



WiFi Stick SOP

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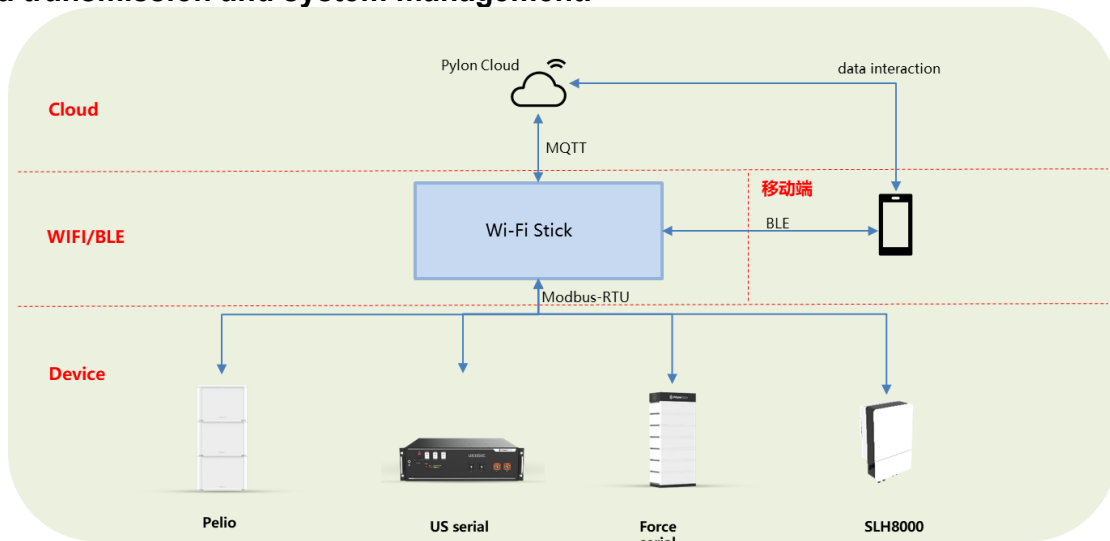
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Product Description

Product Name: WiFi Stick.

Product Model: Pyiot-wifi.

The WiFi Stick is a versatile networking device designed for energy storage systems. It supports WIFI, LAN, and Bluetooth communication protocols, making it ideal for connecting and managing various devices within a network. Equipped with a standard USB interface and adhering to the IEEE 802.11b/g/n/ax wireless standards, this device ensures robust and reliable connectivity. Additionally, it features an Ethernet interface for seamless cloud integration. With simple configuration, the WiFi Stick enables stable communication between photovoltaic equipment and network endpoints via an RS485 serial port, facilitating efficient data transmission and system management.



Summary

wi-fi intelligent acquisition rod is an extrapolation of equipment access type, end through USB stick for acquisition of equipment, on the other side via wi-fi (or LAN) connected to the cloud, near field communication via bluetooth implementation. So it can upload the data of the underlying equipment, upgrade the modules of the underlying equipment and control the remote. See chart below



Product Specification Sheet

Wireless parameters	Operating frequency	2400MHz~2483.5MHz
	Transmit power	802.11b: +17 dBm $\pm$ 2.0dBm (@1Mbps ,11Mbps)
		802.11g: +17 dBm $\pm$ 2.0dBm (@6Mbps 54Mbps)
		802.11n: +16 dBm $\pm$ 2.0dBm (@HT20/HT40, MCS0/MCS7)
		802.11ax: +17dBm $\pm$ 2.0dBm (@HT20,MCS0/MCS7)
	Antenna options	Built: On-board antenna
Bluetooth	Wireless standard	BLE5.1
	Frequency range	2400MHz~2483.5MHz
	Transmit power	6 dBm $\pm$ 2.0dBm
Hardware parameters	Operating Voltage	DC 5V (-10%/+10%)
	Operating power	Steady-state 0.5W (Less than 2W.)
	Light	Connect the signal light to the equipment (equipment /BMS/PCS, etc.) all the way
	Light Data storage	A network status indicator
		One power indicator
		The default configuration is 8MBYTE FLASH

	Operating temperature	-30℃~+75℃
	Operating humidity	5%-95% relative humidity, no condensation
	Storage temperature	-40℃~+80℃
	Storage humidity	5~95%
	External interface	USB, LAN

