

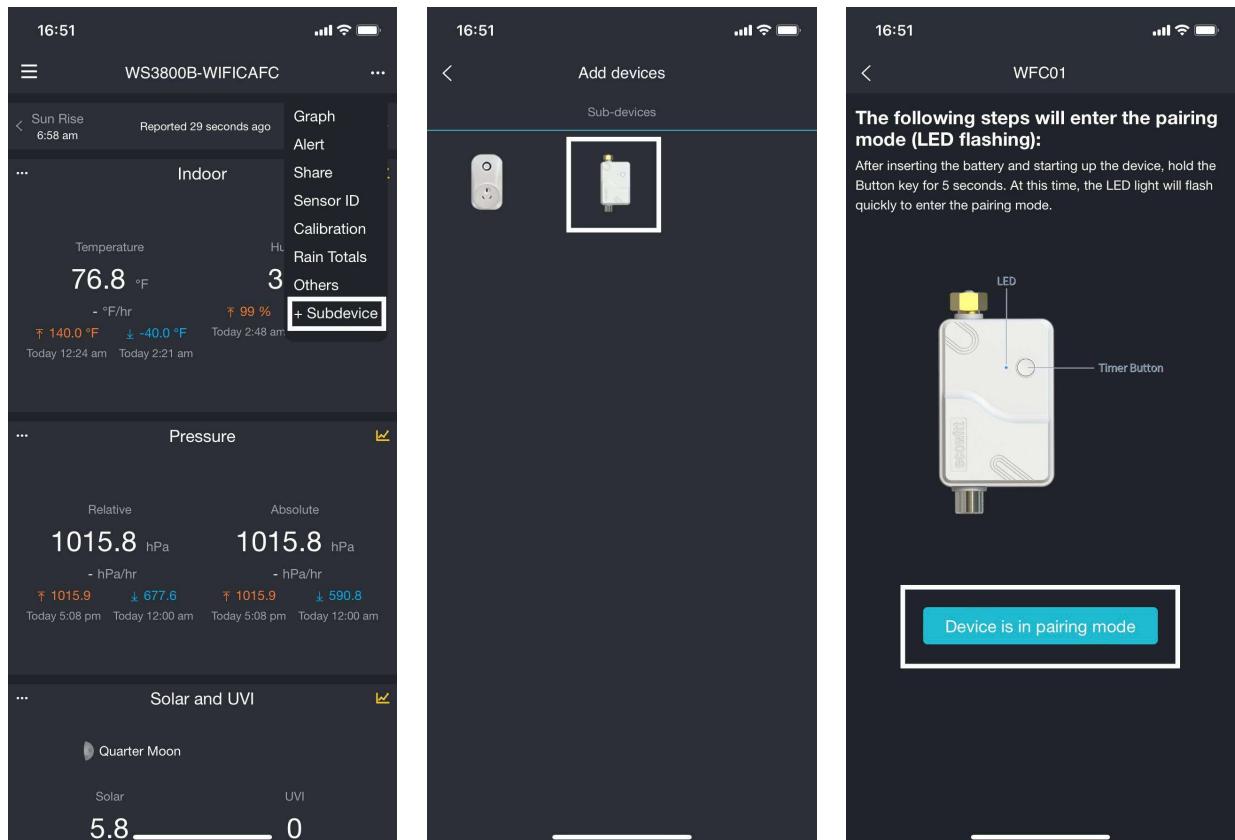
## 4.2 IoT Device:

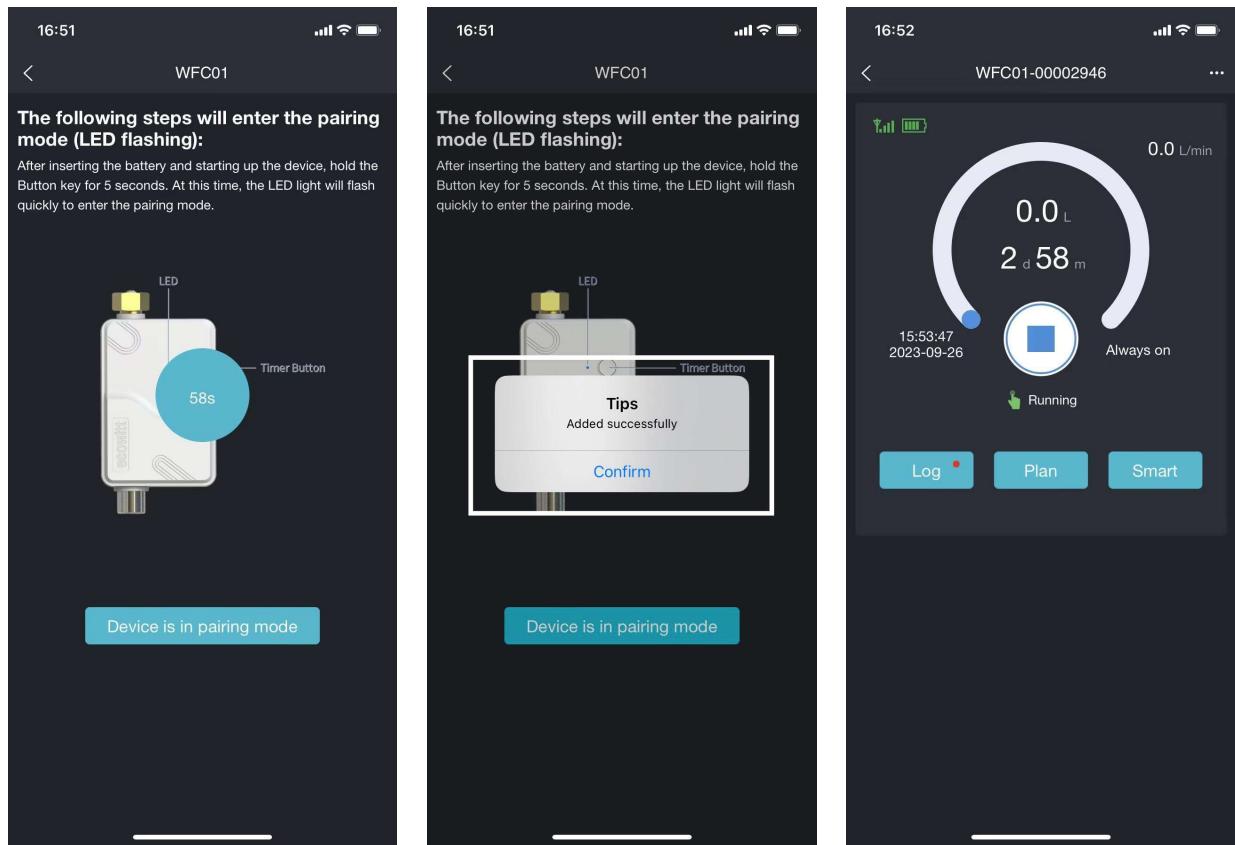
Sensor Model	Max QTY	Picture	Functions
WFC01	16		Smart water timer
AC1100			Smart plug

**Table 8: IoT device**

After the Wi-Fi configuration of WS3800 is finished (refer to **Section 2.2**), IoT products can be connected to the App in two methods. Take WFC01 for an example:

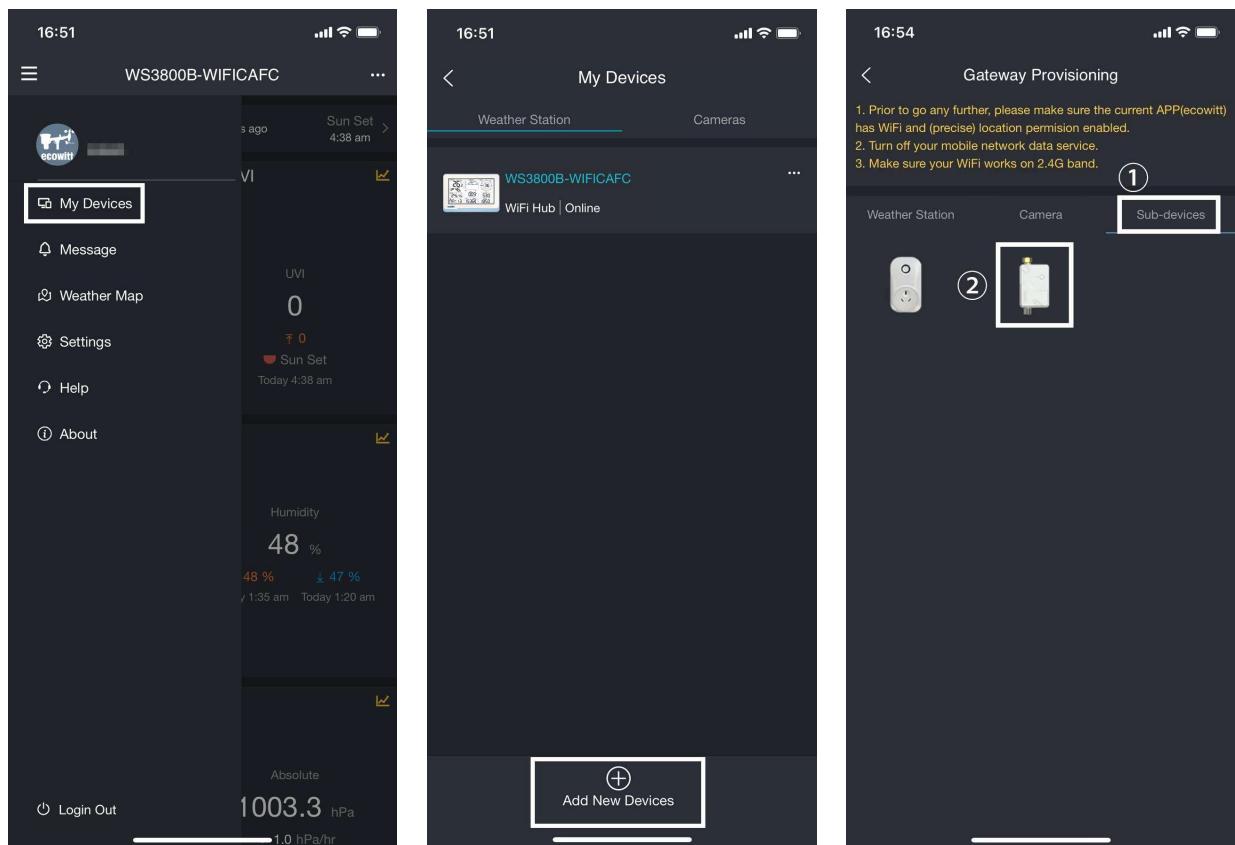
### 4.2.1 Method 1 to Add Sub-devices

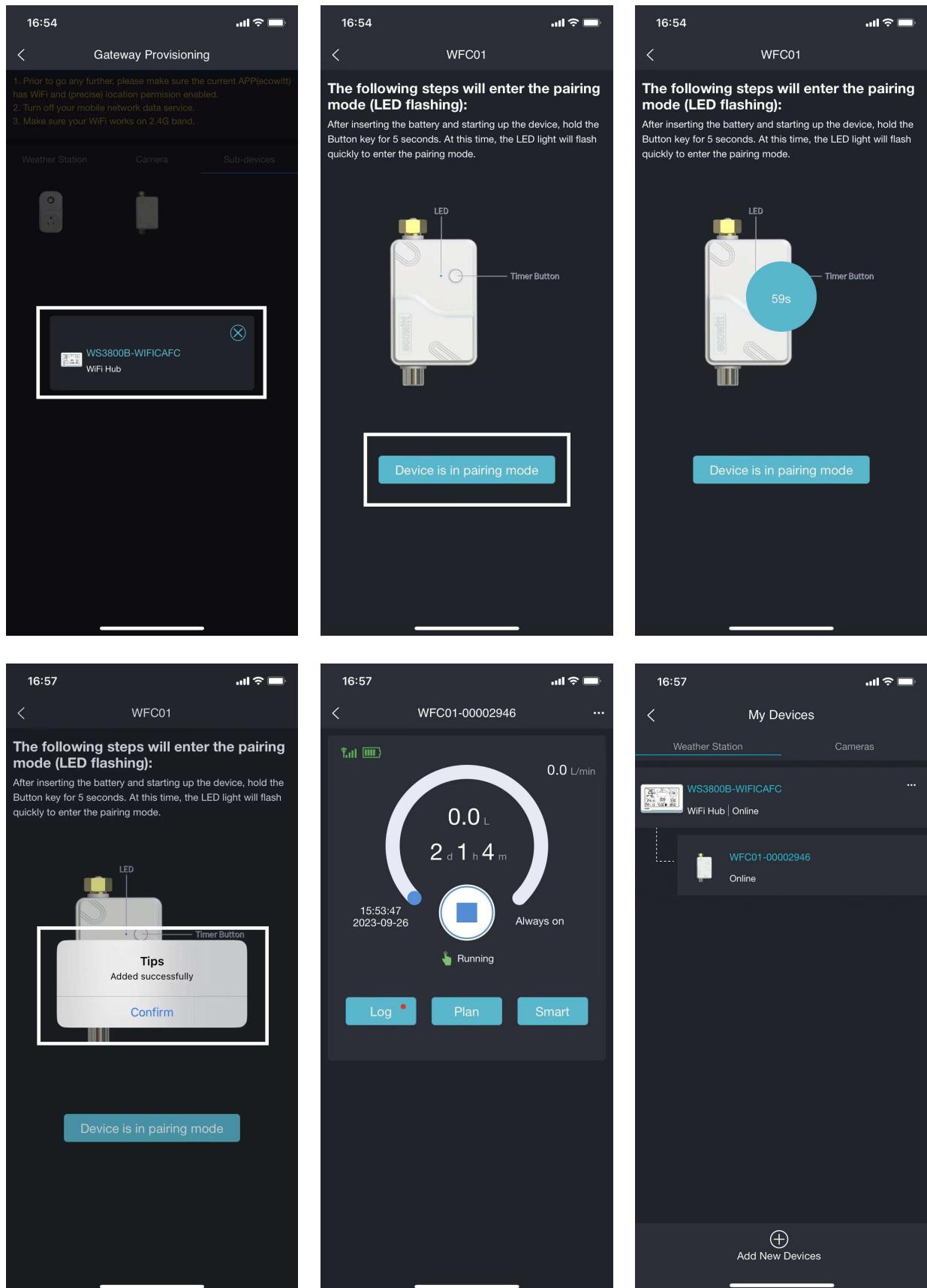




**Figure 39: Method 1 to connect IoT device**

#### 4.2.2 Method 2 to Add Sub-devices





**Figure 40: Method 2 to connect IoT device**

## 4.3 Calibration

If you have data from a relatively accurate weather station. You can use the data to do the calibration.

1. Make sure your mobile device is connected to the same Wi-Fi network that WS3800 is connected to.
2. Click "..." on top right corner and choose "Calibration".
3. For a certain parameter (Take Outdoor temperature as an example in the Figure 41). Calculate the offset of data from accurate weather station and ecowitt sensor.
4. Fill in the offset got from step3, click Save.

