E-LINTER pear pro ETH + Wi-Fi + BLE Stick data Logger

User Manual

V250715-R

Revision History

Date	Author	Version	Description
2025/07/15	Wan Yue	V250715R	Initial Version

Content

1. Briefly

1.1.Introduction

The "pear pro" features ETH + Wi-Fi + BLE/ETH + Wi-Fi mesh + BLE communication. This manual provides instructions for using this product to help users quickly start using it. This manual applies to the current software and hardware versions. We reserve the right to modify the manual content due to product upgrades. To prevent improper operation, please read this manual carefully before use.

1.2.Symbol description

For product installation tips, precautions, and potential hazards, we will use different symbols throughout this manual to alert you. Please pay special attention to these symbols while reading this manual and using the product. The following explains the symbols used - please read carefully.

Table 1-2-1 Symbol Description

Symbol	Description
	**Note:** Used to explain how to better use the product or provide usage tips.
	**Caution:** Indicates potential risk. If not avoided, it may lead to malfunction or losses.
	**Warning:** Indicates potential danger. If not avoided, it may result in injury.

2. Features

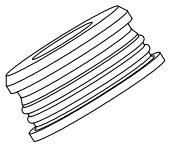
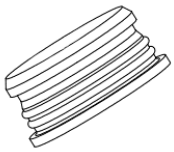
- Supports ETH, Wi-Fi, and BLE tri-mode communication
- Supports OTA firmware upgrades
- Supports automatic time synchronization via network
- Supports Wi-Fi Mesh networking protocol
- Wi-Fi supports 2.4G 802.11 b/g/n protocol
- Wi-Fi supports WPA/WPA2/WPA2-Enterprise encryption
- Supports E-Touch function (Android/iOS compatible)
- Supports BLE 4.2
- 3KB large dual buffer for sending/receiving data
- Flame resistance rating: UL94 V-0
- UV resistance rating: UL746C F1

3. Packing & Setup

3.1.Packing list

Inspect the packaging and accessories upon receipt. Contact the distributor if items are missing or damaged.

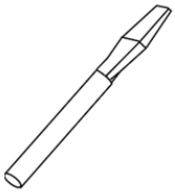
Table 3-1 Packing list

manifest	name	quantity
	ETH +Wi-Fi + BLE data logger	1
	Perforated Sealing Plug	1
	Solid Sealing Plug	1

The data logger models (ETH + Wi-Fi + BLE / ETH + Wi-Fi mesh + BLE) can be identified by the product label.

3.2.Installation Preparation list

表 3-2-1 Preparation Check list

Tools	Name	Specifications	Quantity
	Flathead screwdriver	Blade diameter 6mm	1
	Gloves	-	2

4. Indicators

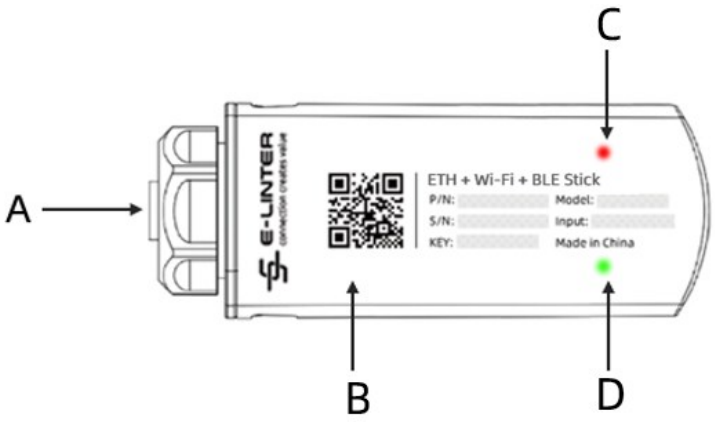


Figure 4-1 Indicators

A. **Interface**: Connects to devices

B. **Label**: Displays product information

C. **Red LED**: Device communication indicator

D. **Green LED**: Network communication indicator

1. After the data logger is powered on, the red and green LED lights flash once per second simultaneously.
2. For LED indicators details, see Chapter 10 [LED Status & Troubleshooting].

