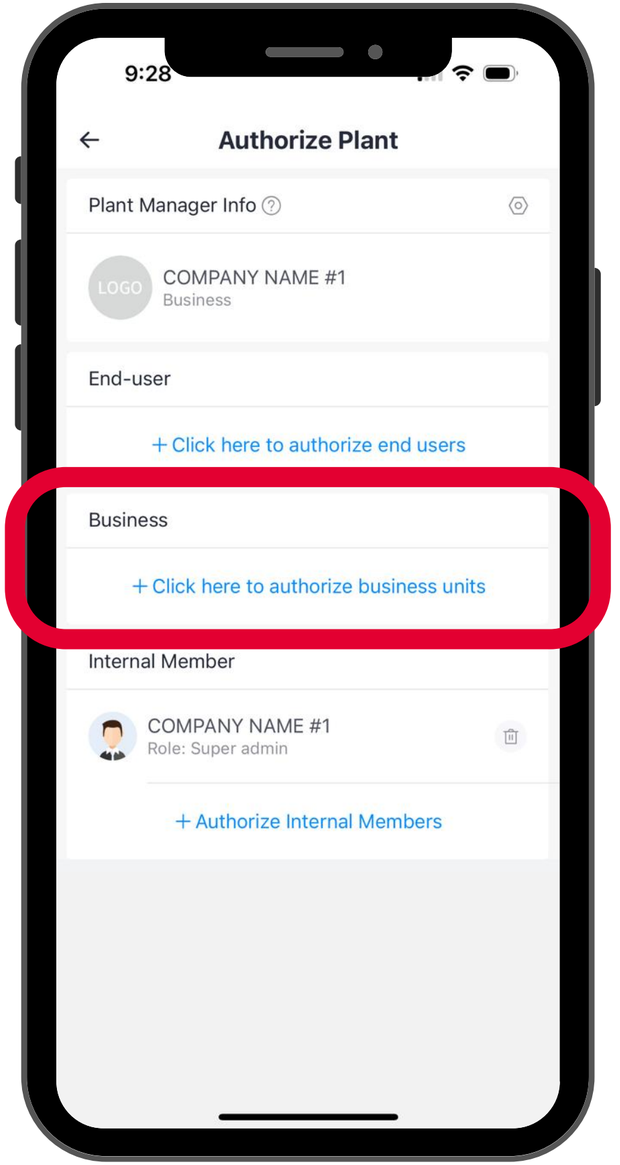


NEOVOLTA™

Authorize Plant

If additional business third parties need to be added, for example, HDM, San Diego Community Power, etc.

+ Click here to authorize business units

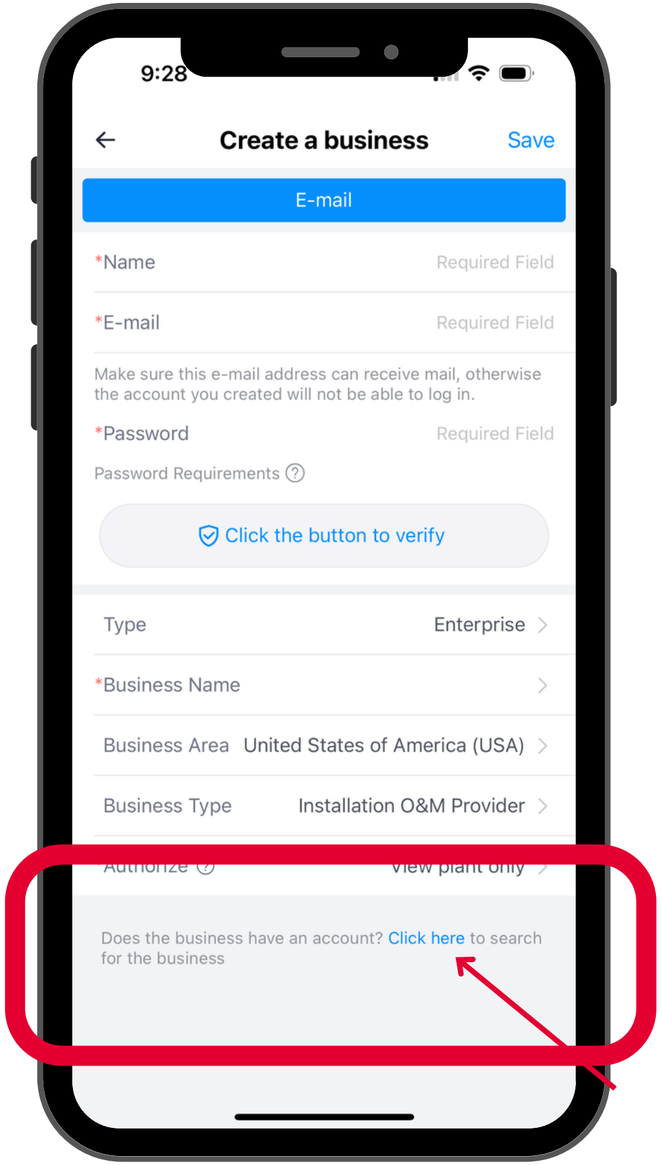


NEOVOLTA

Adding NeoVolta

Bottom of the screen

- In small print
- Select the blue ‘Click here’

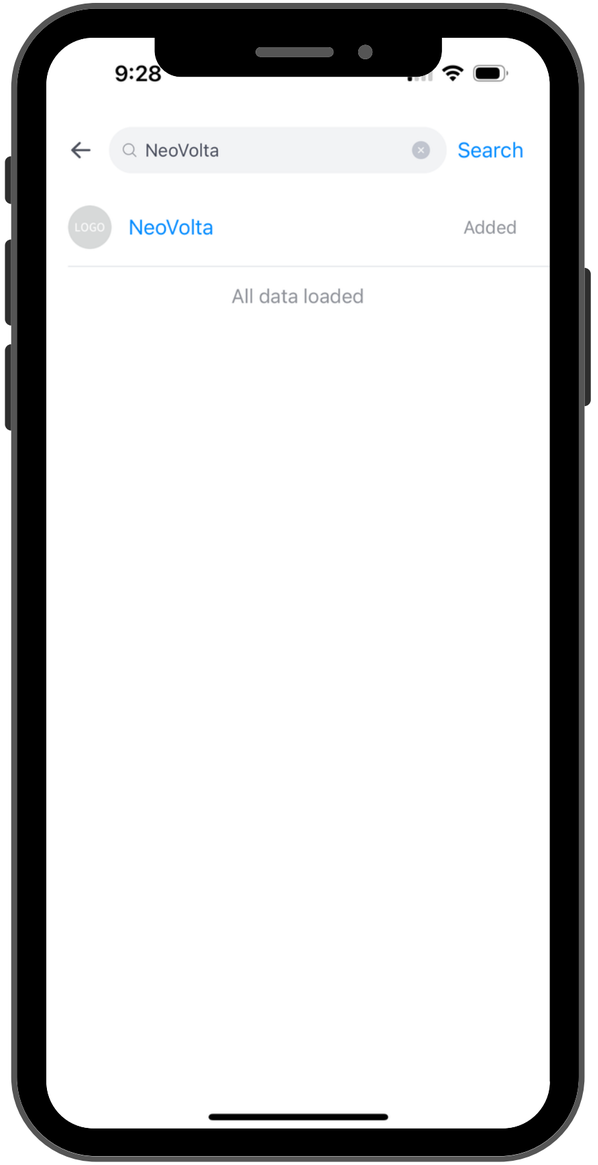


NEOVOLTA™

Adding NeoVolta

Search Bar

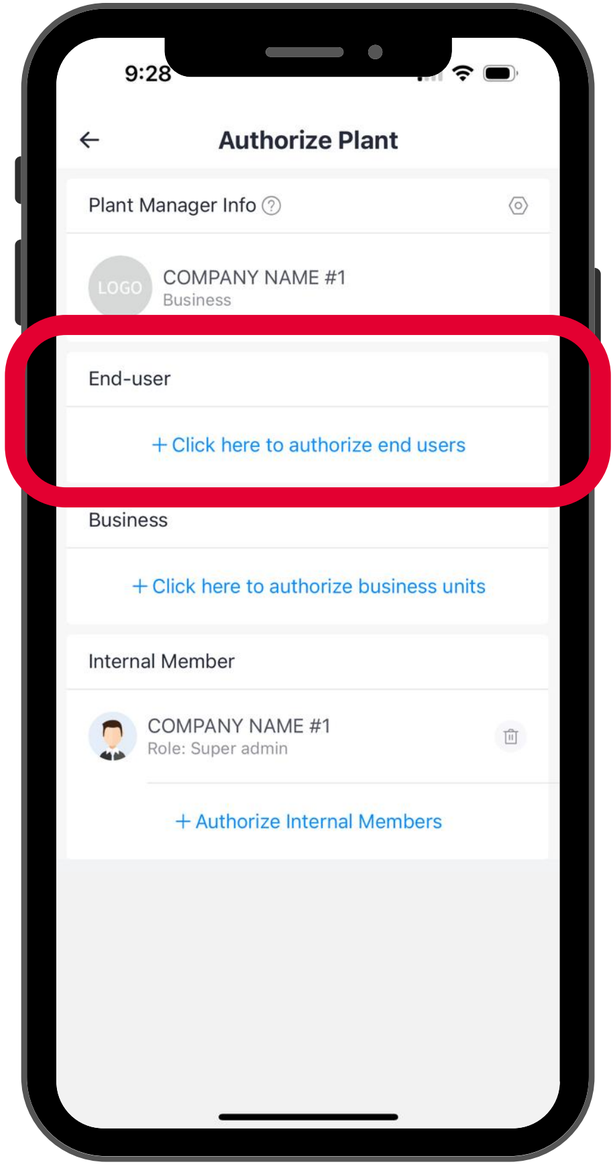
- Type out NeoVolta
- Select ‘Search’
- When the NeoVolta name shows up, tap to select



