WFBLE.DTU.PlugProA -25 Product Manual

Shenzhen Eybond Co., Ltd

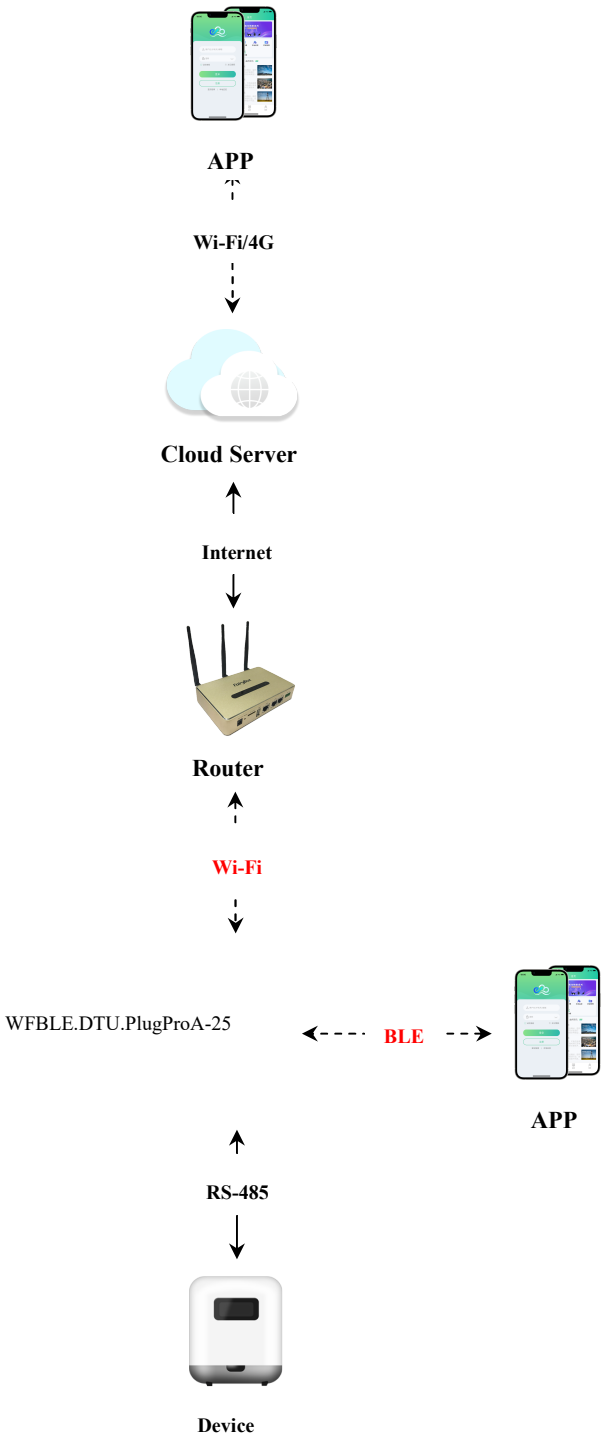
Version	Edited content	Edited by	Date	Remark
1.0	First release	Liyifan	2023-04-27	

Contents

1. Product Overview

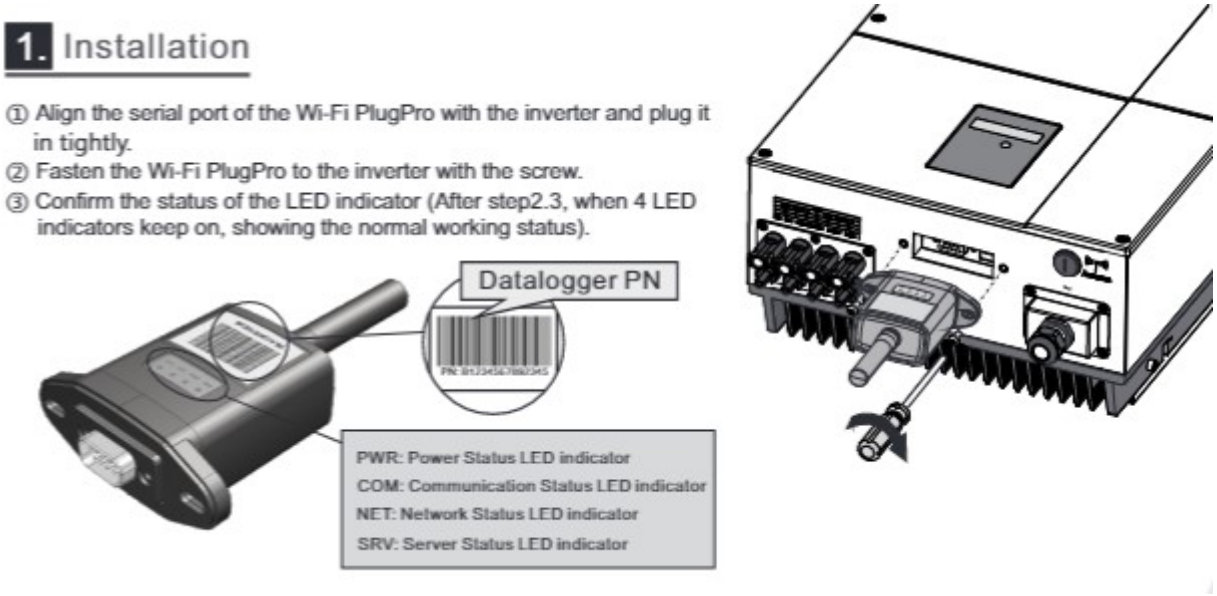
WFBLE.DTU.PlugProA-25 Bluetooth supporting module is suitable for expanding the Bluetooth data transmission channel of the device, there are currently two kinds of built-in antennas and external antennas, and different adaptation schemes can be selected according to different needs. Supports control, commissioning, and upgrading of devices via Bluetooth connection. It can provide users with low-cost, visual, easy to operate solutions.

