



5K 3XP

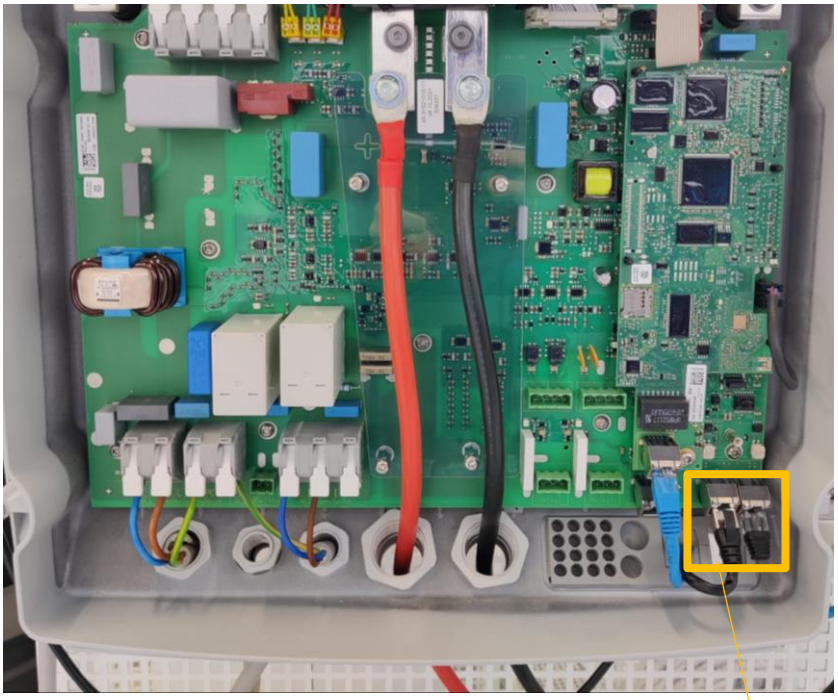
4 to 4K

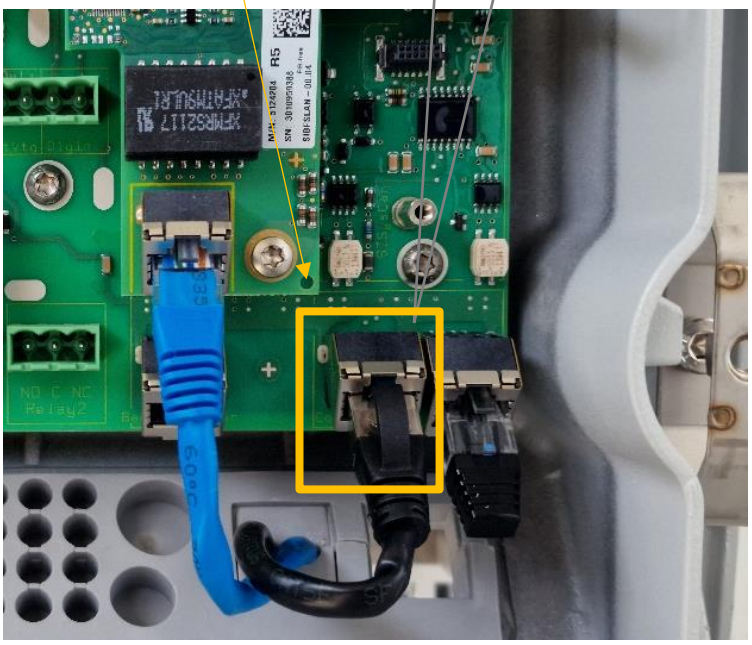
SMA
SUNNY ISLAND Single Phase
Whole Power Range

SMA Sunny Island 220Vac Single Phase Inverter Quick Configuration Guide

Preparations:

Open the connection lid to access the connection board of the inverter, CAN port, CT terminal and Battery Power Connection Terminal are all located here.





Step 1. Safety Preparation

For Safety reason it is forbidden to install any power inputs such as PV, GRID or BATTERY before having completed all the data wiring connection as explained below.

- The PV cables cannot be conneted at this stage
- Grid and Generator wires cannot be conencted at this stage
- Battery must kept OFF while performing the connection operations, power cables to be connected at last.
- Ground the Inverter immediately after fixing it on the wall