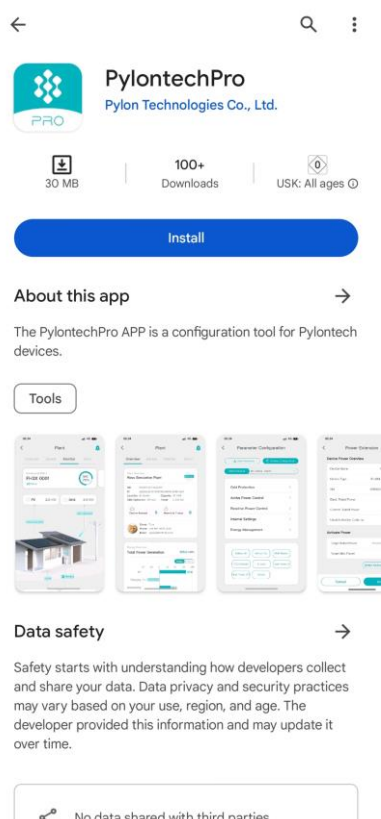
Software parameters	Number of connected devices	1 unit
	Size	160*46*30mm
	Serial communication rate	115200bps
	User configuration	Remote servers
	User configuration Firmware upgrade	App APP Remote upgrades
	Other	Real-time control , resumable transmission

Indicator light description

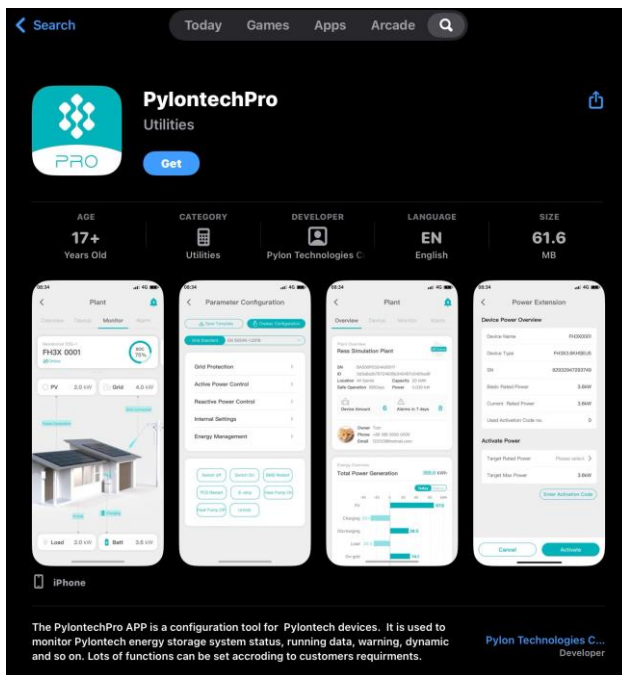
Interactive devices	Functional definitions	remark
keystroke	Press and hold for 10 seconds to restore factory settings	Includes SSID and PWD, BindingCode used for Bluetooth connection.
PWR indicator	Power indicator	A solid light indicates a normal state, and an off signal indicates that the collection stick is running abnormally
COMM indicator	Subordinate connection indicator	Solid on: the connection is normal; Flashing: Connecting; Off: Abnormal
.NET indicator	Networking indicator	Solid: Connected to the server; Flashing: Connecting; Off: Abnormal

1 Download and install the PylontechPro App

For Andriod, search for PylontechPro in Googleplay.



For IOS, search for PylontechPro in APPstore.



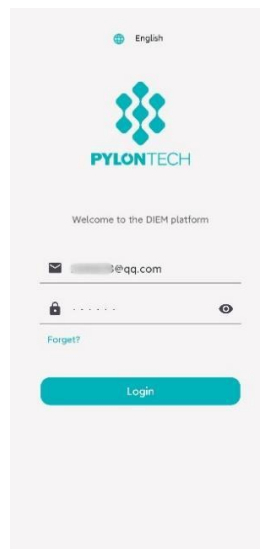
2 Login

2.1 Obtain account

Please contact the person in charge of your organization to obtain an account.

