



BLUETOOTH AND WIFI MODULE F.0

Disclaimer & Warning:

1. Thank you for choosing our products! Before using this product, please read this manual carefully. It includes important information and advice on installation, use, troubleshooting, etc., and please keep this manual in a safe place.
2. The warranty does not cover failure of the product due to accidental damage, unauthorised repair, improper storage and use.

CONTENTS

- I. Product Overview.....1
- II. Product Features.....1
 - 2.1 Product Characteristics1
 - 2.2 Basic Technical Parameters.....2
- III. Basic Information.....2
 - 3.1 Packing List2
 - 3.2 Product Description3
 - 3.3 Assembly Steps.....4
 - 3.4 Instructions For Use.....5
- IV. Anomaly Analysis And Troubleshooting Program.....10
- V. After-sales Contact Information.....10

I. Product Overview

This product allows for wireless data transmission for solar controller, inverter, hub and other devices. Simply connect this product to the RJ45 interface port of the equipment and connect it to the cell phone APP via WIFI or Bluetooth to enable the wireless transmission of data from the accessed equipment for monitoring the equipment and parameter setting.

II. Product Features Product Features

2.1 Product Characteristics

1.Compatible with selected ECO-WORTHY products featuring an RS485 communication port, ECO-CON-PWM30A 2.1.

2.Supports WIFI or Bluetooth communication with eco-worthy mobile APP.You can view/set the detailed parameters and historical data of the accessed devices in real time.

3.Easy to use.

4.Directly powered by the device's RS485 communication port, featuring ultra-low operating power consumption.

5.The effective range of Bluetooth signal is >70m when there is no obstacle blocking.

6.Supports both firmware upgrade methods: Micro-USB and Mobile APP.

2.2 Basic Technical Parameters

Input Voltage	4.5V~5.5V
Operating Power Consumption	0.4W
Operating Frequency	2.412~2.462GHz, 2.402~2.480GHz
Connection Port Type	RJ45
Communication Method	RS485
Operating Temperature	-20°C ~65°C
Operating Humidity	10% ~90%
IP Rating	IP31
Dimension	106x40x16mm/4.2*1.6*0.6inch
Weight	66g/0.15lbs

III.Basic Information

3.1 Packing List

NO.	Name	Qty.	Unit	Note
1	Bluetooth&Wifi Module F.0	1	Piece	
2	Plastic Expansion Tube	3	PCS	M 6 * 30 (mm)
3	Phillips Self-drilling Screw	3	PCS	M 4 * 30 (mm)
4	Manual	1	Piece	

3.2 Product Description

Device Functional Diagram

NO.	Name	Functionality	
1	Power Indicator	Indicates on/off status	Green - Power on Off-Power supply abnormal
2	Communication Indicator	Indicates device connection status	Blue light blinking - Device connected successfully Off - Device not connected Red light blinking-APP successfully issued the command
3	Firmware Upgrade Button	Use the mobile app to access the firmware upgrade	
4	Firmware Upgrade Interface	Upgrading with Windows PC firmware	
5	Screw Holes For Lugs	For mounting fixtures	

3.3 Assembly Steps

① Either of the following can be selected for use:

Mode 1: Wireless transmission of single device data

This product connects to the RJ45 connector at the device end after ensuring that the device end is powered.

Mode 2: Wireless transmission of hub data

This product connects to the hub RJ45 port, after ensuring that the hub is powered.

After selecting any one of the above ways of use, the power indicator of this product would be green, and the communication indicator shows flashing blue light.

② Determine where to mount this product and mark the exact location of the screws.

③ After drilling the holes at the marked screw locations, clean the holes.

Note: The depth of the hole punched should be deeper than the length of the expansion pipe so that the expansion pipe will be completely inserted into the wall.

④ Plug the M 6 * 30 plastic expansion tube into the hole first, then hammer the expansion pipe into the wall until it is sucked in the wall completely.

Note: Do not use the hammer with too much force to avoid damaging the expansion tube.

⑤ From the front, use M 4 * 30 phillips self-drilling screws to go through the holes of the lugs of the product, and then use a screwdriver to screw them into the expansion tubes.

3.4 Instructions For Use

3.4.1 Dimensions:

3.4.2 Download APP:



Mobile Phone APP

You can search and install eco-worthy in Apple App Store or Google App Store, and you can also scan the QR code below to download the APP and use Bluetooth connection without login.



Android phone



iPhone

3.4.3 APP Tutorial

Scan the QR code on the right to get the APP operation manual.



3.4.4 Firmware Upgrade

Upgrade Method 1: Mobile App

After ensuring that the access device is correctly connected to this product, start the eco-worthy APP and click the + sign in the upper right corner of the APP device page to add a device, and select the corresponding product number (ECO-WORTHY BW0F_XXXX) in the device list.