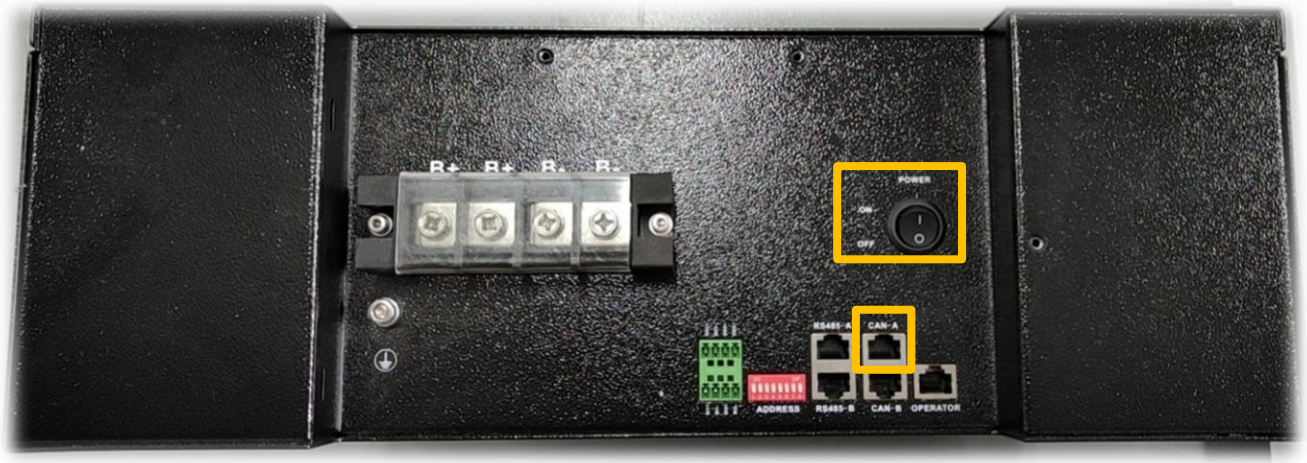
Step 2. Battery Preparation

Keep the BMS switch on “0” OFF.
Set the DIP Switch of the battery in accordance with the relevant manual.
Connect the provided CAN cable RJ45 to the CAN A port.
The RJ45 Terminal on the other side needs to be crimped to match inverter PIN OUT.
Do not connect the power cables at this stage.

5K3 XP EXAMPLE
DIP switched are set all OFF (00000000). Only DIP of last slave must be set differently (00000100).



4K4 LT EXAMPLE
DIP switched are set all OFF (00000000). Only DIP of last slave must be set differently (00000100).



Step 2.1. Can Connection

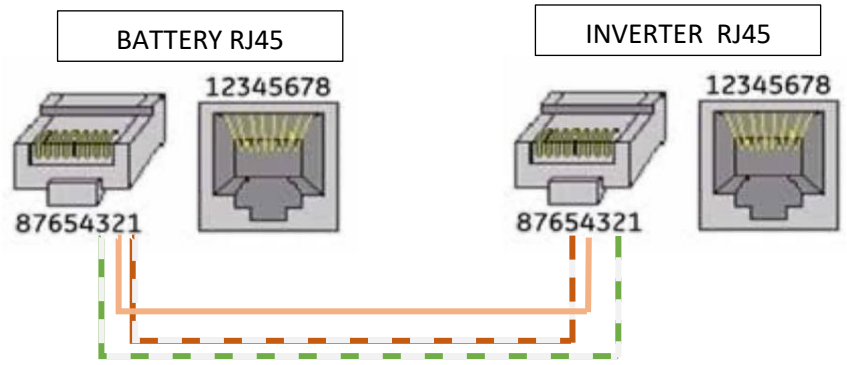
WeCo Provides an RJ45 cable Type T568B with any battery Kit.

BMS CAN PIN OUT at battery side is the same for any WeCo battery.

The RJ45 Terminal on the inverter side needs to be crimped to match inverter PIN OUT

Terminal	Battery Side RJ45	SMA Side RJ45
GND	PIN 3	PIN 2
CAN -L-	PIN 2	PIN 5
CAN -H-	PIN 1	PIN 4