NEOVOLTA™

Authorize Plant

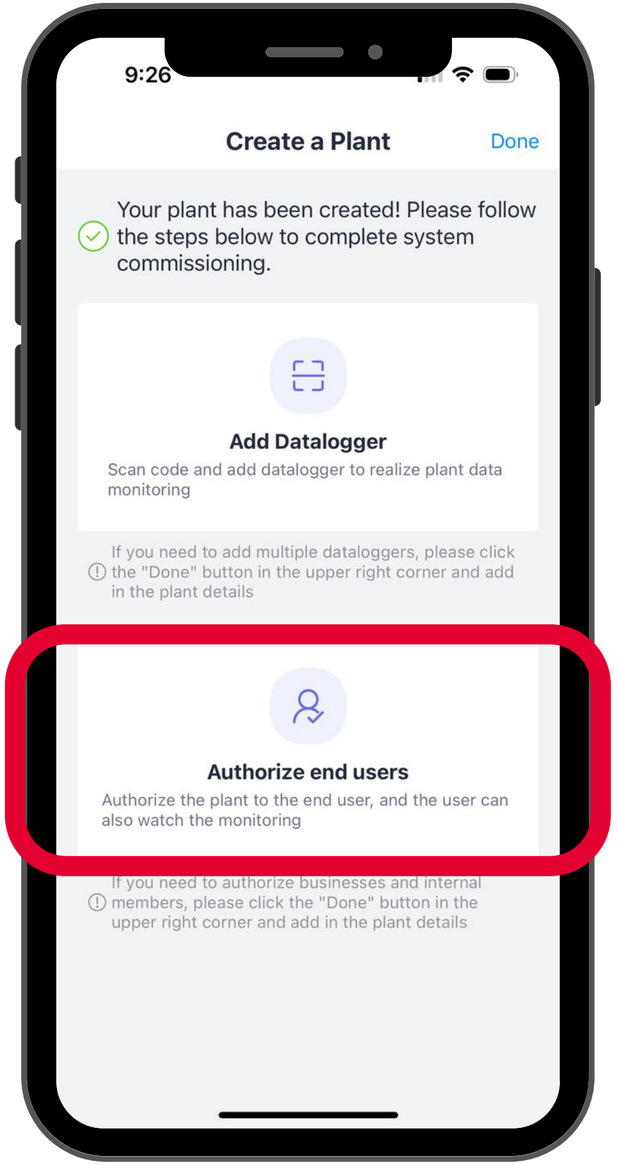
End-user
+ Click here to authorize end users



NEOVOLTA™

Authorize End User

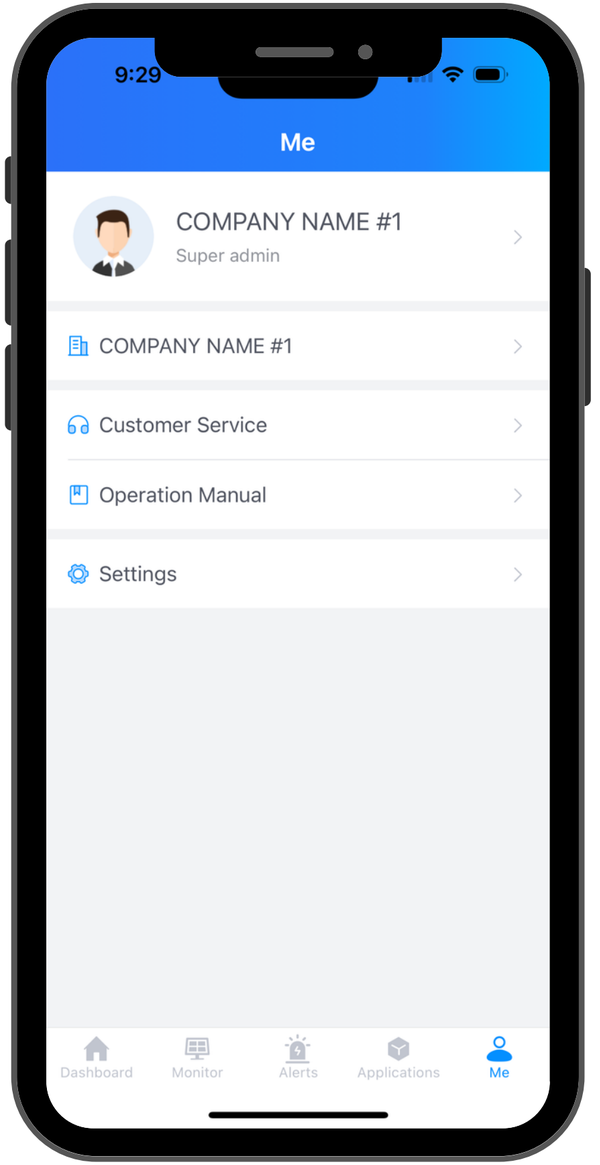
- Tap ‘Authorize End User’
- Follow prompts to enter homeowner email address and create a temporary password
- Double check email and password before continuing
- Provide both to homeowner and have them download Solarman **Smart**
- If there are any login issues, they can select “forgot password” and it will have them create a new one