After successfully connecting with APP, click the corresponding numbered 'HUB2.0 Data Collector' icon on the APP device page to enter the product detail page. Click the icon on the top right of the product detail page to enter the setting page.



Click the 'Firmware update' option and select 'Download the latest' button, then APP will download the latest firmware version of both the product and hub. After holding firmware upgrade button for 2s, the communication indicator of this product will turn off and the product will enter the firmware upgrade mode, and at last click the 'Install' button on this page of APP.

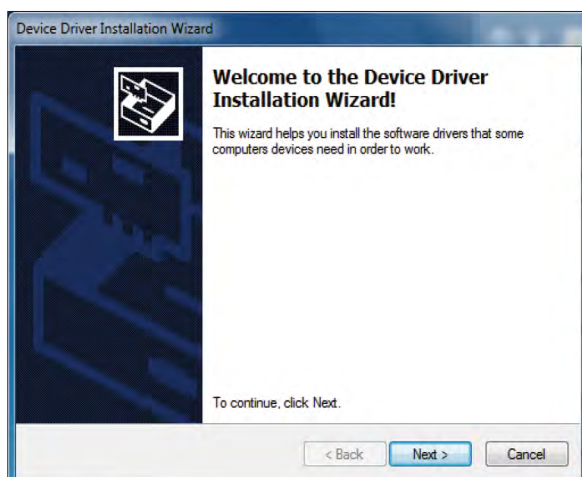


Ensure not to move the product or exit the 'Firmware update' page of the mobile APP in the middle of the installation to prevent the upgrade from failing. If the upgrade fails, it is recommended to use upgrade method 2 to re-upgrade.

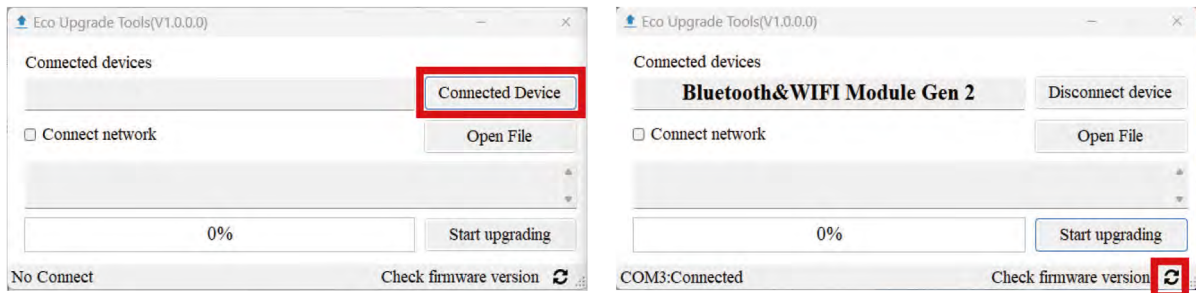
After successful installation, the APP page displays the upgrade success logo, and the communication indicator of this product changes from off state to blue blinking state, completing the firmware upgrade of the product.

Upgrade method 2: Windows PC

Connect the firmware upgrade interface of this product and the USB interface of your computer through the Mirco USB cable, make sure that the firewall and antivirus software are closed, then download the program [http://app.eco-worthy.com:7777/hub2/Eco Upgrade Tools Install.zip](http://app.eco-worthy.com:7777/hub2/Eco%20Upgrade%20Tools%20Install.zip) through the web site, unzip it and select the corresponding application CH340 Driver.exe according to your Windows system, and run it as [Administrator] to complete the driver installation according to the instructions of the installation wizard.



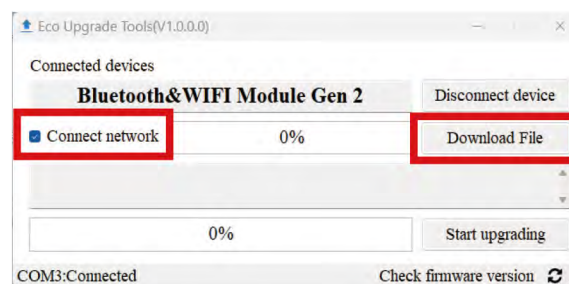
Find the software Upgrade Tools in that folder and run it as [Administrator], click the 'Connect Device' button in the pop-up window. If the connection is successful, the device name will be displayed.