ATTENTION SMA CAN BMS CABLE TO BE MODIFIED LOCALLY



BATTERY SIDE KEEP THE ORIGINAL RJ45 TERMINAL

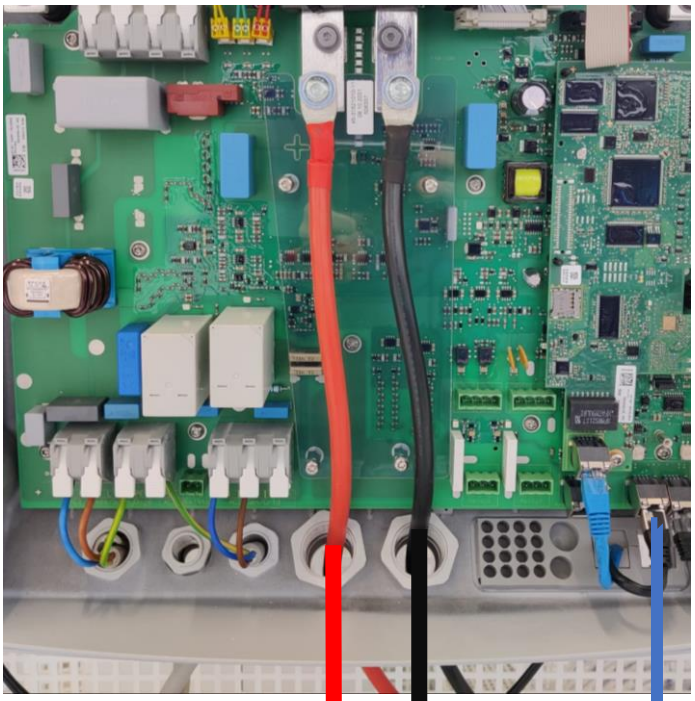


INVERTER SIDE MAKE A NEW TERMINAL PIN OUT



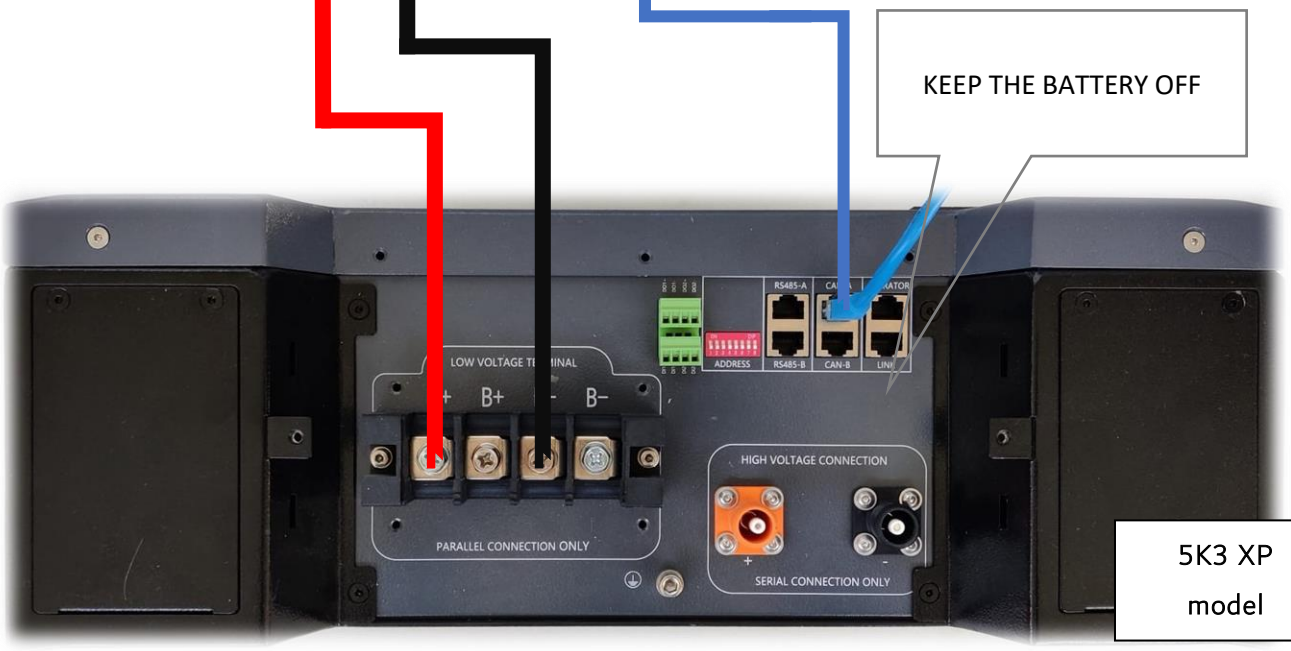
Step 3. Battery Power Connection

Keep Inverter and Battery OFF.
Connecting the power Cables from the battery to the Inverter.
Use a Torque Wrench to secure the cables bolt.