5. Installation

This chapter describes how to install and remove the logger.

If only Wi-Fi communication is used, seal the Ethernet port with the solid waterproof plug to ensure the data logger remains airtight. For specific methods, refer to Section 5.1 [Waterproof Plug Installation].

5.1.Install Waterproof Plug

install solid waterproof plug: As shown in the figure below, first install the solid waterproof plug at the bottom.

Figure 5-1-1 Installing Solid Waterproof Plug

5.2.Remove the waterproof plug:

Remove the Housing: As shown below, use a flat-head screwdriver to press the clips on both the left and right sides of the logger, then pull off the housing.

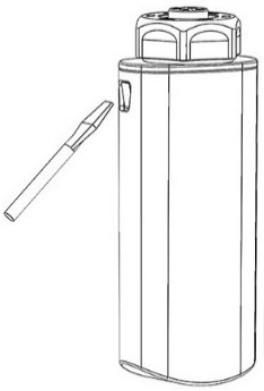


Figure 5-2-1 Removing the housing

Insert the Ethernet Cable: As shown below, first pass the Ethernet cable through the cable port. Then, confirm the orientation of the logger's RJ45 socket and insert the RJ45 connector in the direction of the arrow.

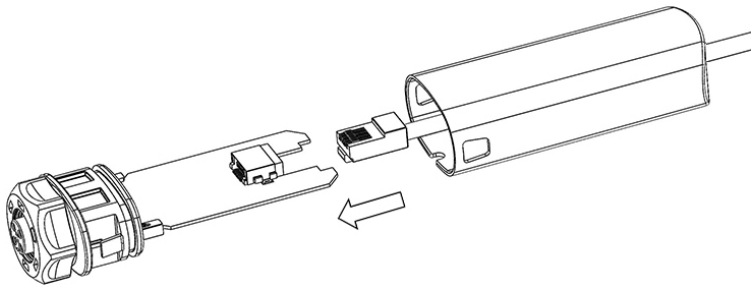


Figure 5-2-2 Inserting the Ethernet Cable

Install Housing and Waterproof Plug: As shown below, first reconnect the housing clips on both sides of the logger. Then, clip the waterproof plug onto the Ethernet cable and insert it into the cable port in the direction of the arrow.

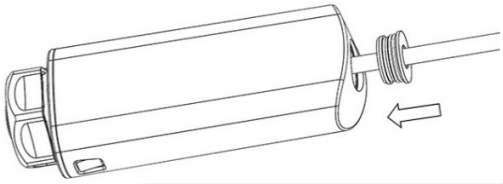


Figure 5-2-3 Installing Housing and Plug

After Ethernet cable installation is complete, the result should look like the image below.

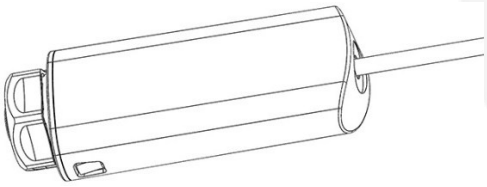
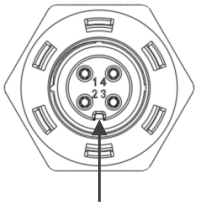


Figure 5-2-4 Completed Installation

5.3.Installing the logger

Install the data logger by aligning its anti-misalignment notch with the corresponding notch on the device connector before insertion to prevent damage to the data logger.



data logger anti-misalignment notch

Insert the logger: As shown below, align the fool-proof notch on the logger with the corresponding notch on the inverter/device, then insert the logger into the device in the direction of the arrow

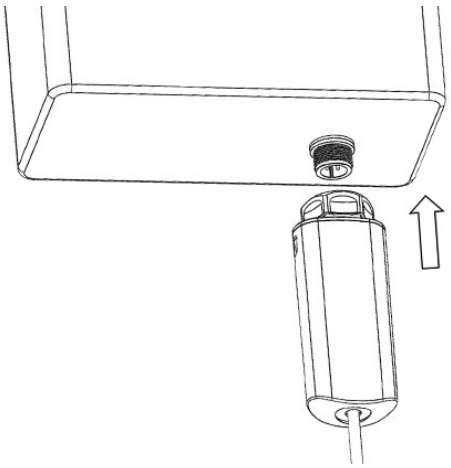


Figure 5-3-1 Insert the logger

Tighten the nut: as shown below, rotate the hex nut clockwise to tighten it. Installation is now complete.