NEOVOLTA™

Me

Can view your company
Make changes to Settings

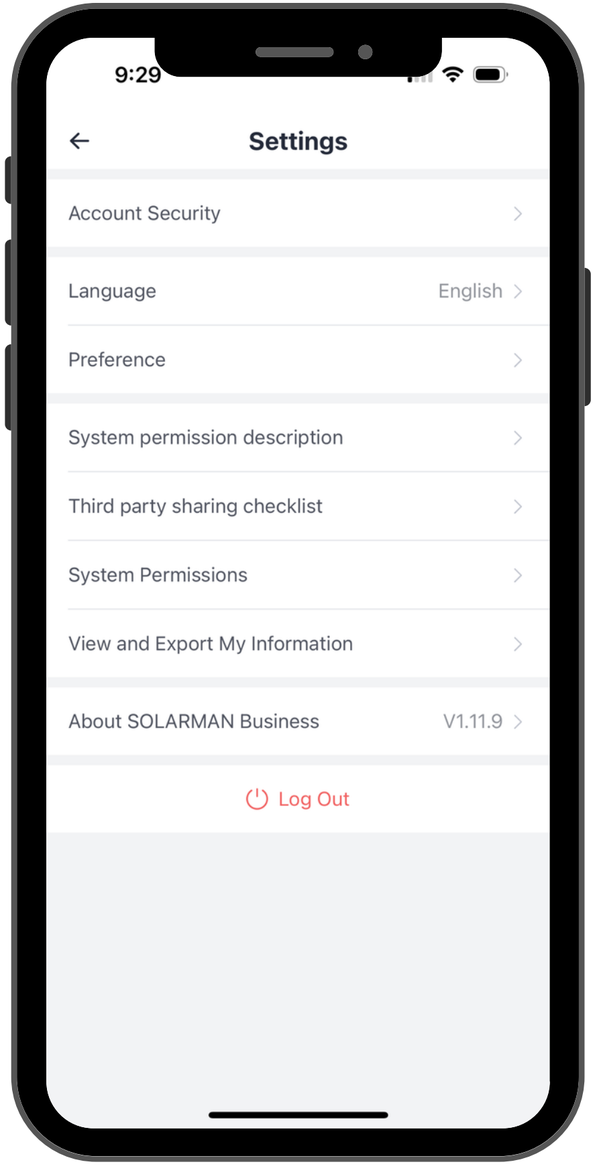


NEOVOLTA™

Settings

Edit the Temperature Preference

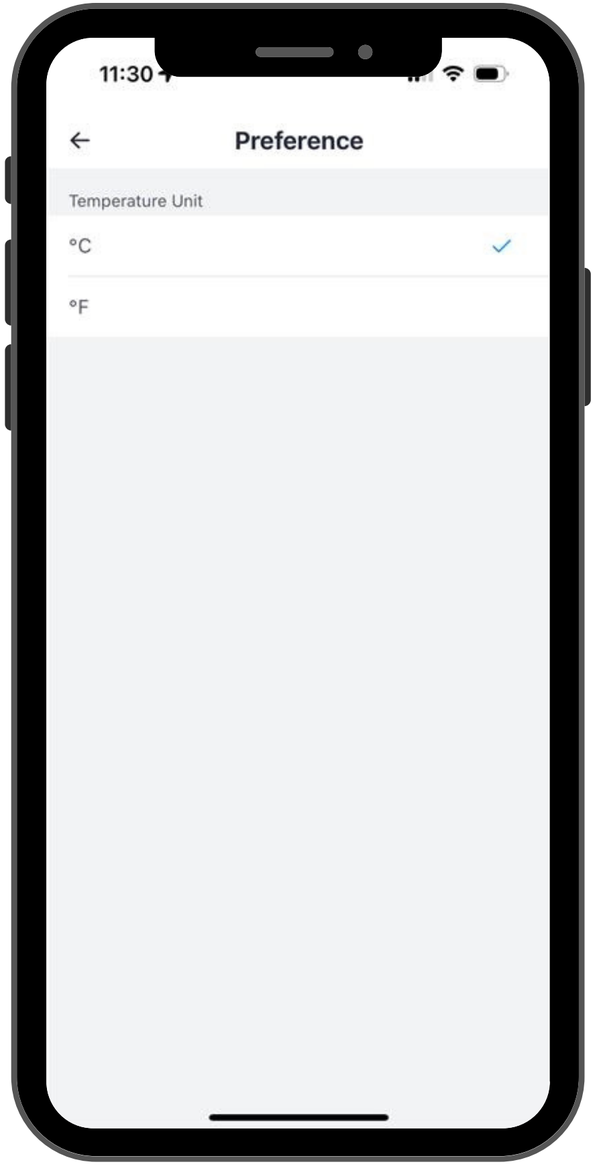
Select Preference



NEOVOLTA™

Tempature

- Select Celsius or Fahrenheit

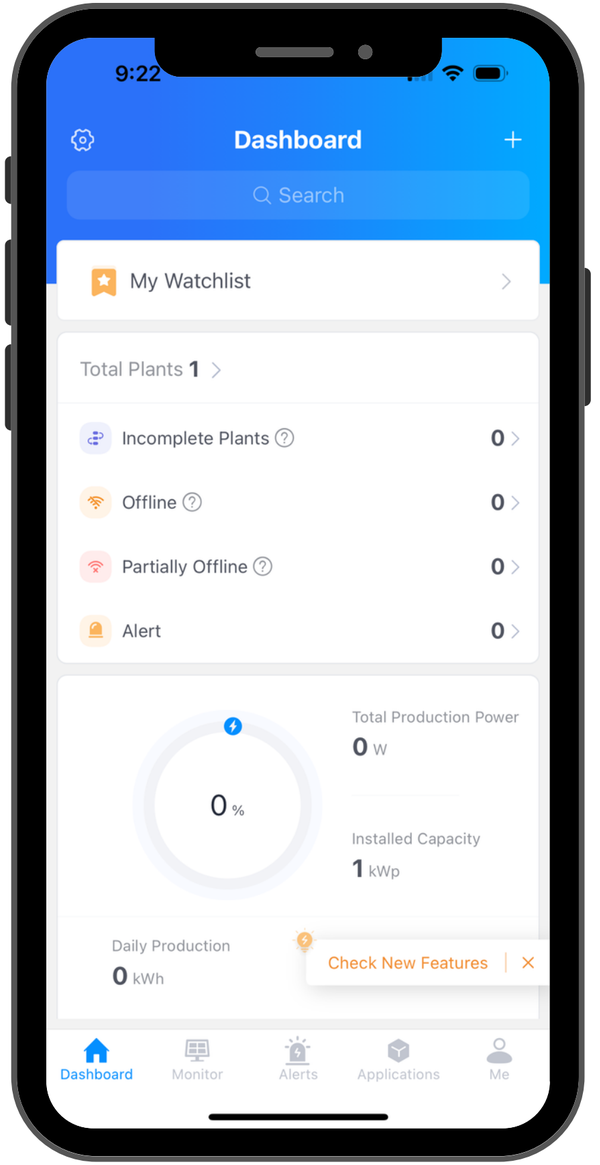


NEOVOLTA™

Complete

Dashboard

- 1 Plant now displays



NEOVOLTA™

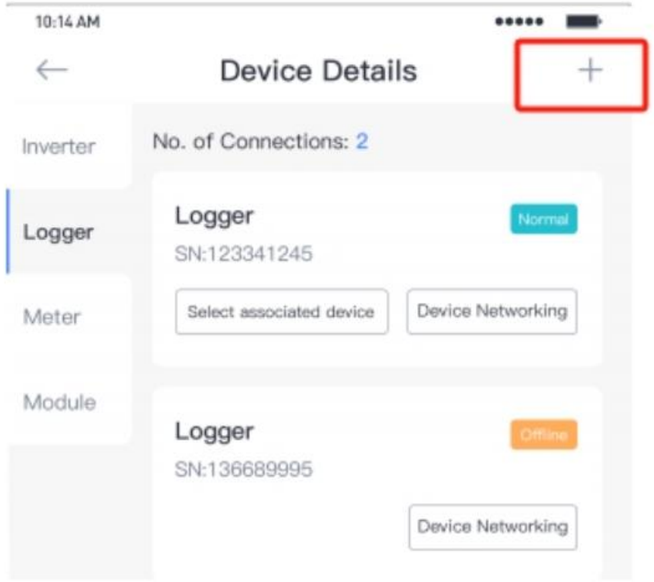
Solarman Business Settings

If the inverters are not programmed on the LCD screen, they can be programmed remotely.