WFBLE.DTU.PlugProA-25 –Typical Networking Solution for Products



2. Installation Instruction

2.1 Electrical connections



2.2 Network connection

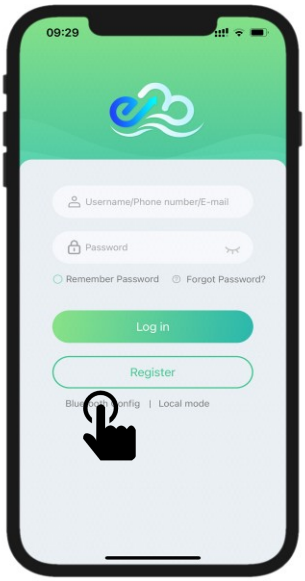
2.2.1 Download APP

(1) Scan the QR code, Download APP;

(2) Open the APP, click the "Bluetooth Network" button, enter the "Bluetooth Config" process.

iOS

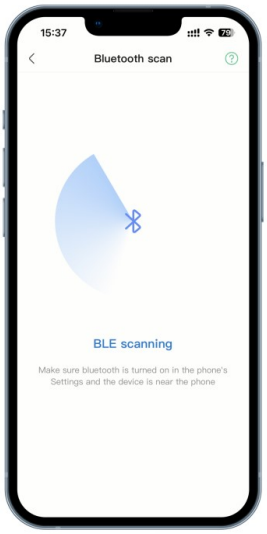
Android

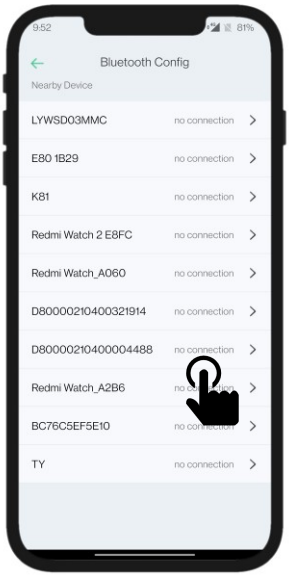


2.2.2 Bluetooth connection to the digger

(1) in the "bluetooth distribution network" page, automatic scanning around the bluetooth device;

(2) Find the PN corresponding to the data logger and click the "no connection" button.

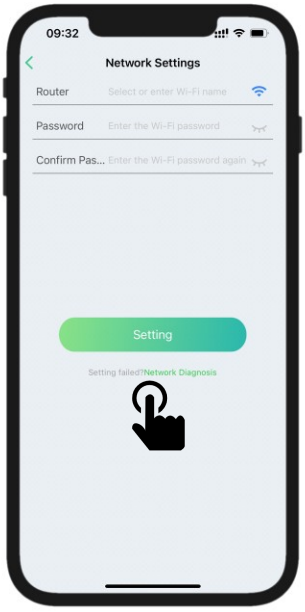


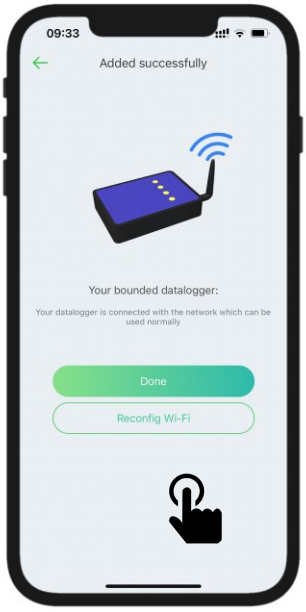


2.2.3 Networking settings

(1) Fill in the relevant router information as prompted, click the "Settings" button, and enter the "Add Successful" interface;

(2) If the network is successful, click the "Done" button, if the networking fails, then click the "Reconfig Wi-Fi" button.