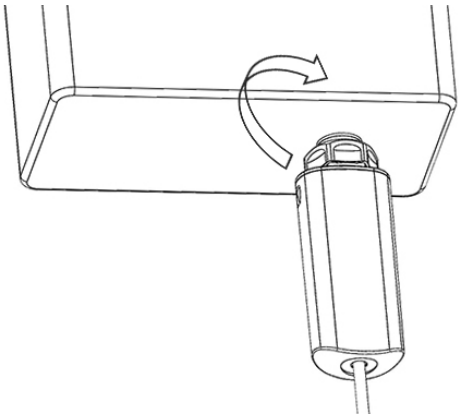


Figure 5-3-2 Tighten the Nut

During installation, only tighten the hex nut part. Do not twist the main body of the product directly to avoid damage.

The installation result is shown in the figure below:

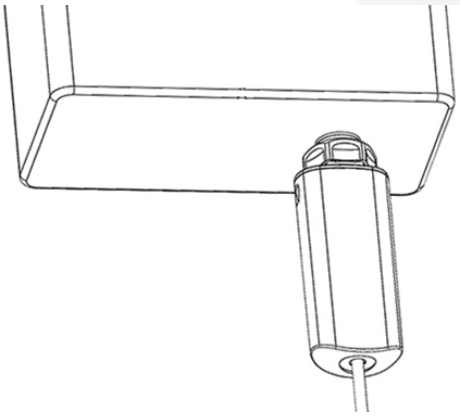


Figure 5-3-3 Installation Result

5.4.Remove the logger

Loosen the Nut: As shown below, rotate the hex nut counter-clockwise until the threads are completely disengaged.

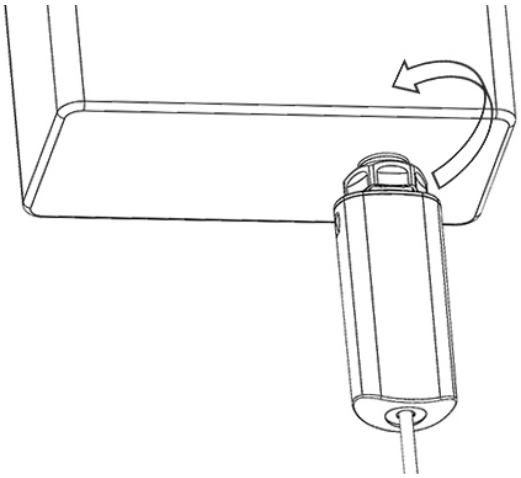


Figure 5-4-1 Loosening the Nut

Pull Out the logger: As shown below, pull the collector out in the direction of the arrow. Removal is now complete.

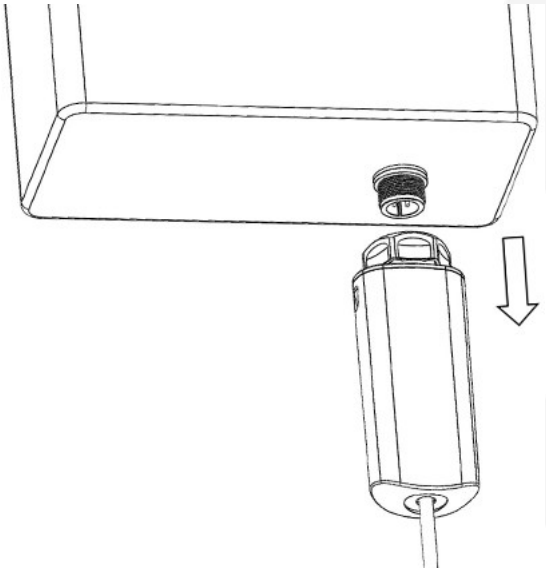


Figure 5-4-2 Pulling Out the Logger

6. APP download

iOS: Search "PV Pro" or "PV Lite" on the App Store or scan the QR code.