NEOVOLTA™

Solarman Business Settings for Parallel Inverters

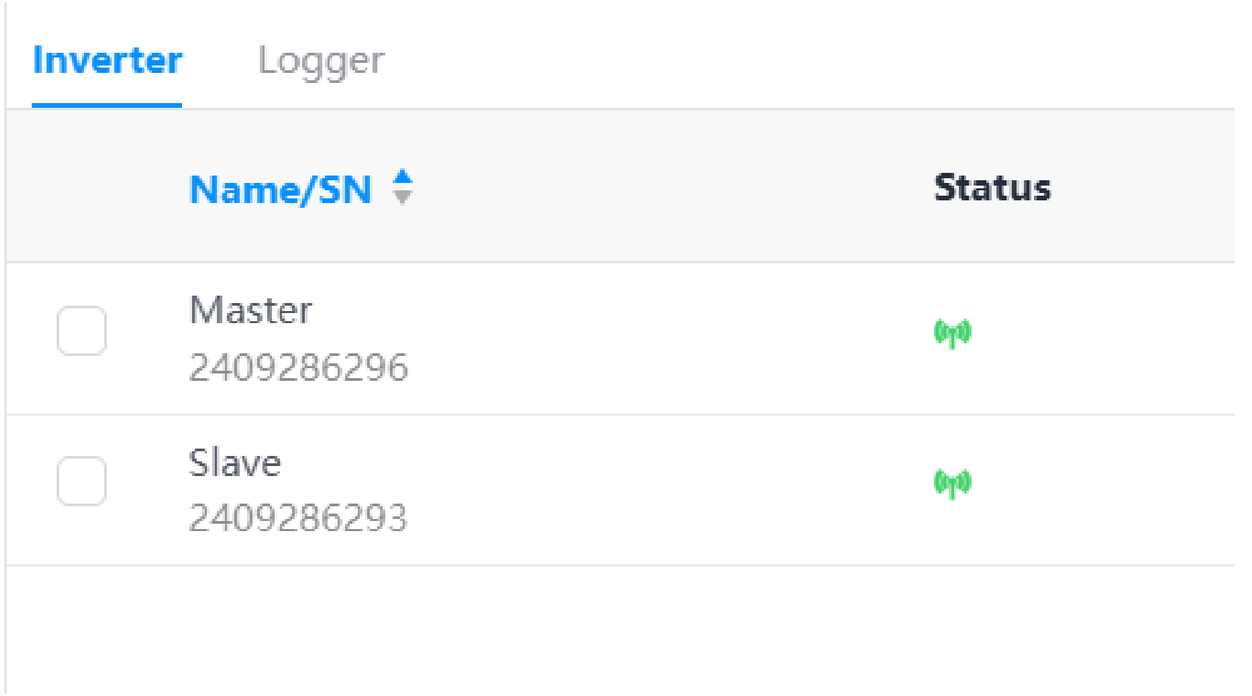
Add both inverters on the same plant



NEOVOLTA

Solarman Business Settings for Parallel Inverters

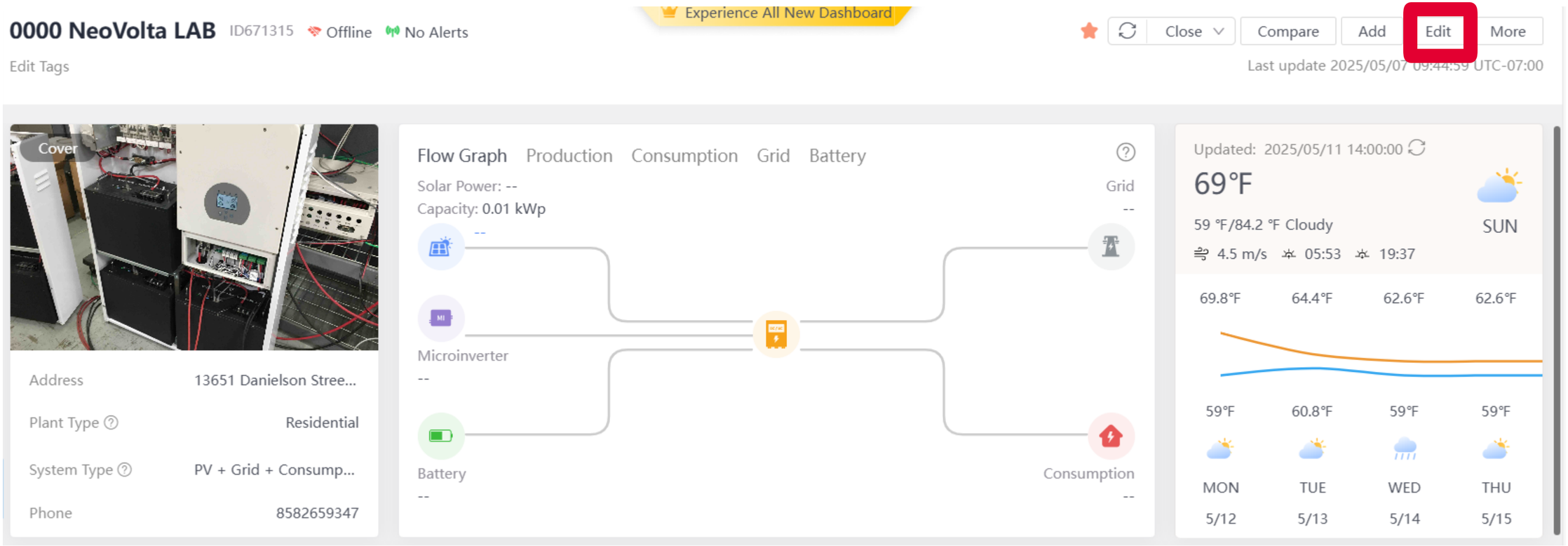
Label as Primary (Master) and Secondary (Slave) accordingly



NEOVOLTA

Solarman Business Settings

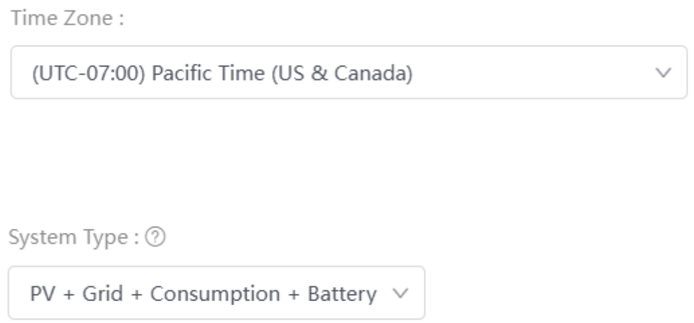
Select Edit

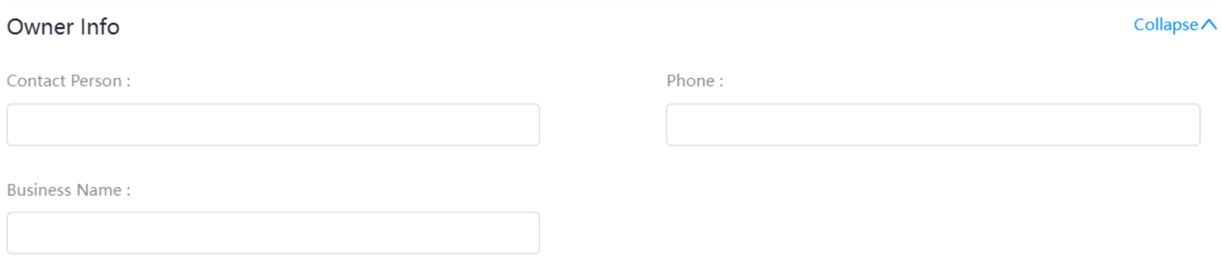


NEOVOLTA™

Solarman Business Settings

1. Under Plant Info
2. Select the correct Time Zone
3. Select System Type:
   - PV + Grid + Consumption + Battery
4. Add the Owner Info
5. Select Done

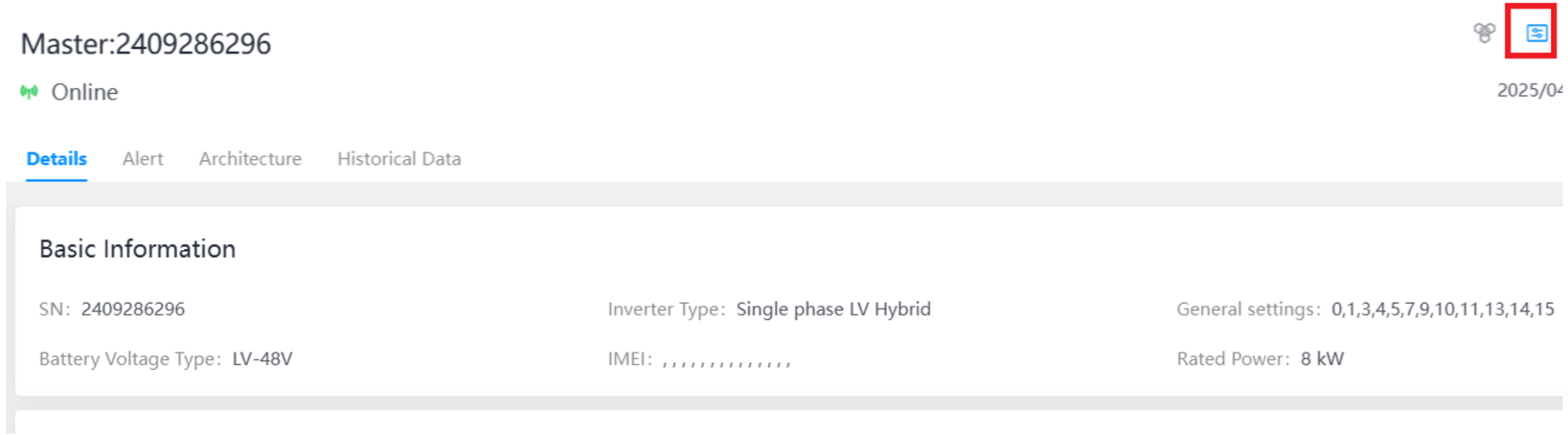




NEOVOLTA

Solarman Business Settings

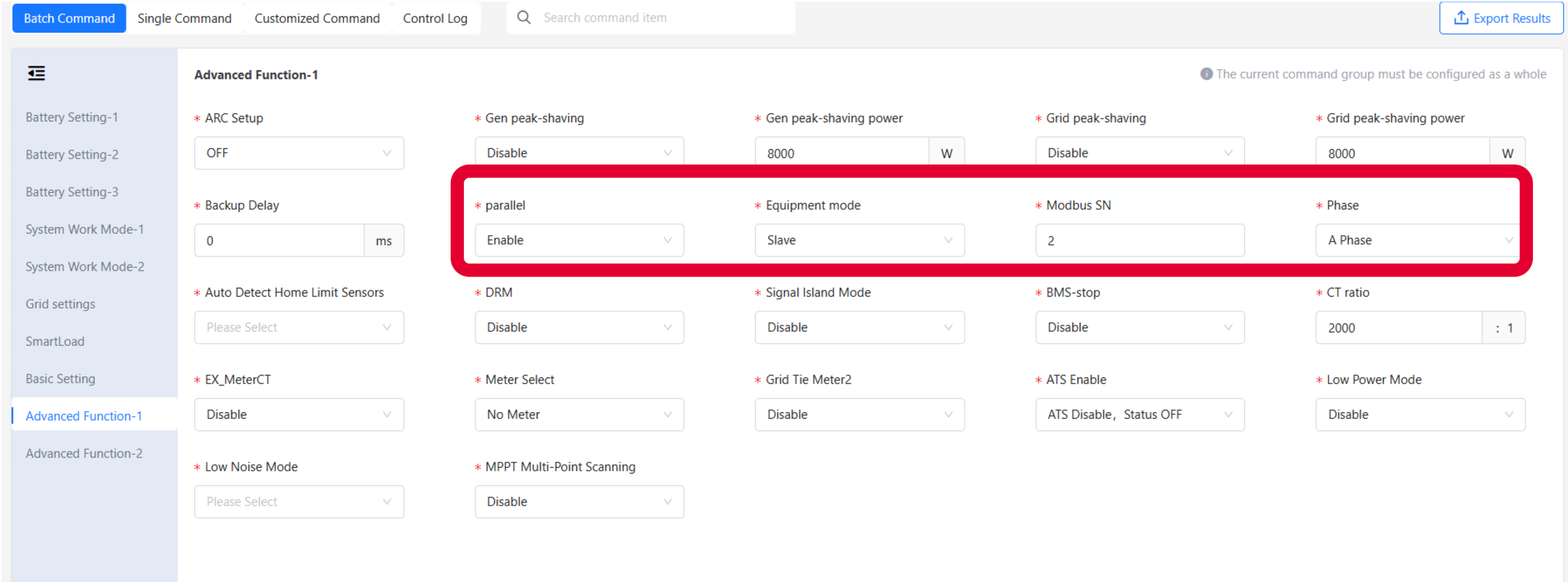
Select the inverter and select Device Control