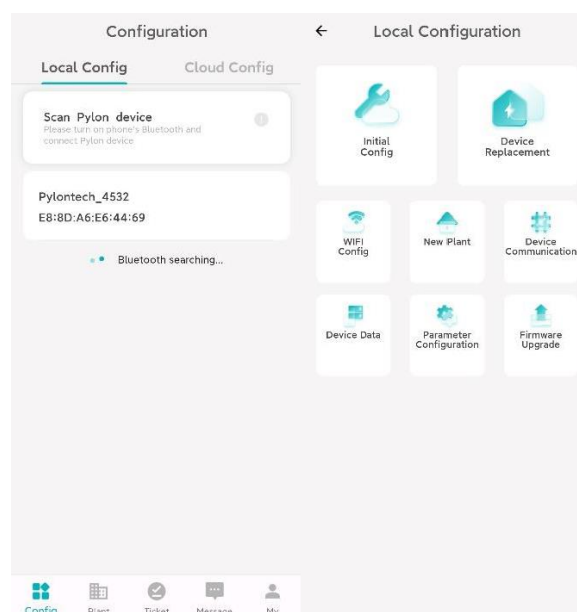
2.2 Login

Open the PylontechPro App, enter the login page. Enter your email and password (we have provided), click Login to access the system.



3 Local config

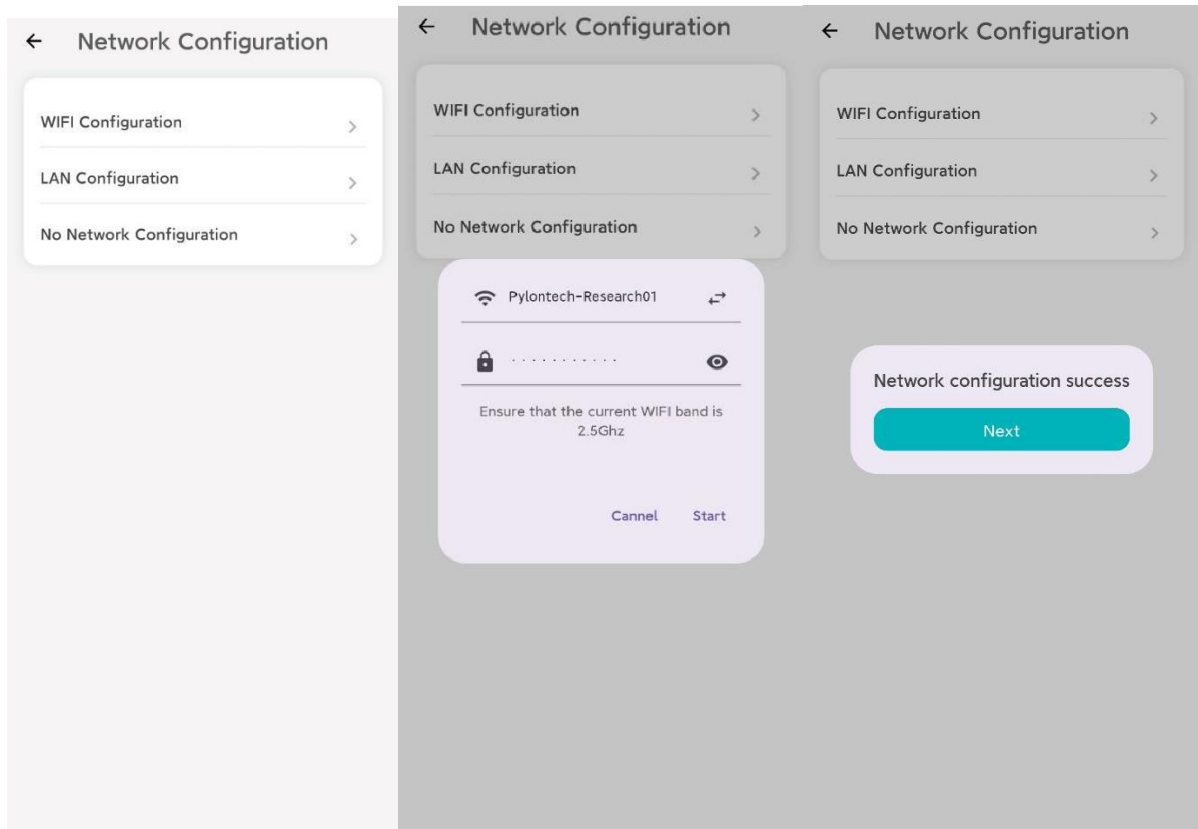
After confirming the device is powered on. The App will automatically search for Bluetooth of nearby devices, you can select the corresponding device and enter the “**Local Configuration**” interface.