Android: Search "PV Pro" or "PV Lite" on Google Play or scan the code.

Figure 6-1 QR Codes

7. Bluetooth connection

When configuring local parameters for the data logger or setting inverter parameters locally, you need to establish a Bluetooth connection between your mobile device and the data logger. This section explains how to pair them via Bluetooth.

The figure below illustrates the BLE connection setup. Please refer to Chapter 6: [APP download] to install the corresponding APP, then follow the in-app instructions to configure the data logger. Ensure the Bluetooth connection is successfully established before proceeding with configuration.

Figure 7-1 BLE connection diagram

The effective Bluetooth communication range between the data logger and mobile device is 10 meters. For optimal performance, keep your phone as close as possible to the data logger during operation.

8. Network Connection

The product supports both Ethernet and Wi-Fi network connection methods. You may choose either connection method based on your requirements. The following sections will introduce both network connection approaches.

1. Ensure the logger is powered on during network configuration. If it is not powered, check if the connected device is turned on

2. Ensure the router has a normal internet connection.

3. The logger has DHCP enabled by default. Please ensure the router's DHCP function is also enabled.

4. The logger communicates with the cloud server using ports 8886, 8885, and 80. Please ensure these remote service access ports are open.

8.1.Configure Network Connection

8.1.1. Ethernet Connection

The figure below shows the Ethernet connection diagram of this product. If the router's DHCP function is enabled and the required ports are open, the data logger will automatically connect to the network after Ethernet cable connection, without any configuration.

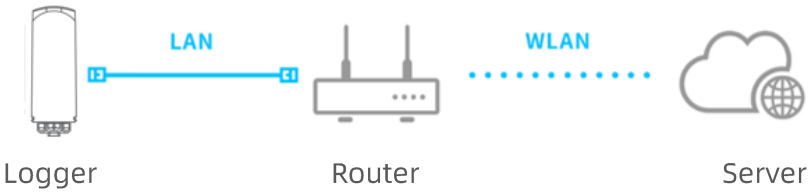


Figure 8-1-1-1 Ethernet Connection Diagram

For static IP connection, refer to Chapter 8.2: [Network Parameter Settings] to modify the product's network parameters.

8.1.2. Wi-Fi Network Configuration

The figure below shows the Wi-Fi network configuration diagram via BLE for this product. Refer to Chapter 6: [APP download] to install the corresponding APP, then follow the in-app instructions to configure the data logger for proper network connection.

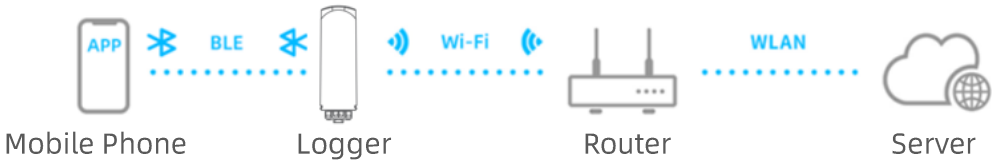


Figure 8-1-2-1 BLE Network Configuration Diagram

The figure below shows the network configuration steps according to the APP instructions.