NEOVOLTA™

Solarman Business Settings for Parallel Inverters

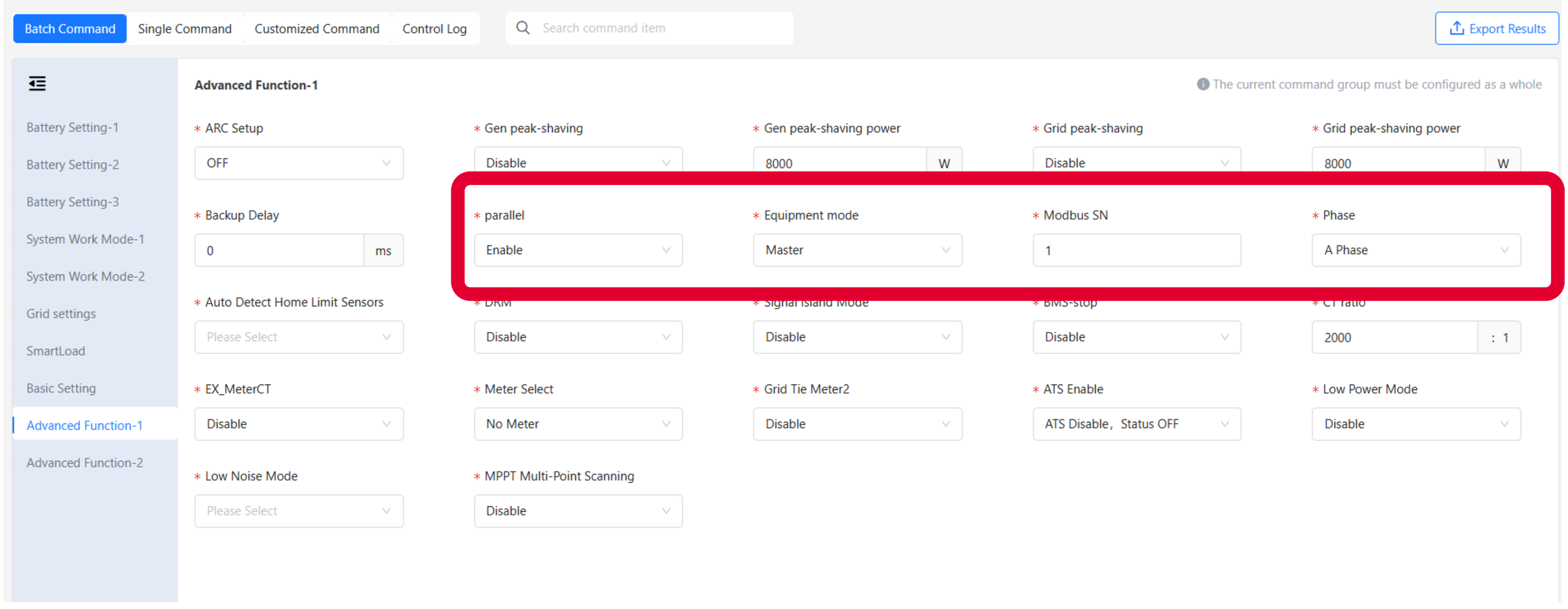
On the slave inverter only program Advanced Function – 1 inverter. Program the slave inverters prior to the master.



NEOVOLTA

Solarman Business Settings for Parallel Inverters

Program the master inverter with all the values. Program the master Advanced Function-1 last.



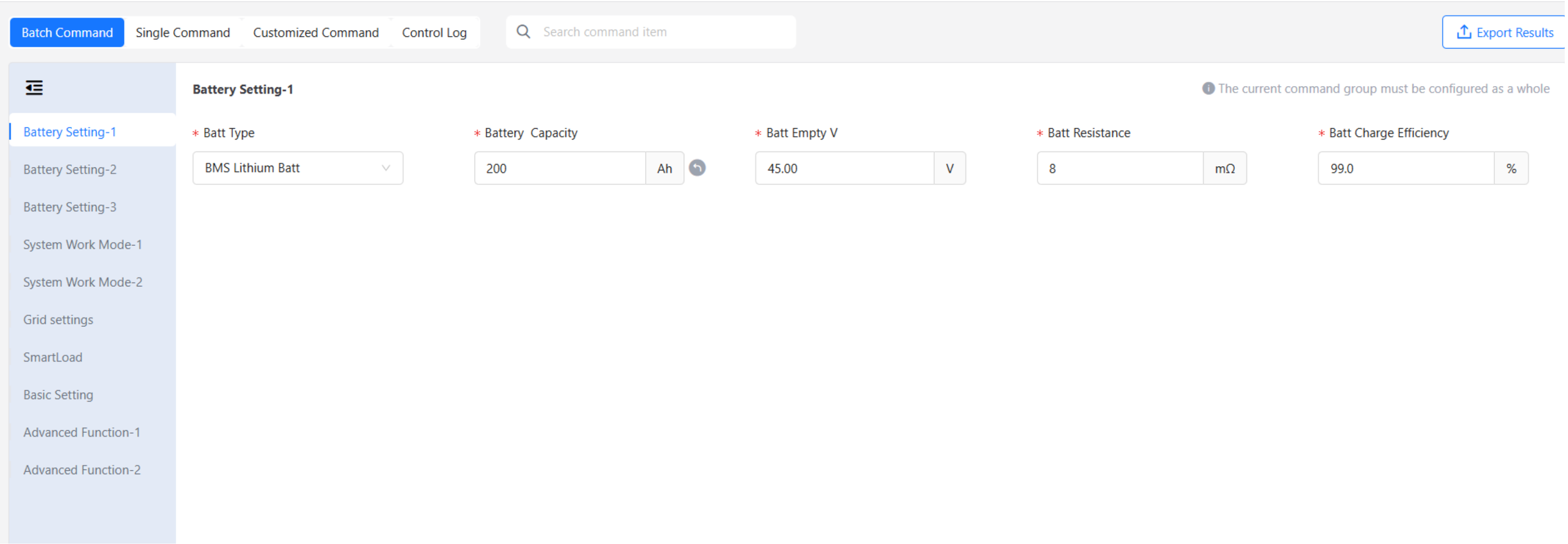
NEOVOLTA™

Solarman Business Settings for Parallel Inverters

- Continue with subsequent slides to program the master inverter.