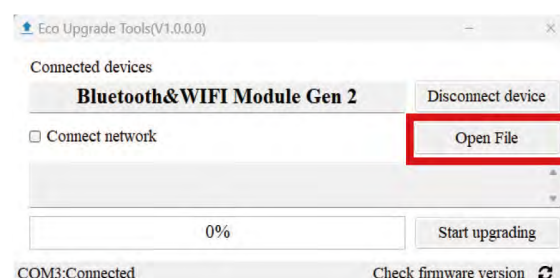
It is recommended that you click on the Refresh icon in the lower right corner each time you need to update the version, and then proceed with the version upgrade when the Update Success pop-up window is displayed. If you want to know the content of the updated version, you can click Check firmware version again to open the updated version description.

Upgrade Tools has both local and online upgrade methods to get updated version resources. The following is the introduction of how to use it:

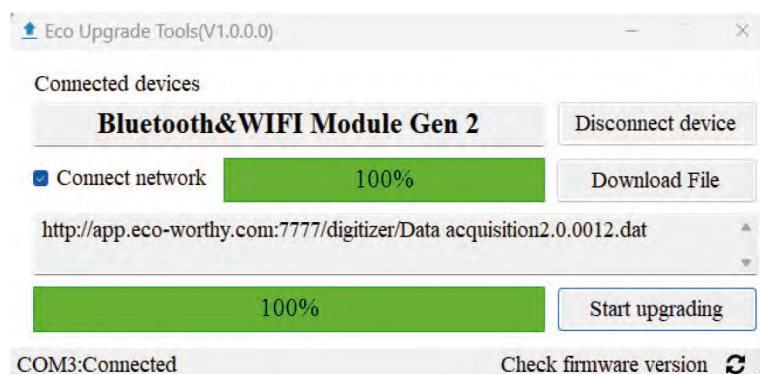
Online update: Check 'Connect to network' and click 'Download File' button to select the version of the file to be installed. If you choose to upgrade online, when the progress bar above reaches 100%, it indicates that the updated version has been successfully downloaded.



Local update: If you have previously downloaded the update you want to install, open the 'Open File' button and select the corresponding storage address to find the installation file.



After selecting one of the download methods, then click the 'Start upgrading' button, when the progress bar below reaches 100%, indicating that the product has been successfully updated, Eco Upgrade Tools displays the Update Success pop-up window, completing the product firmware upgrade.



3.4.5 Precautions for use

- 1.Ensure that the operating temperature of this product at range of -20℃ ~ 65℃ and keep it in a dry environment.
- 2.This product should only be used on ECO-WORTHY products, otherwise the product may be damaged.
- 3.Not to lose everything in the packing list - accessories, manuals, etc.
- 4.If there is any abnormality during the use of the product, please contact our after-sales service personnel immediately.
- 5.Keep away from rainwater.

IV. Anomaly Analysis And Troubleshooting Program

Overview of the issue	Abnormal Phenomenon	Reason	Remedy
The app won't connect to the product.	The power indicator on the product doesn't come on.	A product is not supported by our HUB 2.0, or the input device is not turned on.	Use our HUB2.0 series products and make sure that the connected devices power on normally.
	The power light of the product is always on.		①Close the app from the background, reopen it and try to connect again. ②Reconnect the product to the device.
APP can't display device data such as controllers, inverters, etc.	The communication indicator of the product is flashing.		①Check if the APP is currently connected to the appropriate data collector. ②Close the app from the background, reopen it and try to connect again.
	The communication light of the product does not light up.	The product is not connected to the products supported by our HUB2.0, the products cannot communicate with each other, or this product is damaged.	①Check whether the product is currently connected to the products supported by our HUB2.0, and check whether the connected devices are working normally. ②Check the network cable.

V. After-sales Contact Information

Official website address: www.eco-sources.cn

After-sales service email: customer.service@eco-worthy.com



BLUETOOTH- UND WIFI-MODUL 2.0

Haftungsausschluss und Warnung:

1. Vielen Dank, dass Sie sich für unsere Produkte entschieden haben! Bevor Sie dieses Produkt verwenden, lesen Sie bitte dieses Handbuch sorgfältig durch. Es enthält wichtige Informationen und Ratschläge zur Installation, Verwendung, Fehlerbehebung usw. und bewahren Sie dieses Handbuch bitte an einem sicheren Ort auf.

2. Die Garantie deckt keine Ausfälle des Produkts aufgrund von Unfallschäden, unbefugter Reparatur, unsachgemäßer Lagerung und Verwendung ab.

INHALT

I. Produktübersicht.....	
II. Grundlegende Information	1
2.1 Produkteigenschaften.....	1
2.2 Grundlegende technische Parameter.....	2
III. Verwendungsmethoden	2
3.1 Packliste	2
3.2 Beschreibung der Ausrüstung.....	3
3.3 Montageschritte	4
3.4 Gebrauchsanweisung	5
IV. Programm zur Anomalieanalyse und Fehlerbehebung	10
V. Kundendienstkontakt	10