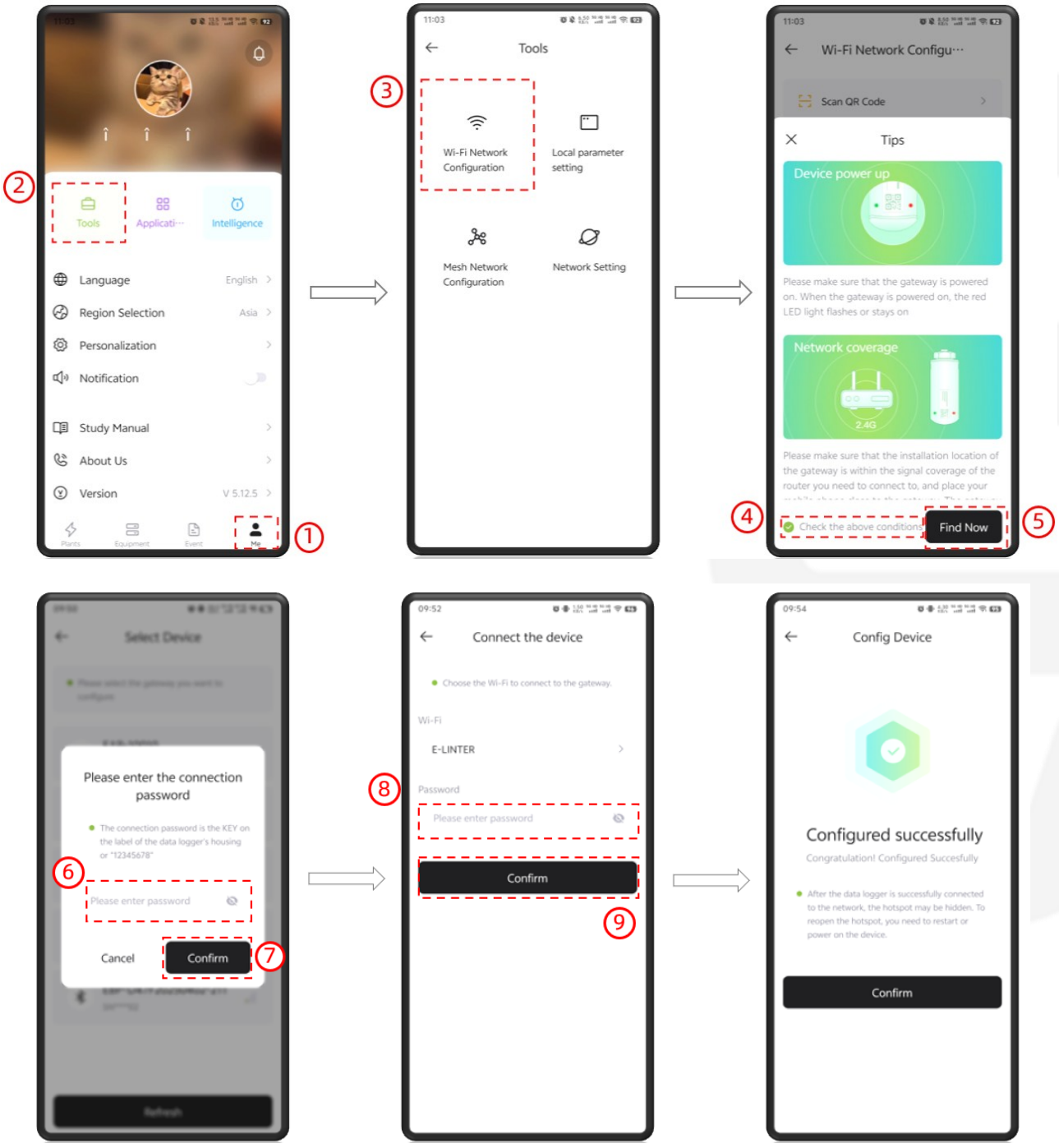


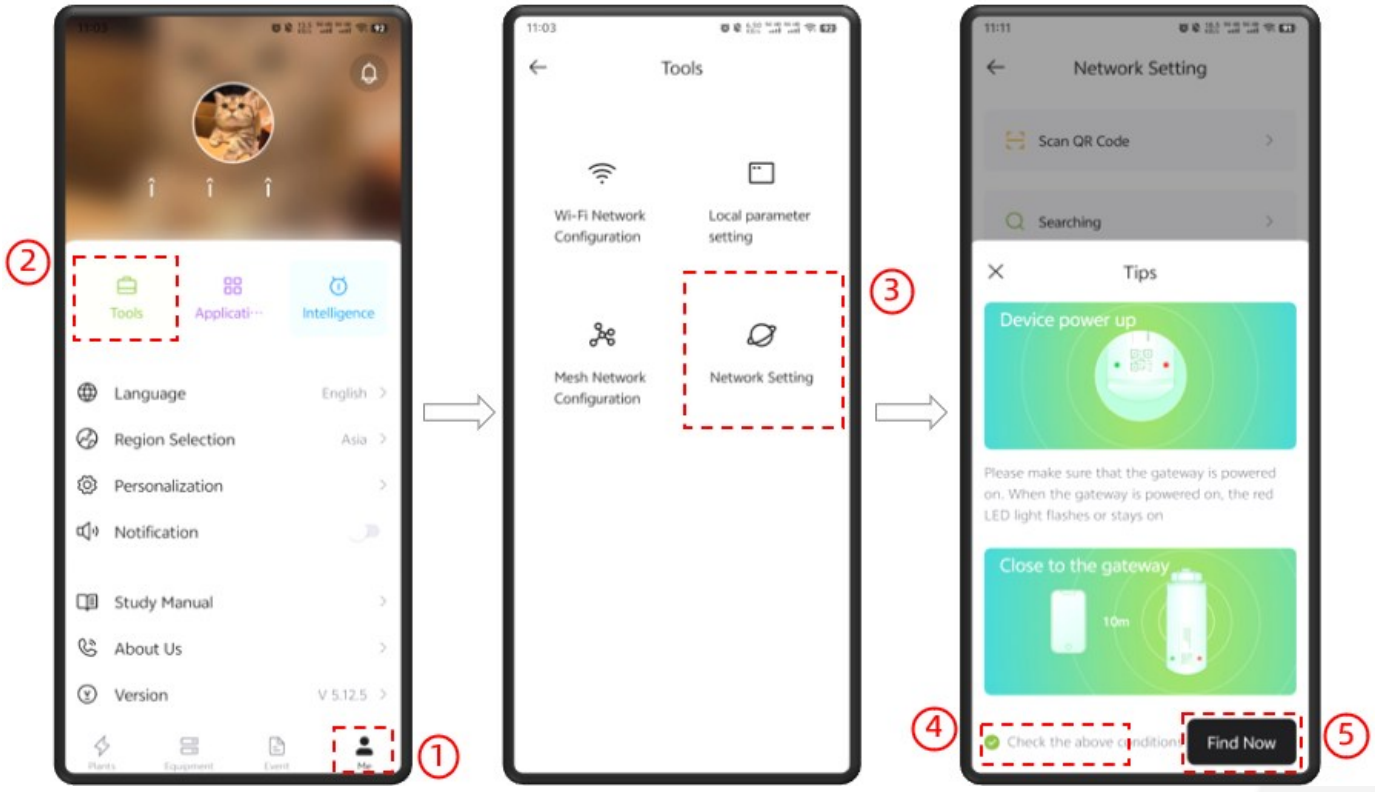
Figure 8-1-2-2 Network Configuration Diagram

1. The Wi-Fi function of this product only supports 2.4G band, please enable the 2.4G band of the router before connecting.

2. This product does not support connecting to a router's 5GHz band. Please ensure the 2.4GHz band is available and connectable.

8.2. Network Parameter Settings

To configure a static IP address, follow the APP instructions. Network parameter settings include both static and dynamic (DHCP) IP configurations. Refer to Chapter 6 [APP download] to download the APP, then follow its instructions for settings. Example steps in PV Pro or PV Lite:



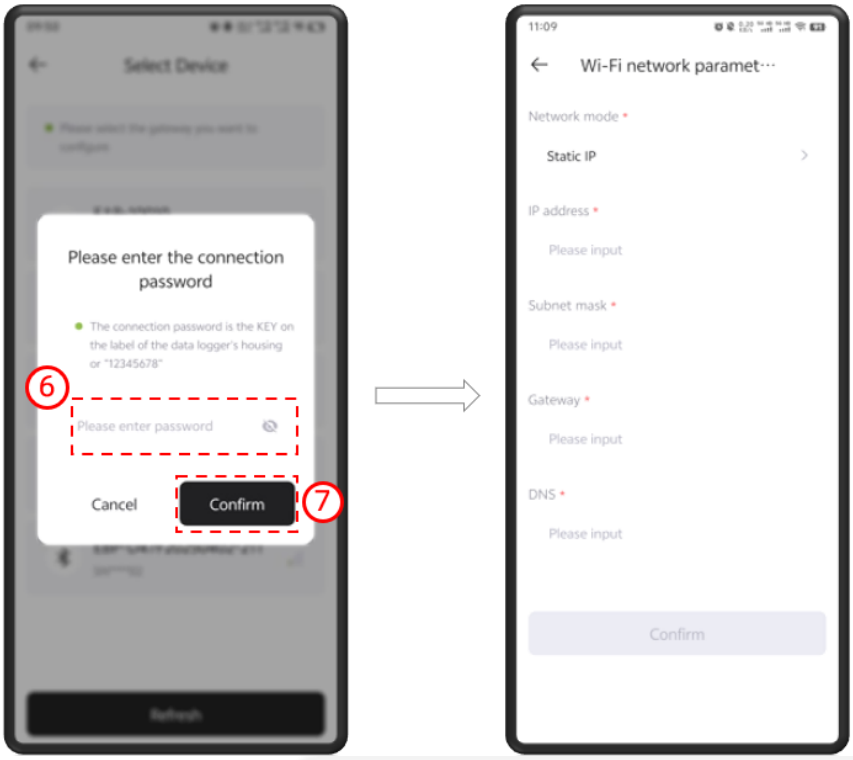


Figure 8-2-1 Network Settings Process Diagram

The Ethernet and Wi-Fi communication methods share the same DNS configuration. Any modifications made to either interface will be automatically synchronized to the other interface.

9. Installation Confirmation

When both red and green LEDs are normal on, the data logger is in normal operation, and device status can be monitored via the cloud or APP. Otherwise, troubleshoot using Chapter 9: [LED Status & Troubleshooting].

The normal working state of the collector is shown below:

Figure 8-1 Normal Working State

10. LED Status & Troubleshooting

The LED colors indicate the data logger's status: red represents the device communication indicator, green represents the network communication indicator. When both LEDs are normal on, the product operates normally. The logic for other LED states is as follows:

Red LED (Device communication indicator)

Green LED (Network communication indicator)

Table 10-1 LED status table

LED	Status	Description	Solution
	Steady On 	Normal communication with connected devices	/
	Blinks every 1 second 	Powered on but no communication with connected devices	Communication error 1. Check communication lines between the data logger and device, or contact the distributor 2. Check if the data logger interface is loose
	Off for over 30 seconds	Power supply failure or product damage	Verify the inverter's power supply is normal, or contact the distributor
	Steady On 	Normal communication with the server	/

	Blinks every 1 second 	Powered on but no router connection	No router connected: 1. Verify the router password is correct 2. Check if the router signal is weak
	Blinks every 2 seconds 	Router connected but server connection failed	1. Confirm the router has internet access permissions 2. Check firewall settings
	Blinks every 4 seconds 	Server returned incorrect product information	Contact the distributor or email us at: support@e-linter.com

11. CE Conformity

This product complies with the radio interference requirements of the European community. Hereby, Chengdu E-LINTER Information Technology Co., Ltd. declares that the product is in compliance with the essential requirements and other relevant provisions of RE Directive 2014/53/EU. You can find the Declaration of Conformity on www.e-linter.com.

RF frequency:

2.4G WIFI: 2412 MHz to 2472 MHz

BLE: 2402 MHz to 2480 MHz

RF power:

2.4G WIFI: 18.10 dBm

BLE: 8.57 dBm

Manufacturer Name: Chengdu E-LINTER Information Technology Co., Ltd.

Address: No. 505, Building 6, Zone D, Tianfu Software Park, No. 599, Century City South Road, CDHT, Chengdu, Sichuan, China

12. FCC Statement

1. 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.

(2) This device must accept any interference received, including interference that may cause undesired operation.

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

The device has been evaluated to meet general RF exposure requirement, this equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

Table 12-1 Model and FCC ID List

Model	FCC ID
ECS3-06	2BAGJ-ECS3-06

13. Contact information