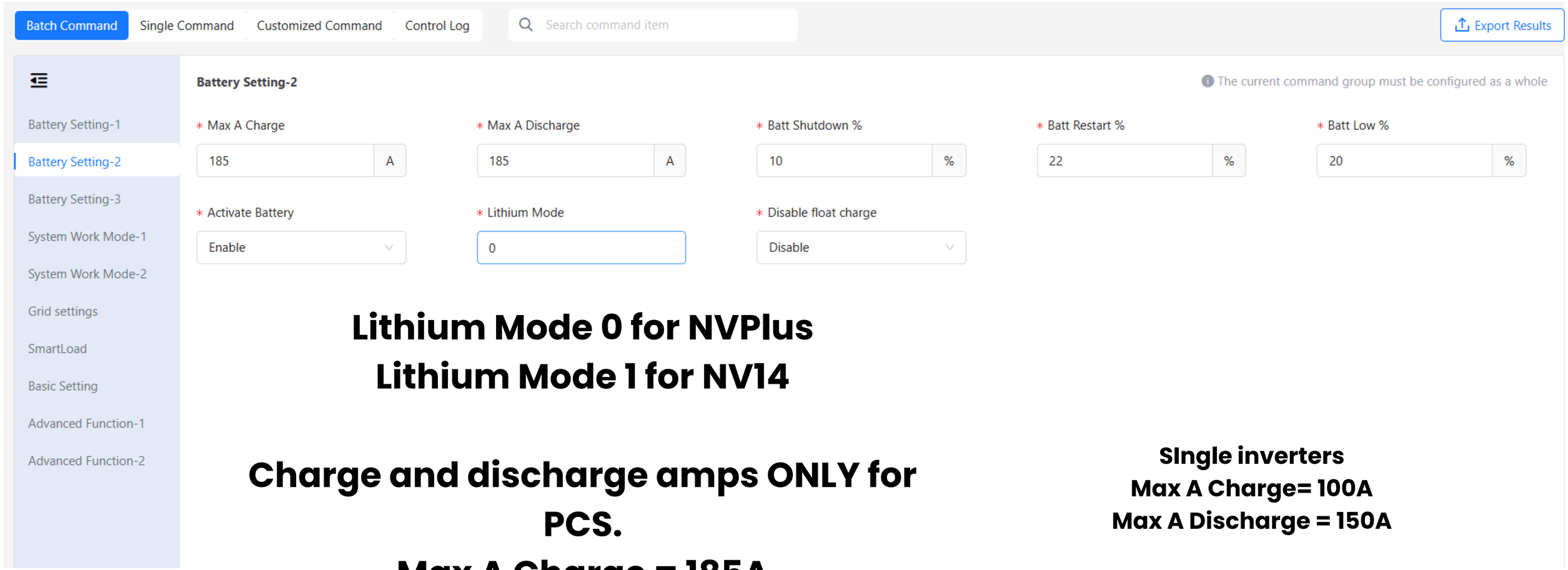
NEOVOLTA

Battery Setting - 1



NEOVOLTA

Battery Setting - 2



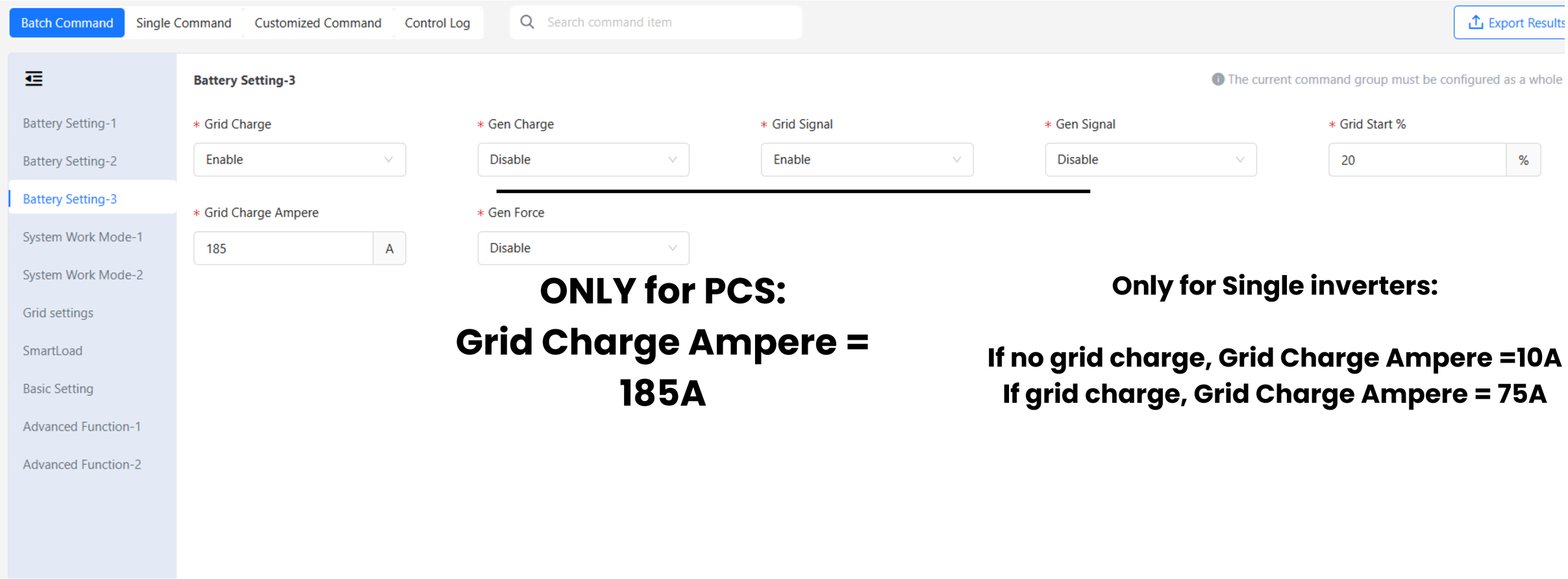
Lithium Mode 0 for NVPlus
Lithium Mode 1 for NV14

Charge and discharge amps ONLY for PCS.
Max A Charge = 185A
Max A Discharge = 185A

SIngle inverters
Max A Charge= 100A
Max A Discharge = 150A

NEOVOLTA™

Battery Setting -3



ONLY for PCS:

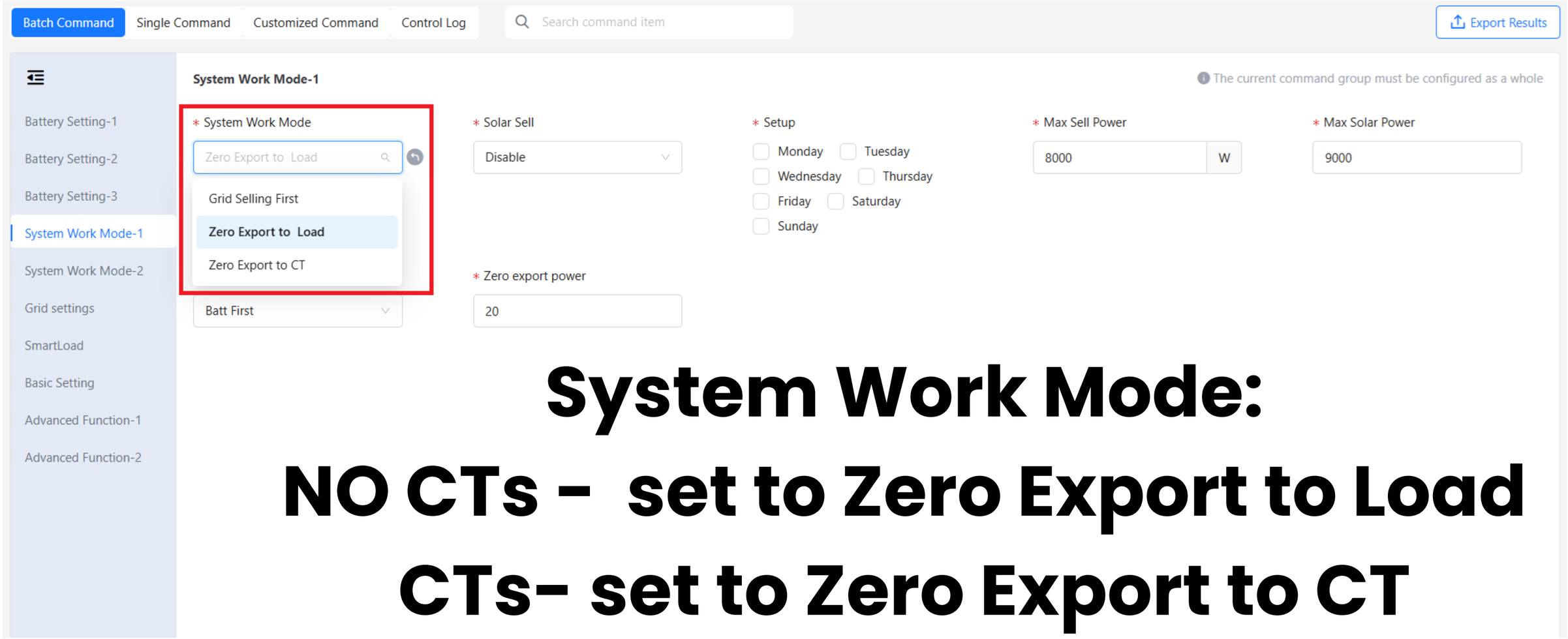
Grid Charge Ampere = 185A

Only for Single inverters:

If no grid charge, Grid Charge Ampere =10A
If grid charge, Grid Charge Ampere = 75A

NEOVOLTA

System Work Mode-1



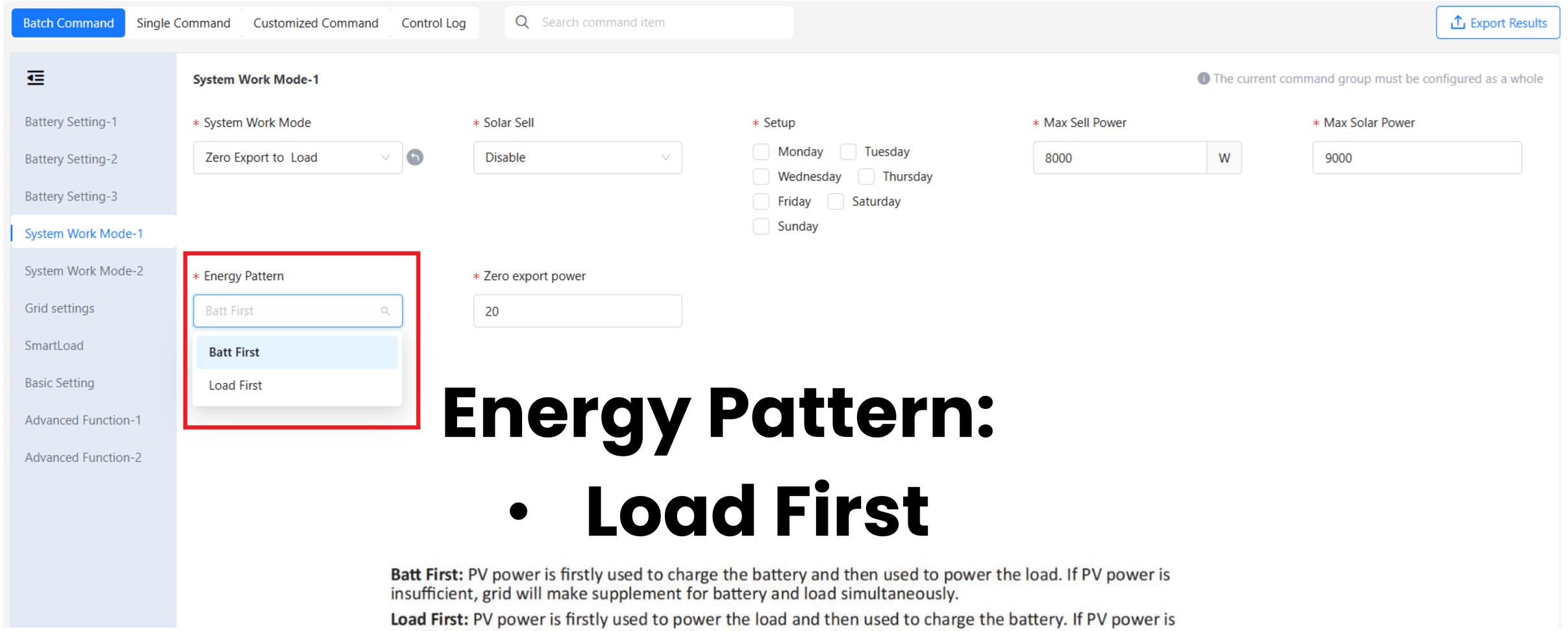
System Work Mode:

NO CTs - set to Zero Export to Load

CTs- set to Zero Export to CT

NEOVOLTA

System Work Mode-1



Energy Pattern:

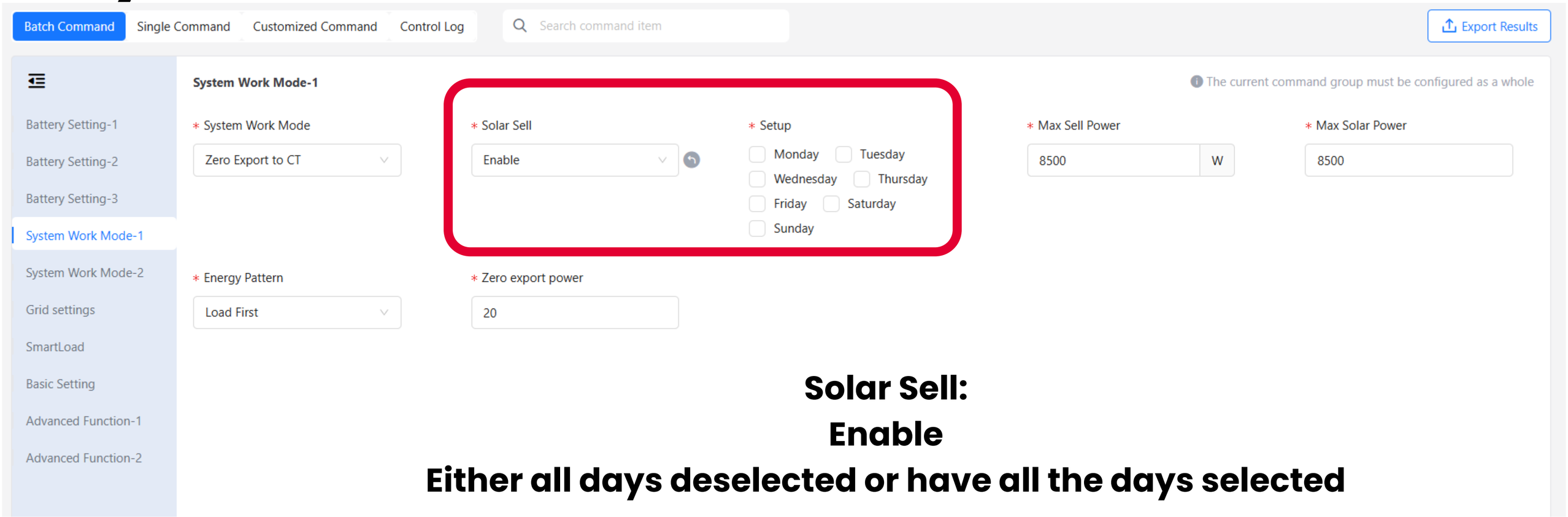
- **Load First**

Batt First: PV power is firstly used to charge the battery and then used to power the load. If PV power is insufficient, grid will make supplement for battery and load simultaneously.

Load First: PV power is firstly used to power the load and then used to charge the battery. If PV power is insufficient, grid will make supplement for battery and load simultaneously.

NEOVOLTA

System Work Mode-1



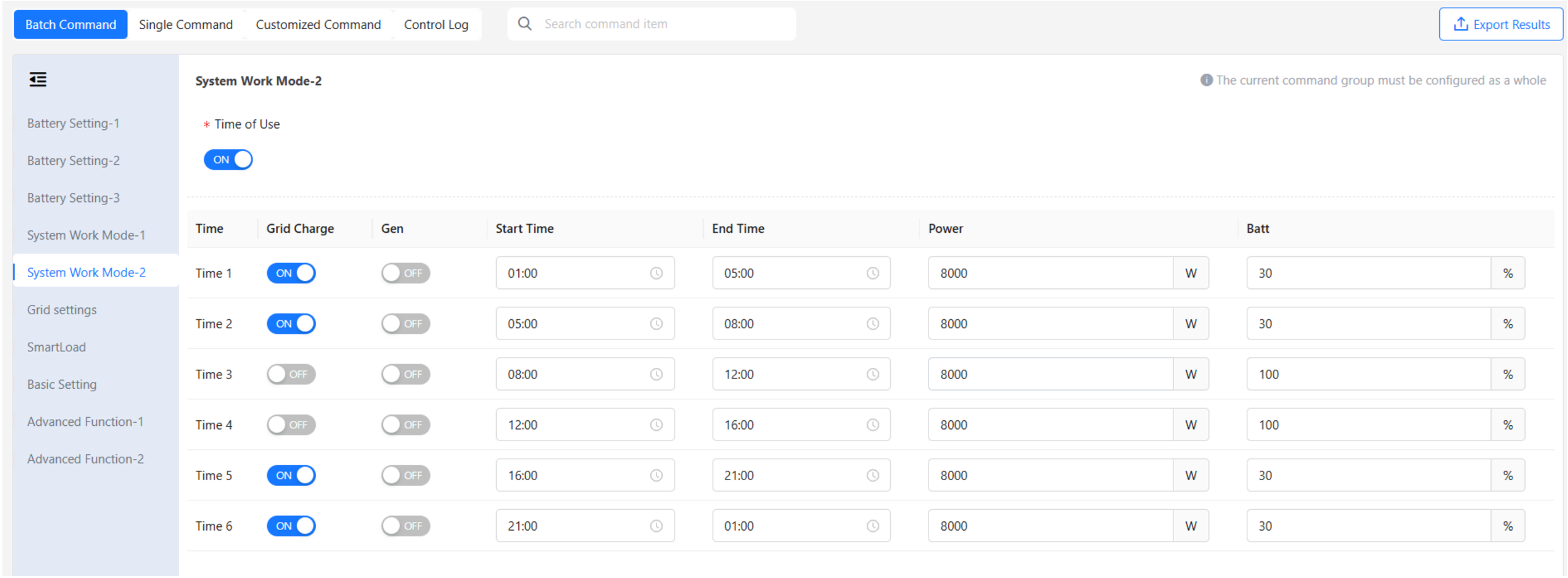
Solar Sell:

Enable

Either all days deselected or have all the days selected

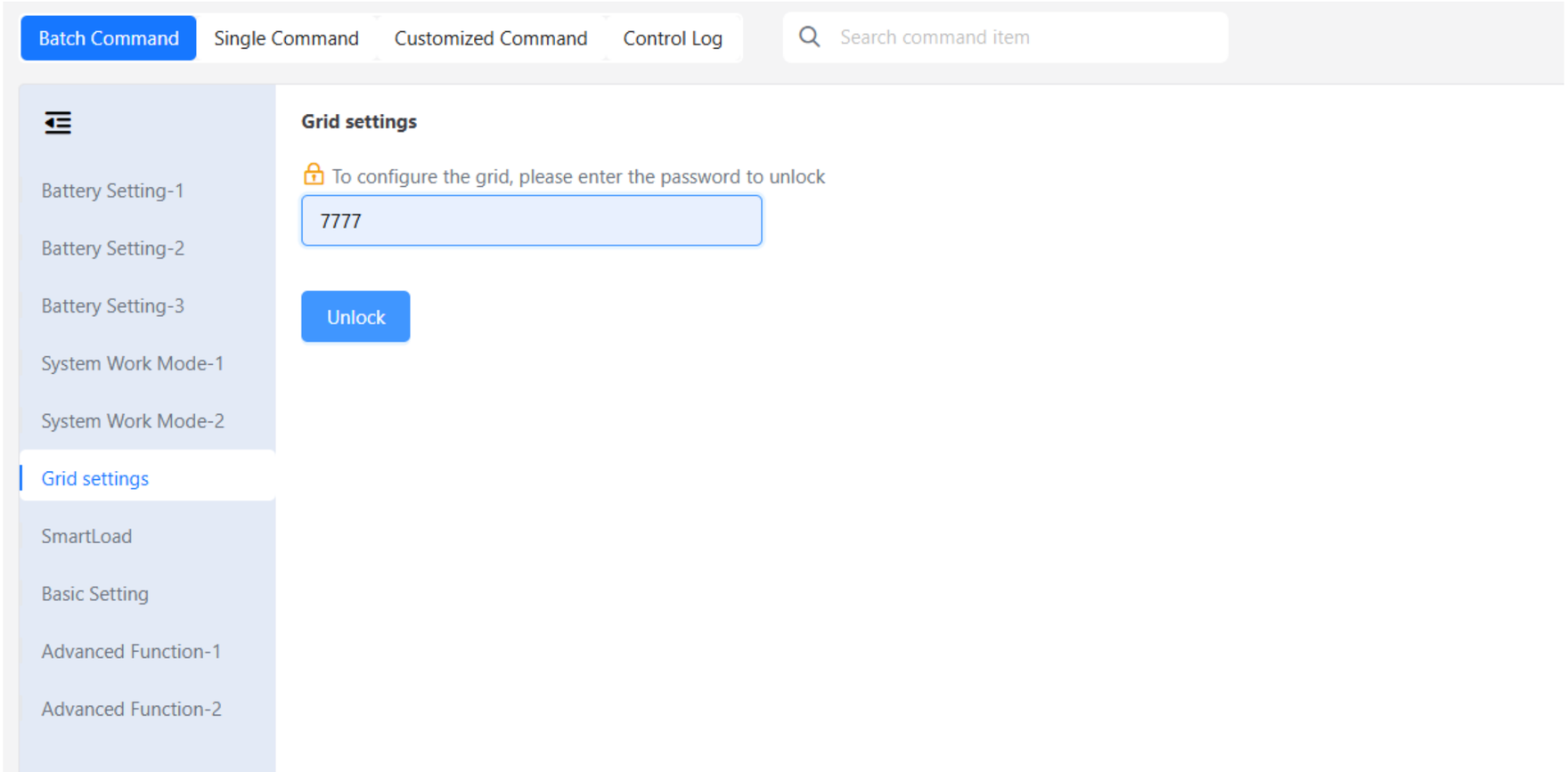
NEOVOLTA

System Work Mode-2



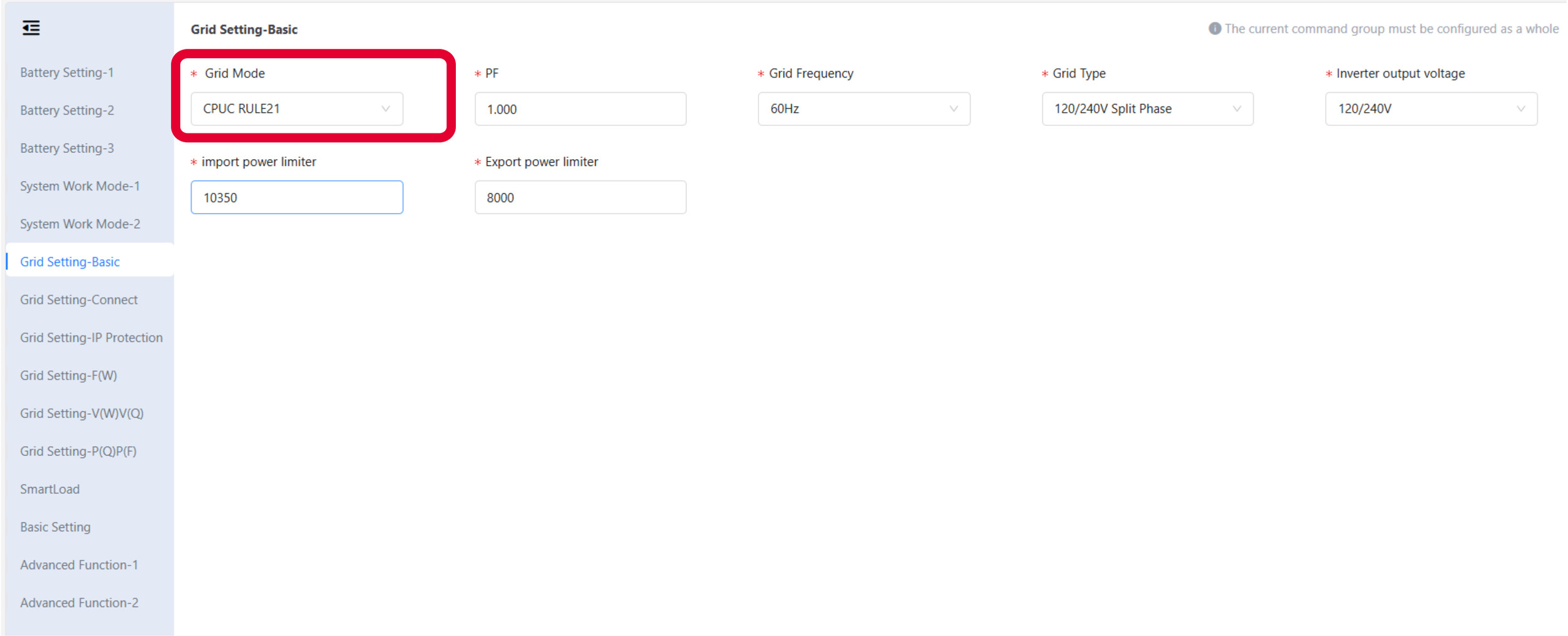
NEOVOLTA™

Grid Settings Enter 7777



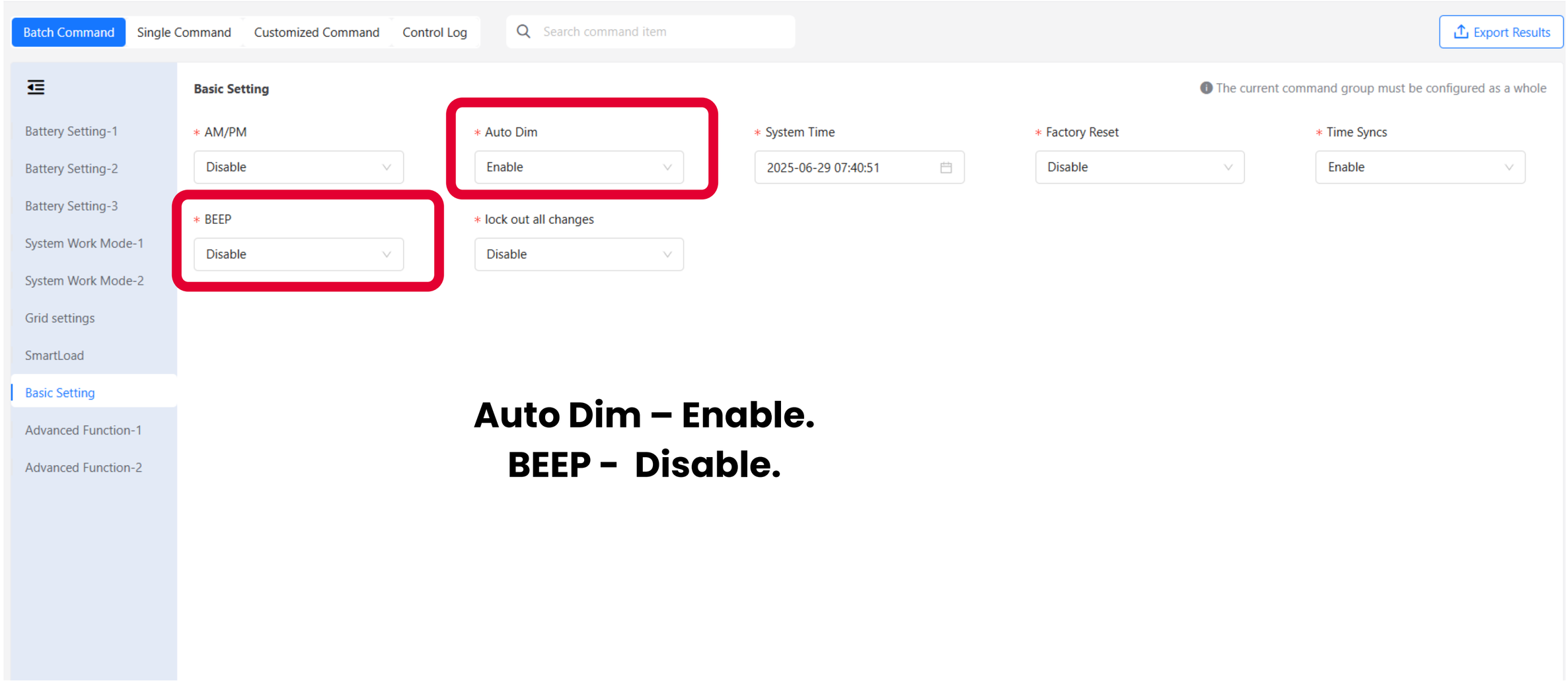
NEOVOLTA

Grid Setting – Basic



NEOVOLTA

Basic Setting



Auto Dim – Enable.

BEEP - Disable.

NEOVOLTA™

Solarman Business Settings for Parallel Inverters

- Verify the slave has the same parameters from the master.
- For example, check to see if the slave inverter has the same settings as the Master.
- Select Battery Setting-2
  - Max A Charge 185A
  - Max A Discharge 185A