INVERTER OFF
BATTERY OFF

Battery Torque: 9.5 Nm
Inverter Torque: 11 Nm



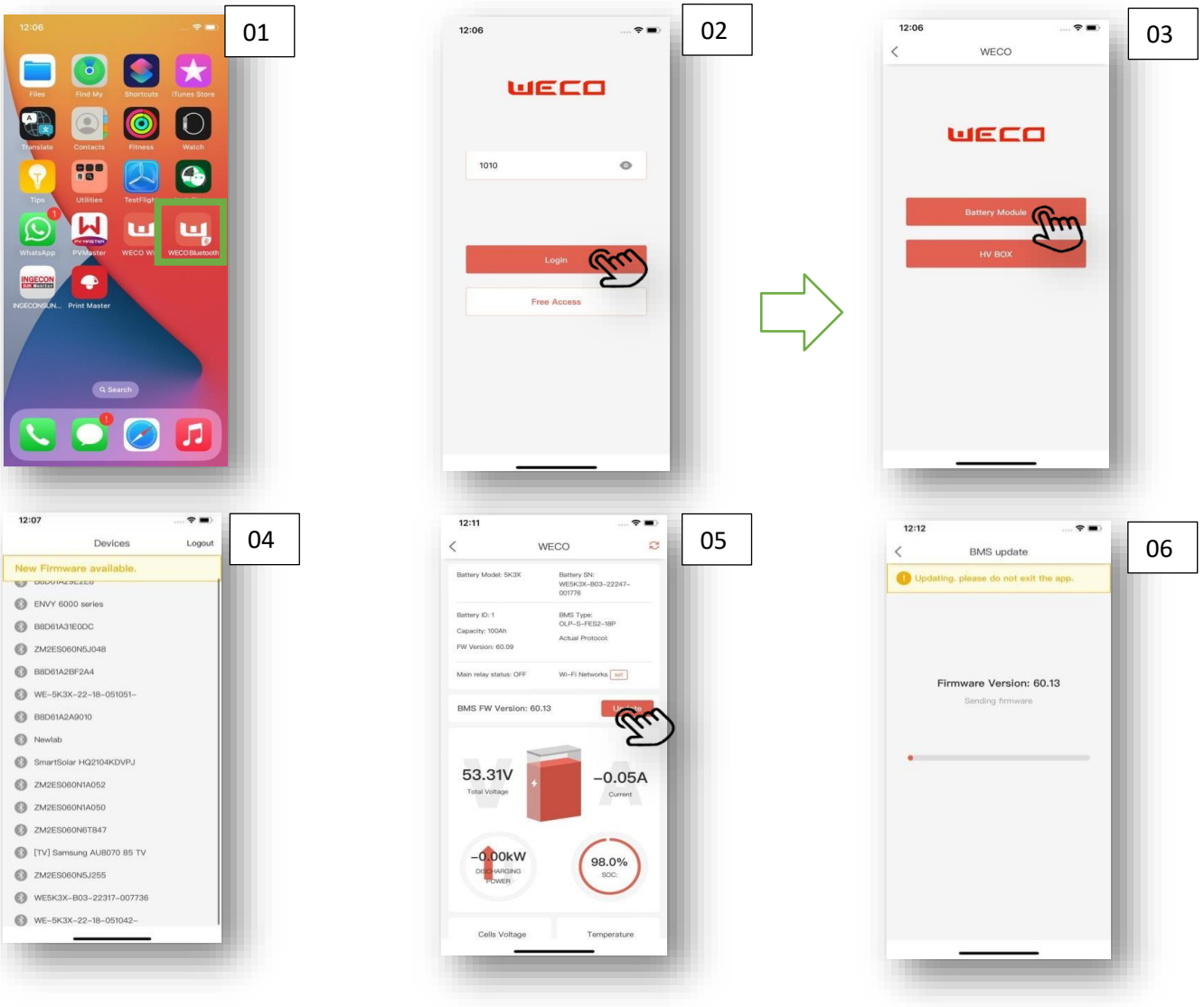
Same configuration applies to the 4k4 LT model.

Step 4. Battery FW Upgrade and Protocol Set

Download the WeCo Bluetooth APP from Google Play of from APP Store.
The Bluetooth APP will allow you to inspect the battery, set the battery and monitor the BMS functions during the commissioning phase.
As good practice, it is always required to search for the latest FW for the battery.
The 5K3 XP Model has a built in WiFi/BT device and it is possible to find the battery Bluetooth Signal (in the form of battery Serial Number) directly from the in-APP list.

- Open the BT APP
- Turn On the Battery
- Access the APP using the password **1010**.
- Select **Battery Module**.
- Scroll Down and tap on the Serial Number of your battery.
- Once the main page will display your battery info, scroll down and tap on the FW upgrade button if available (if not displayed means the battery is UP to Date).