3.1 Network configuration

After selecting the “**Initial Config**” in the above interface, select the corresponding network config method according to the connection situation of the device (WIFI Configuration is usually recommended).

Then entering the account and password of the home WIFI (if the phone is connecting to the WIFI at this time, the app may automatically read the account the WIFI and display it). Click ‘Start’ and wait. After displaying ‘Network configuration success’, click ‘Next’.



3.2 New plant Creation

1. By clicking the icon on the right side of the input box, you can scan the **QR code** on the device label to show the device SN number automatically. Or you can type it by yourself. You can copy and paste the SN number after finishing plant creation.

← New Plant Creation

1 SN 2 Plant 3 Config 4 Inspection 5 Upload

Scan the SN code to create a plant
 The SN code is located on the surface of the device or dongle. For further information, please contact info@pylontech.com.cn

* SN S60C 566

Next

2. Click 'Next' to enter to the **plant information** Interface, please type or select the relevant information according to the actual situation of the equipment. After finishing plant creation, the terminal users can modify again in the PyHome app.

← New Plant Creation

1 SN 2 Plant 3 Config 4 Inspection 5 Upload

* Plant Name Please enter plant name

* Location Please enter or select an address

* Region Please select Country

* Timezone Please select timezone

* Owner Please enter the owner's name

* Phone Please enter mobile number

* Email Please enter owner's email

Capacity 5.12

Time 2024-07-02

☐ User authorization has been obtained
 Site information contains user privacy, please ask for user consent to fill in.

Previous Next

3. Click 'Next' to enter the **configuration interface**, It is essential to apply the following necessary settings, or the device cannot work normally. Only after you expand all options, the 'Next' can be click.

The screenshot displays the 'New Plant Creation' configuration interface. At the top, a progress bar indicates the current step is 'Config'. Below this, five expandable sections are listed: '1 - Inverter time', '2 - Grid/meter Settings', '3 - Set battery parameters', '4 - Set the working mode', and '5 - Other'. At the bottom, there are 'Previous' and 'Next' navigation buttons.

For the five options displayed on the page, 'Inverter time' is not to be cared and it will be automatically changed to the current time after the plant creation complete.

For the 'Grid/meter Settings', you only need to check the 'Meter Type' is right (three-phase is Meter(3P), single-phase is CT(1P)). The 'Power to Grid' and 'Power from Grid' can be set according to the rated power of your device.

For 'Set battery parameters', the two parameters can be set as you want. 'Discharge limited SOC' is the minimum value of the system discharging, 'Charge limited SOC' is the maximum value of the system charging.

For the 'Set the working mode', you can set one mode as you need. About the specific differences of every work mode, you can see '**6.2.3 Working Mode**' in the user manual.

For 'Other', the 'Backup Enable' can be set as users need, if you choose 'Enable', the backup