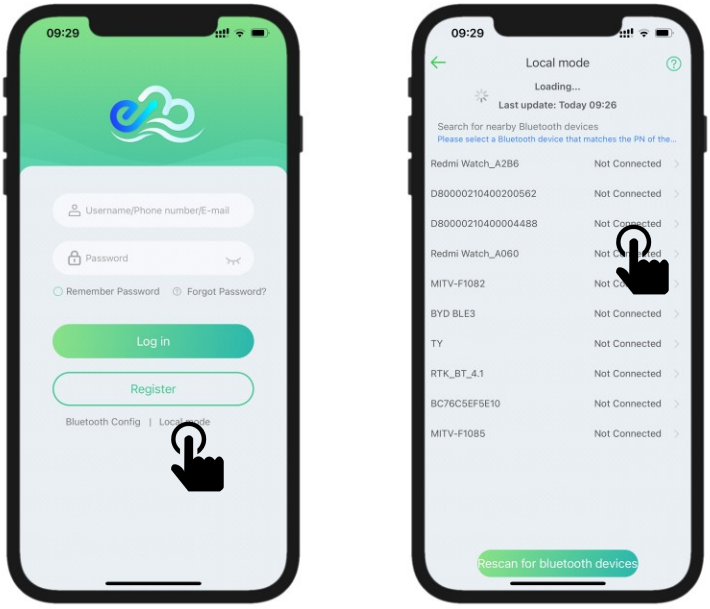


2.3 Connect to third-party platforms

2.3.1 Connect the Bluetooth of the data logger

(1) Click the "local mode" button on the "Login Page" to enter the "Local mode" page to automatically scan the surrounding Bluetooth devices;

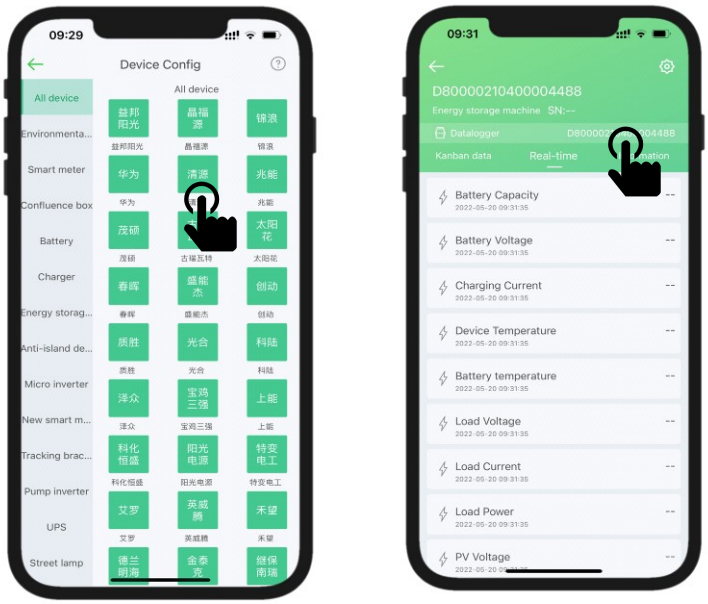
(2) Find the PN corresponding to the data logger and click the "Not Connected" button.



2.3.2 Configure the device

(1) On the Device Config screen, select any protocol and click;

(2) On the "Equipment Overview" screen, click on the logger number.

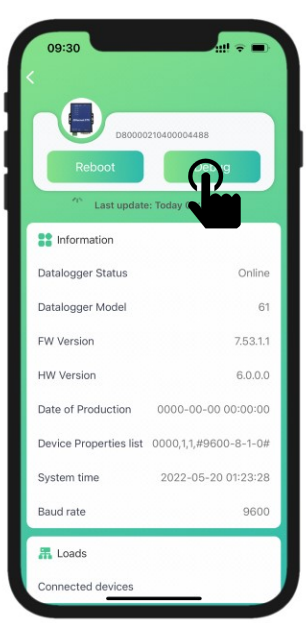


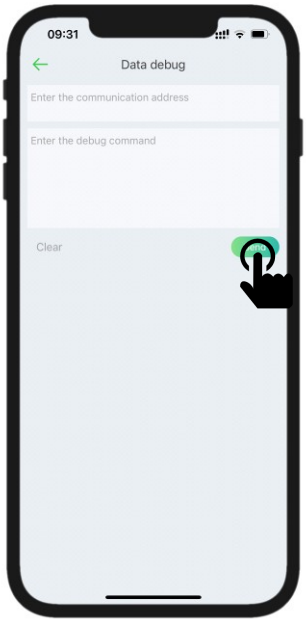
2.3.3 AT command debug Connection Server