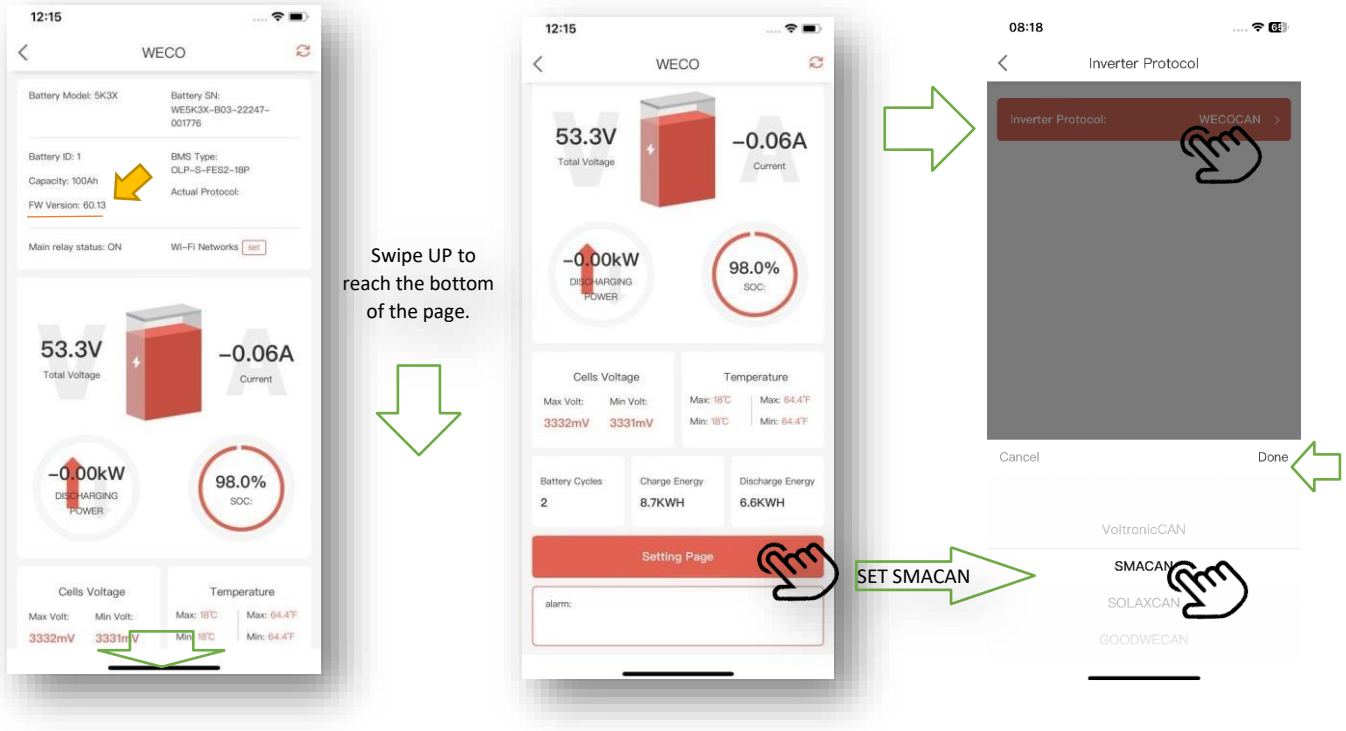
APP STEPS



Same procedure applies to the 4k4 LT model, with the exception that an external WiFi/BT dongle is needed. In this case, in the step of screen 04 you will have to select the dongle's MAC Address.

Protocol Set Up

Wait until pop up confirms that the update process is successful, then proceed to set the inverter protocol.



ATTENTION

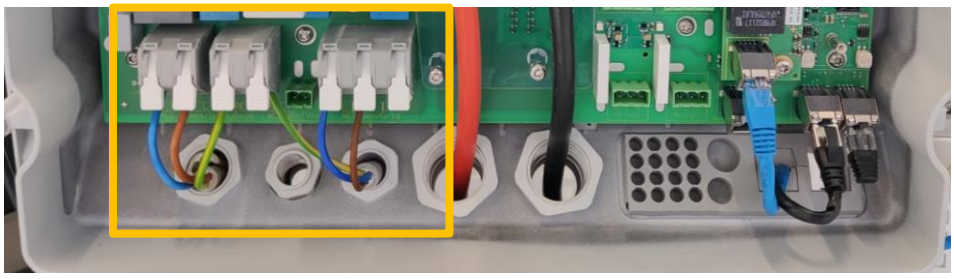
Turn Off the battery to proceed with the remaining operations.

Keeping the battery ON will damage the BMS an potentially the inverter power protection circuit.

Step 5. Inverter Wiring

Now it is possible to wire the GRID into the inverter and reinstall the protection cover.

Then press the battery ON/OFF to start the inverter.



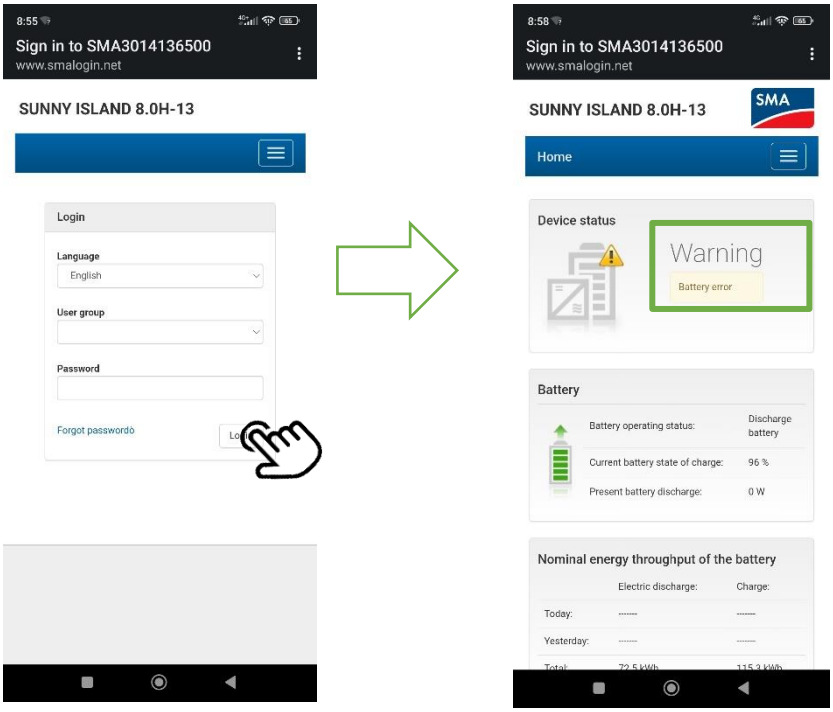


Now the inverter will Initiate the Start Up process and the **Battery can be turned ON**.