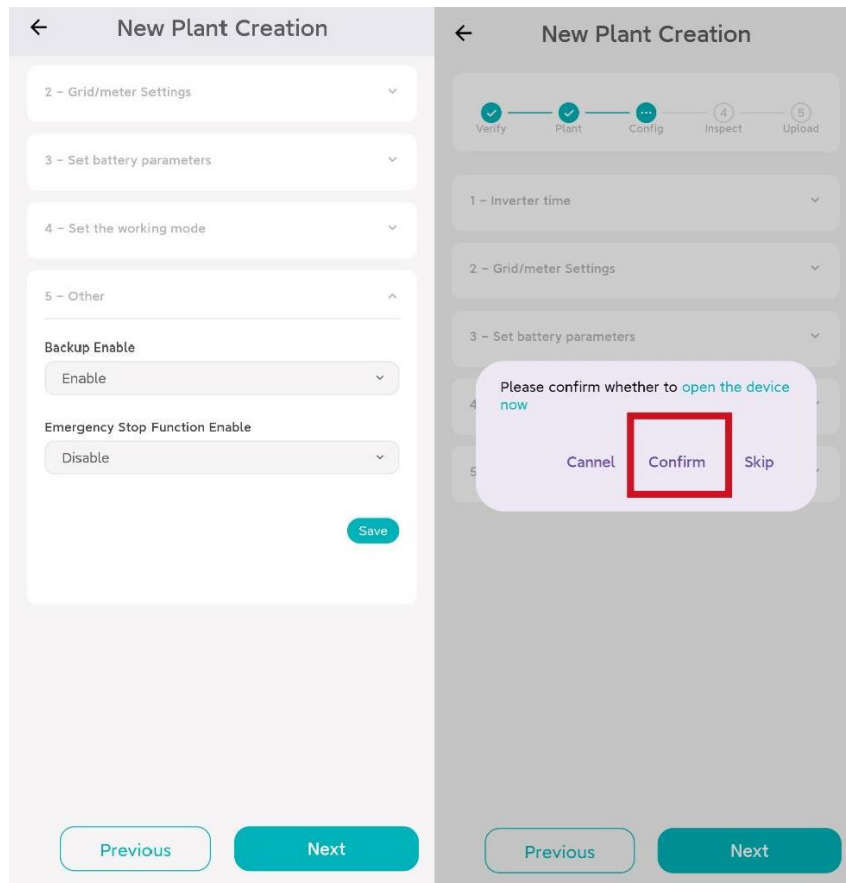
load will work normally. The 'Emergency Stop Function Enable' should 'Disable', only the device has something wrong, it can be set enable.

If you have modified one parameter, please click 'Save'.

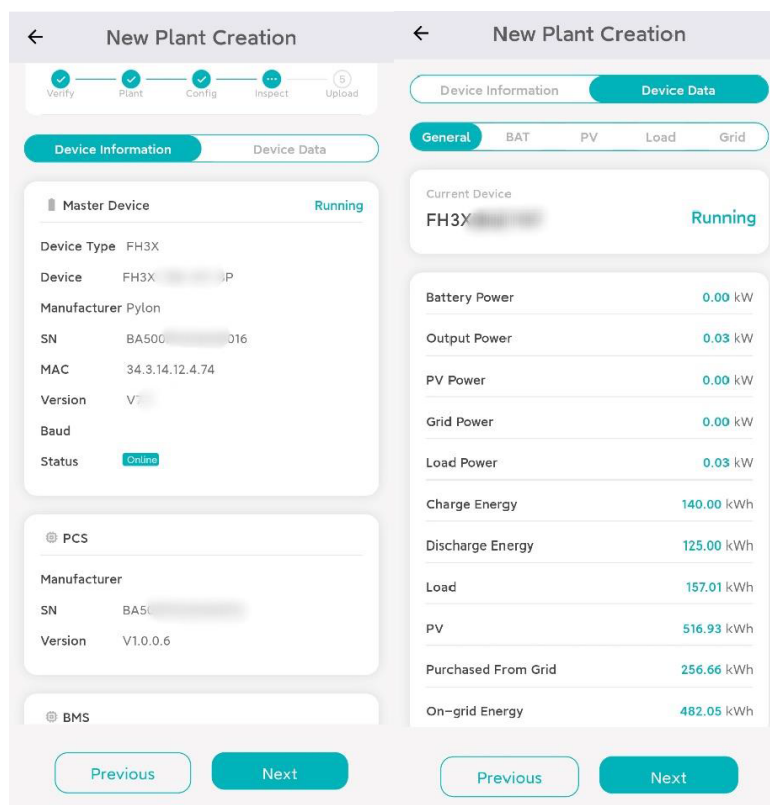
The image shows a web-based configuration interface for a device, divided into four main sections:

- 2 - Grid/meter Settings**: Contains settings for Grid Standard (EN 50549-1:2019), Meter Type (Meter (3P)), Power to Grid (15000 W), Power from Grid (60000 W), and Three-phase imbalance mode (Minimum phase active power control). A 'Save' button is at the bottom.
- 3 - Set battery parameters**: Contains settings for Discharge Limited SOC (10%) and Charge Limited SOC (100%). A 'Save' button is at the bottom.
- 4 - Set the working mode**: Contains a 'Work Mode' dropdown menu. The menu is open, showing options: Self-Consumption, Backup, Full Off-Grid, Feed in priority, and User mode. The current selection is 'Self-Consumption'.
- 5 - Other**: Contains settings for Backup Enable (Enable) and Emergency Stop Function Enable (Disable). A 'Save' button is at the bottom.