(1) On the Data Debugging interface, enter 1 in the Mailing Address box (default is 1), and in the Debug Command box, enter AT+CLDSRVHOST1=xx.xx.xxx.xxx (IP address or domain name), xxx (port number), TCP\r\n. (Set remote server instruction) Click "Send", wait for a reply, such as reply result: "AT+CLDSRVHOST1:W000" indicates that the setting was successful, "AT+CLDSRVHOST1:W001" indicates that the setting failed, then check whether Bluetooth is connected normally. Or check that the instruction is correct (note: use English symbols)

For example:AT+CLDSRVHOST1=iot.eybond.com,18899,TCP\r\n

(2) When the setting is successful, please enter "AT+RESET=S\r\n" (reset instruction) in the "debug instruction box", click Send, wait for a reply, such as reply result: "AT+RESET:W000" indicates that the setting is successful, when successful, the logger will immediately restart, "AT+RESET: W001" indicates that the setup failed, check if the Bluetooth is connected properly, or check if the instruction is correct (Note: Use the English symbol)





2.3.4 The server issues a heartbeat command

(1) The server sends through the Socket connection “AT+HTBT?\r\n”(Heartbeat Command), The data logger will automatically reply to the result: "AT+HTBT\r\n" indicates that the setting was successful.

2.3.5 The AT command sets the serial port parameters

(1) On the "Data logger Details" screen, click the "Debug" button;

(2) After the restart is complete, connect to Bluetooth again, enter the "Data debug" interface, enter "AT+UART=9600,8,1,NONE\r\n" in the "Debugging Instruction Box", click Send, wait for a reply, such as reply result: "AT+UART:W000" indicates that the setting is successful," AT+UART:W001" indicates that the setup failed, check whether bluetooth is connected properly, or check whether the instruction is correct (Note: Use English symbols)

(3) In the Debug Command Box, enter for example "01 03 10 11 07 07" (the device's hex instructions), click Send, and wait for a reply, such as reply result: "01 03 11 22 33 44 55" indicates that the setting was successful, if there is no reply, it means that the setting failed, check the Bluetooth connection, or check whether the instruction is correct (Note: Use English symbols)

2.3.6 Common AT instruction tables

ID	Command	Description
1	AT+CLDSRVHOST1?\r\n	Query the remote server
2	AT+CLDSRVHOST1=iot.eybond.com,18899,TCP\r\n	Setting up the Remote Server
3	AT+DTUPN?\r\n	Query the DTU_PN number
4	AT+DTUTYPE?\r\n	Query the type number of the DTUs
5	AT+FWVER?\r\n	Check the firmware version number
6	AT+HTBT?\r\n	Send heartbeat command
7	AT+HWVER?\r\n	Query the hardware version number
8	AT+RESET=S\r\n	program reset
9	AT+UART=9600,8,1,NONE\r\n	Set the serial port parameters
10	AT+WFLKAP?\r\n	Query the information of the AP to connect to

11	AT+WFLKAP=wifi_test,AES,WPA2_PSK,87654321\r\n	Set the information for the AP to connect to
12	AT+WFSS?\r\n	Query the signal value of the AP to be connected

Note:"AT + RESET: W000" said set success,

"AT + RESET: W001" setting failure

"AT + RESET: W002" said does not support parameters

"AT + RESET: W003" said parameter format error.

"AT + RESET: W004" said parameter limit

"AT + RESET: W005" said parameters of super lower limit

"AT + RESET: W006" said system is busy

"AT + RESET: W007 "said operating frequency

"AT + RESET: W008" said does not support the operation of the

"AT + RESET: W009" said does not support working condition.

"AT + RESET: W010 says it is" try again.

3. Common Failures

When you encounter the following problems, please refer to the following solutions first. If the problem is still not resolved, please contact our after sales staff.

Phone: +86-755-89992588

Email: market@eybond.com

The following table lists some basic problems that may be encountered during operation, we provide some basic solutions.

FAQ	Workaround
The data logger is offline	1. Whether to set the WFBLE data receiver to connect to the local wireless router; 2. If the networking is not set up successfully: (1) Check whether the user name and password are correct; (2) Please check whether the Wi-Fi signal of the router at the installation point is too weak to cause the disconnection;
Digital logger online The device is not online	1. Check whether the communication address of the device is 1; 2. The fault has not been ruled out, contact the manufacturer after sales.

4. Precautions

(1) Installation: Please ensure that the logger and equipment are firmly installed to prevent the product from being unable to carry out normal collection work;

(2) Environment: The data receiver needs to be installed in a place where there is no strong electrical interference, because this product belongs to wireless communication, to prevent strong electrical interference from causing data loss in the process of data transmission of data;

(3) Transportation: do not be squeezed by heavy objects during transportation, and the packaging is intact;

(4) Storage: Avoid placing in a wet place, do not immerse in water.

FCC STATEMENT :

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.
Warning: 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.

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.