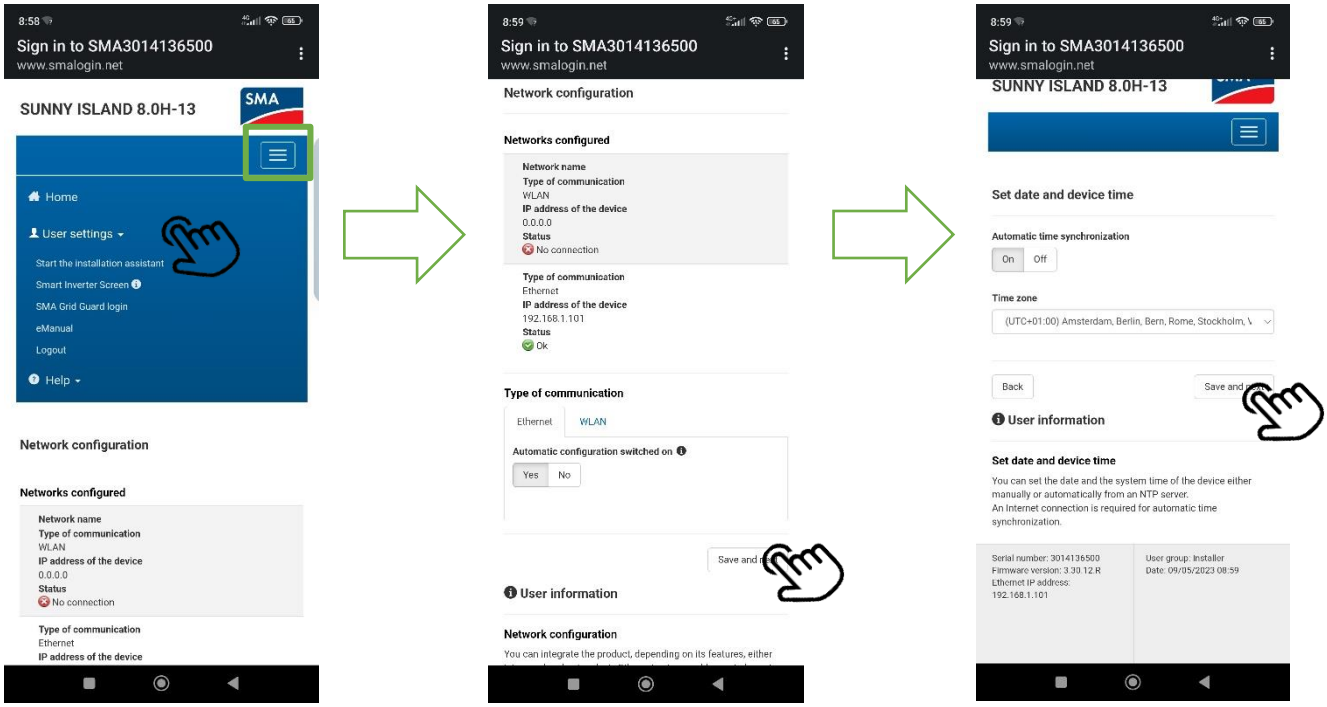
Step 6. Inverter Configuration

Once the inverter has started go to your mobile device's WiFi settings and search for the SMA WiFi connection and login.