- After checking out all parameters, you can click 'Next'. And then you will receive a message as shown in the below. Please click '**Confirm**', then all the relays will work, when the sound of relays closing over. The device start running now.



5. Then users need to check the device information, where you need to confirm that the communication status is online (if the network config has been completed), and confirm there is no abnormal data of other parameters (battery, grid, PV, etc.). Then click 'Next'.



6. Finally, it is recommended to upload the actual pictures according to the user's plant condition, so as to facilitate the maintenance later. After uploading, click 'Next', all the initial settings of the device & plant will be **completed**.

The image displays two side-by-side screenshots of a mobile application interface titled "New Plant Creation".

Left Screenshot (Upload Step):

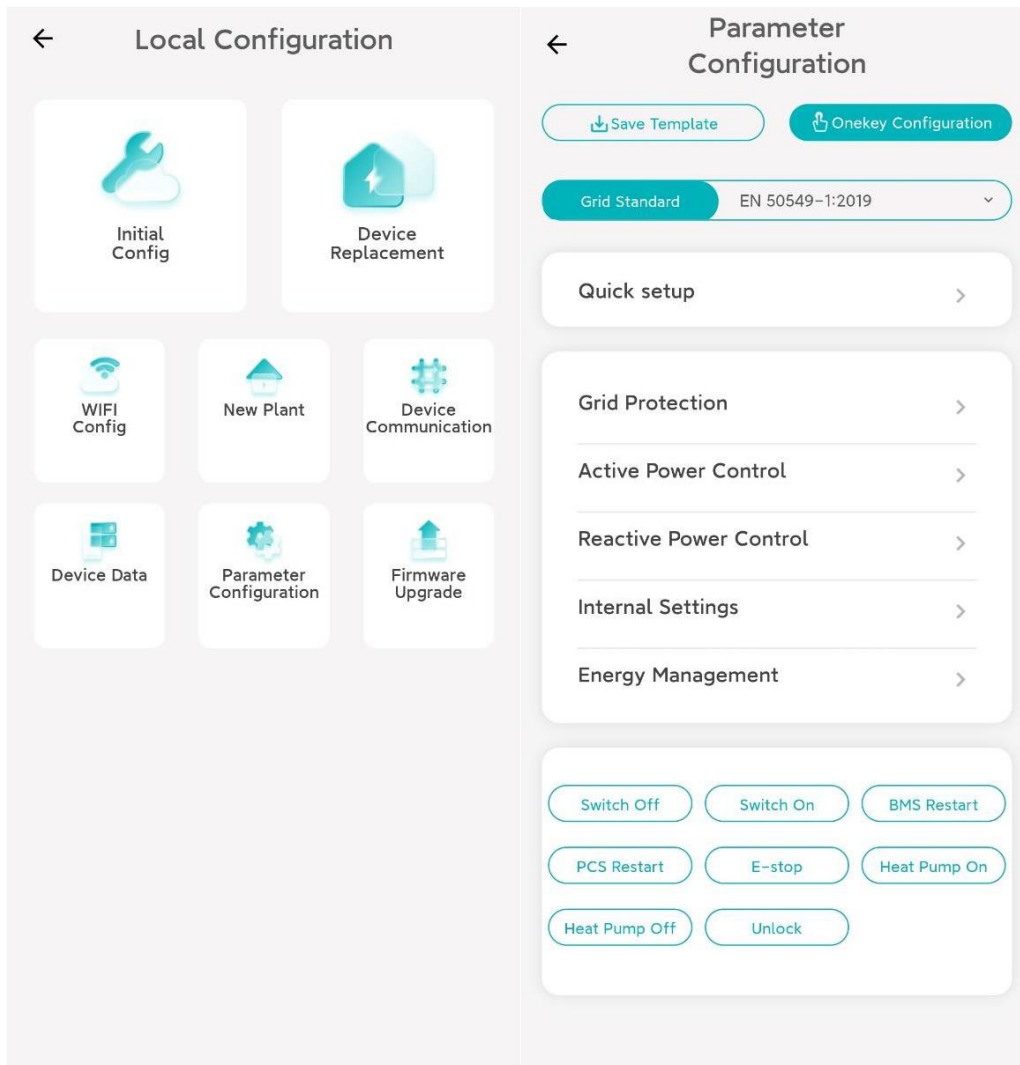
- At the top, a progress bar shows five steps: Verify, Plant, Config, Inspect, and Upload. The "Upload" step is currently active, indicated by a blue checkmark and a blue bar.
- Below the progress bar, there is a section for "Current battery cabinet" with the label "SN" and a text input field containing "BA50".
- Below that, a section titled "Please upload the plant layout photos" includes the instruction "Upload the plant layout photos for further maintenance." and a placeholder image with a plus sign.
- At the bottom of this section, there is a "Comments:" label followed by a text input field with the placeholder "Please enter comments".
- At the very bottom, there are two buttons: "Previous" (outlined) and "Next" (solid blue).