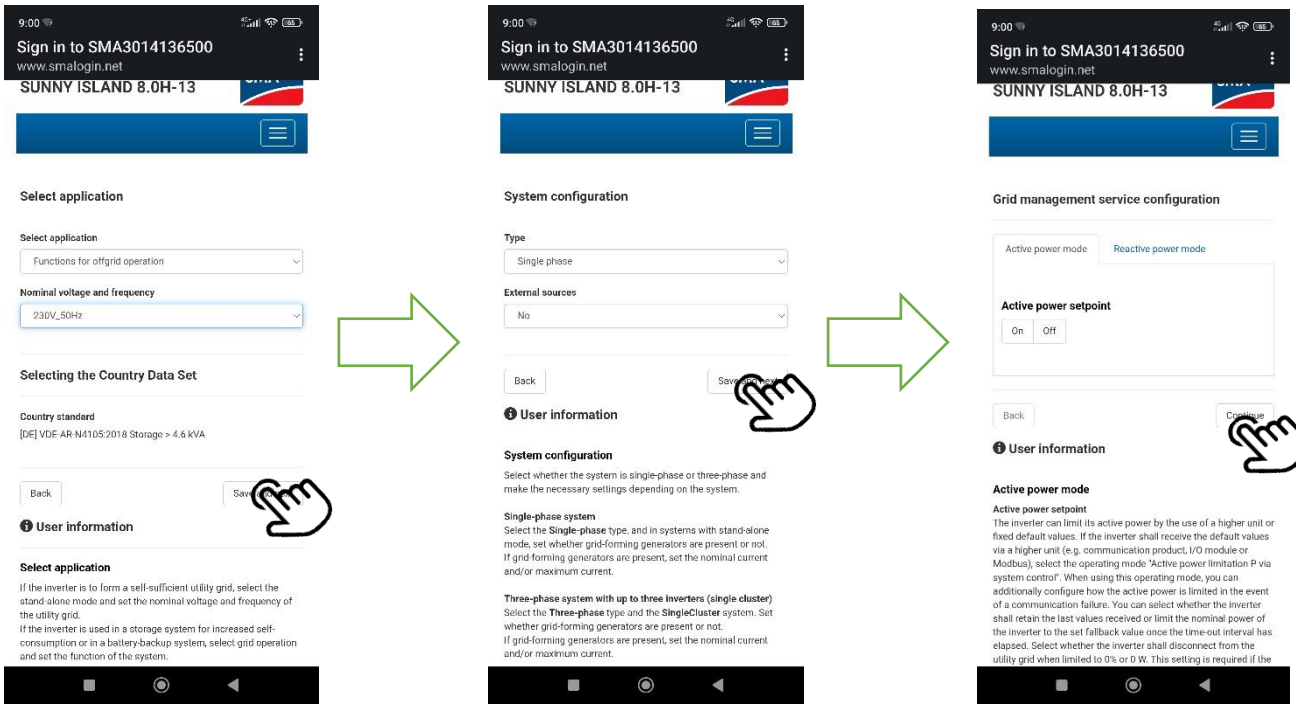
On the first startup, "battery error" may be displayed. This is normal as it necessary to set the right battery settings to start communication.



On the main page open the drop-down and start the installation assistant. Here enter your preferred settings for the Network, Type of Communication and Time Zone, then press Save and next to confirm.

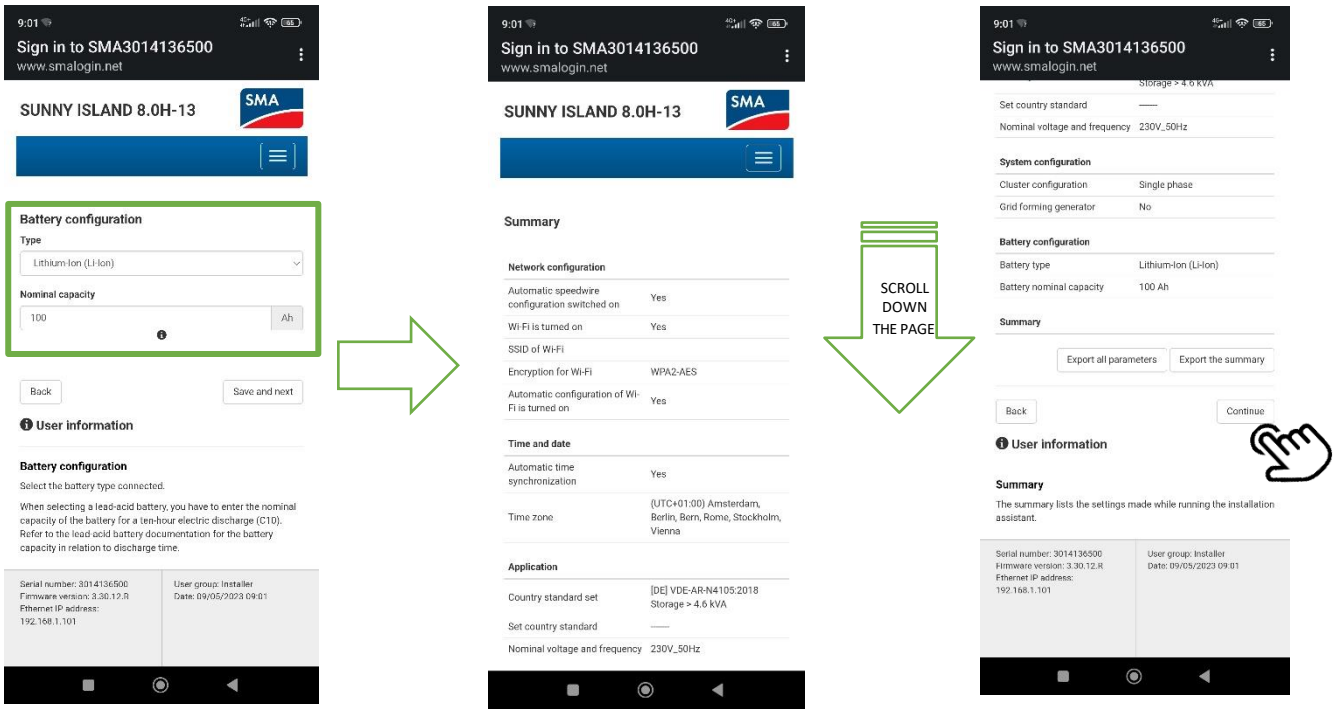


Now set the Grid Settings related to your system and Continue.



In the Battery Configurations page set Lithium-Ion as Battery type and set capacity of your system (each 5K3XP has a capacity of 100Ah).

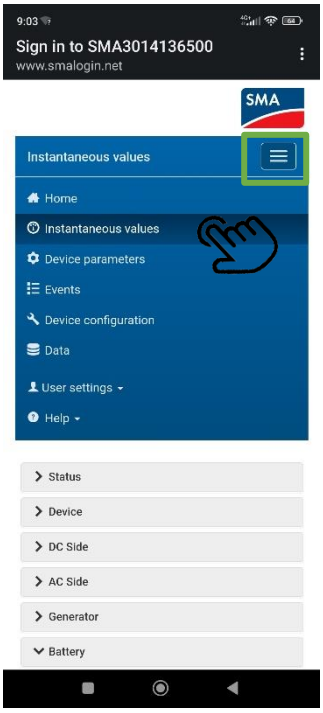
Save the settings and after checking that all the settings entered are correct, press continue to complete the procedure.

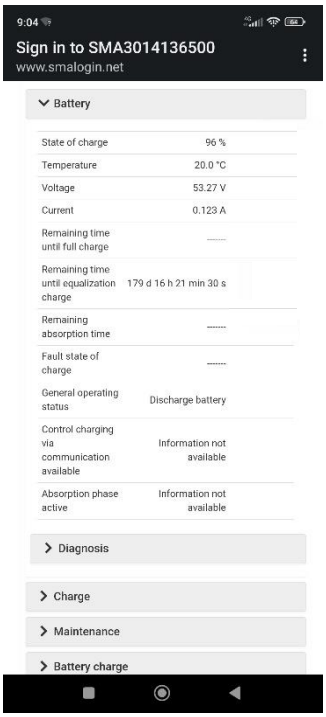


Battery is now recognized by the inverter and parameters are visible.

ATTENTION, IMPORTANT

To ensure that all the information are properly displayed and received by the inverter it is necessary to make a double control by entering the menu and tapping on Instantaneus values.



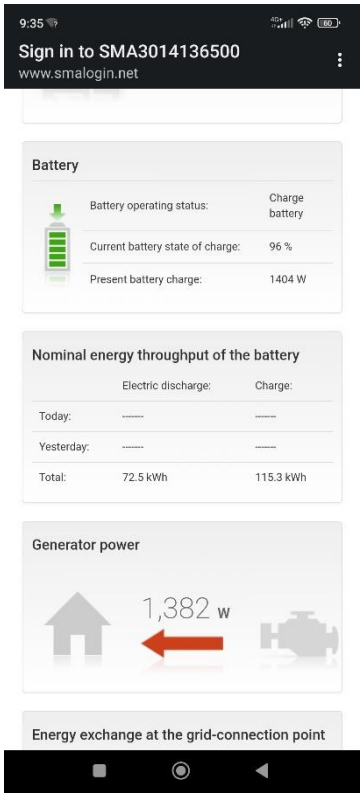


In the Screen it Is possible to see the correct information received by the inverter from the Battery BMS, such AS: (Image A)

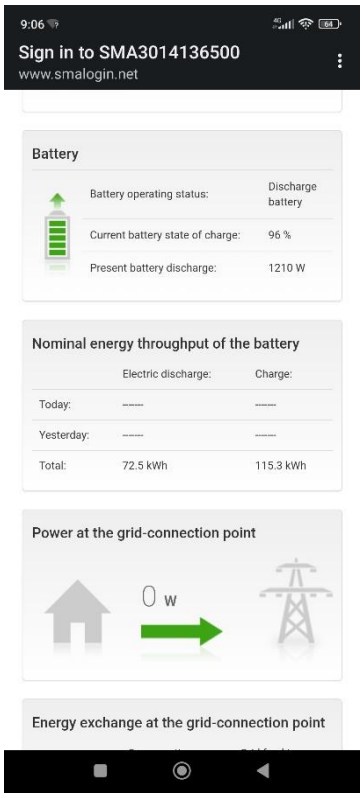
- SOC %
- Voltage
- Current
- Temperature
- Etc.

Now the whole system is ready to work:

BATTERY CHARGE



BATTERY DISCHARGE



To enable the WeCo WiFi Monitoring App, please follow the relevant manual available on our Web Site https://wecobatteries.com/download-area/