Right Screenshot (Complete Step):

- The progress bar at the top shows all five steps (Verify, Plant, Config, Inspect, Upload) completed with blue checkmarks.
- The main content area displays the message "Congratulations! You have created the plant." followed by the instruction "Click 'Complete' to return to the main menu".
- Below the text is a large smiley face icon with a blue checkmark.
- At the bottom, there is a large solid blue button labeled "Complete".

3.3 Parameter Configuration

1. When finishing the plant creation, you can exit and enter to 'Parameter Configuration' to config all parameters.
2. Users can config the parameters in the 'Quick setup'. The specific steps are the same as the above 3.2-3.
3. Also, in the specific options, the following two can be modified.



(1) Active Power Control

In this page, you need to do the following settings and do not change other options.

- ① Select “Active Power Control Mode” as meter/CT;
- ② The ‘Power to Grid’ represents the upper limit of system feed-in power, you need to set the value according to rated power and the local safety standard, note that the value must be more than 0. If the value you set exceed the upper limit, it will be automatically limited to the upper value.
- ③ If the machine is three-phase, select “Meter Type” as Meter(3P); if the machine is single-phase, select 'Meter Type' as CT(1P).

← Active Power Control

Fixed Active Power ^

Active Power Control Mode

Meter/CT v

Power to Grid

15000 W

Meter Type

Meter (3P) v

System Limit Power

1000 W

Meter limit mode

Total Three Phase Active Power Control v

Total Three Phase Active Power Control

Minimum phase active power control

(2) Energy Management

All following settings are available to set by the terminal user.

- ① Select “System with/without Battery” as With Battery; 'Work Mode' and 'Backup Enable' as the user needs to select;
- ② The “Discharge Limited SOC” means the discharge limit of the battery. E.g setting the value as 30%, the load or grid could gain electric from battery only when the SOC more than 30%.
- ③ On the contrary, the “Charge Limited SOC” means the charge limit of the battery.
- ④ The ‘Power from Grid’ indicates the upper limit of power taken from the grid, which should be changed based on the actual demand.
- ⑤ Charge/discharge time can be set independently according to the user's demand, a total of four time periods can be set. Each time period can be set independently of the start and end time, charge/discharge, power, and repetition time. You can set open or close at the ‘State’ with the user’s demand.

For all of the above parameters, if you have changed one, please click 'Save'.

←

Energy Management

Energy Configuration

^

System with/without Battery

With Battery

Save

Work Mode

Self-Consumption

Save

Backup Enable

Enable

Save

Discharge Limited SOC

10

%

Save

Charge Limited SOC

100

%

Save

Power from Grid

60000

W

Save

←

Energy Management

Charge/Discharge Time Control

^

Time Period

Charge/discharge time set 1

Start Time

00:00

End Time

23:59

Charge/Discharge Power

50.0

%Pn

Charge/Discharge Mode

Charge

Repetition Time

Sunday, Monday, Tuesday, Wednesday, Th...

State

Closed

Save

Subsequently, the user can scan the QR code of the device directly by the Pylontech APP to enter this plant. The user also can edit part of the plant information and the energy management control according to the demand.

FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user ' s authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment .

This equipment should be installed and operated with minimum distance 20cm between the radiator& your body.



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