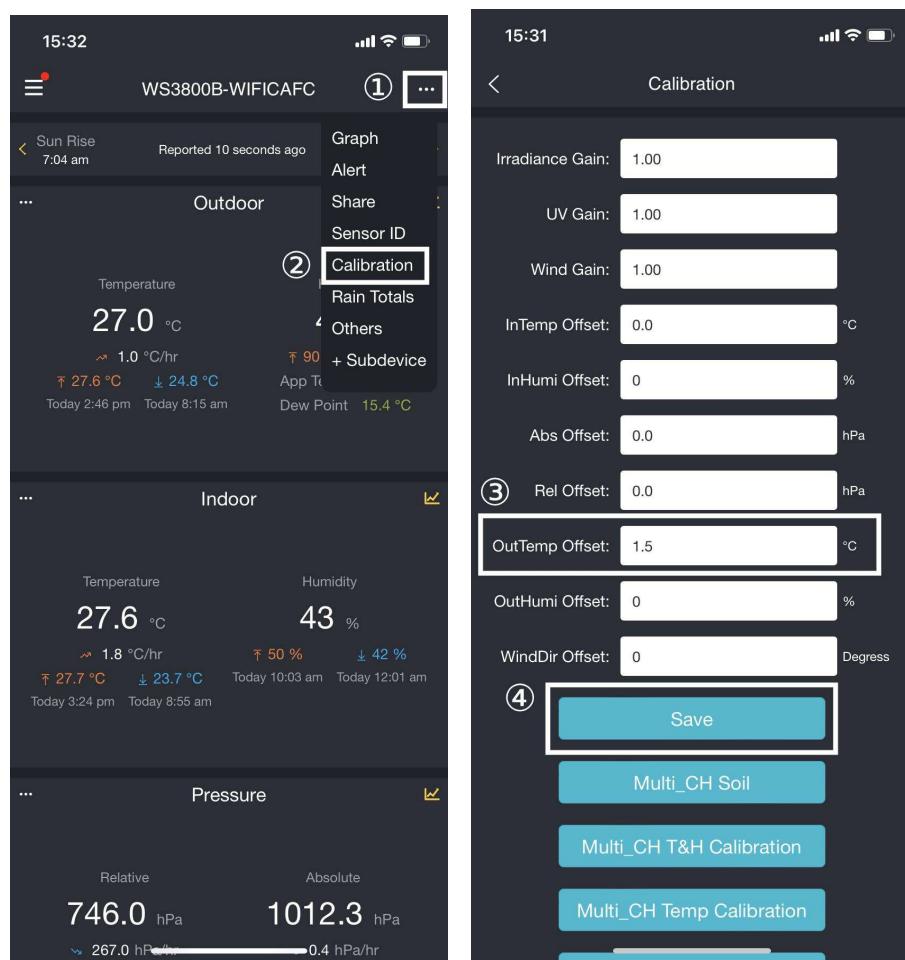


Figure 41: Calibration

## 5. Others

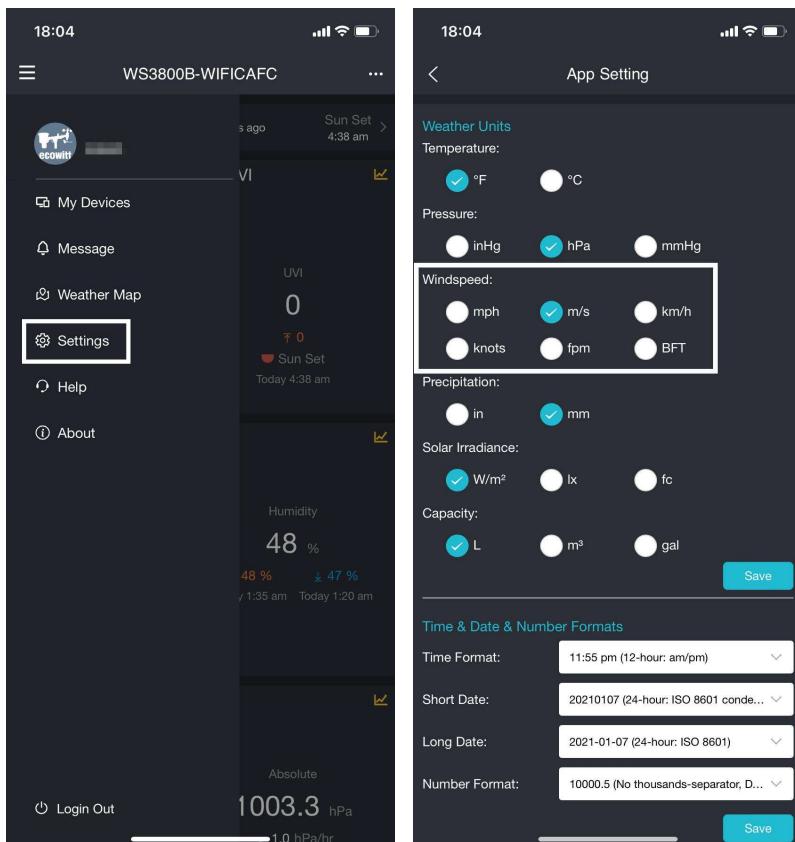
### 5.1 Lightning Distance Unit

WS3800 can connect one WH57 lightning sensor, and the lightning data can only be viewed through Ecowitt App, website, and web page, if you need to modify the lightning distance unit, you can modify it by modifying the wind speed unit on the App, website or web page.

We here recommend modifying units on the App, the lightning units will be used in daily viewing and exporting data on the website.

Wind Speed Unit	Lightning Distance Unit
m/s, km/h, BFT	km
knots	nmi
mph, fpm (fpm can only be set in App/website)	mi

Table 9: Corresponding table of wind speed and lightning distance units



**Note:** The wind speed units set on the App will not be synchronized to the WS3800.

Figure 42: Setting lightning units by setting wind speed units on the App

## 6. Specifications

Model	WS3800
Name	Weather Station (receiver)
Dimensions	8.2 x 5.6 x 1.1 inch
Screen Size	6.6 x 3.7 inch
Weight	368.9(g)
Material of Plastic Casing	ABS
Material of Screen	HTN-LCD
Temperature Metering Range	-9.9°C to 60°C (14°F to 140°F)
Temperature Metering Accuracy	±0.2°C (±0.4°F)
Temperature Metering Resolution	0.1°C (0.2°F)
Humidity Metering Range	1% to 99%
Humidity Metering Accuracy	±2%
Humidity Metering Resolution	1%
Barometric Pressure Metering range	300 to 1100 hPa (8.85 to 32.5 inHg)
Barometric Pressure Metering accuracy	±1.5hpa (absolute pressure); ±2hpa (relative pressure)
Barometric Pressure Metering resolution	0.1 hPa (0.01 inHg)
Reading Update Interval	About 1 minute
RF Connection Frequency	915/868/433MHz (depending on local regulations)
RF Wireless Range	Over 100 meters (in open areas)
WLAN	802.11 b/g/n 2.4 GHz (802.11n, Max 150 Mbps)
WLAN Range	Over 30 meters (in open areas)
Console Operating Temperature	-10°C to 50°C (14°F to 122°F)
Power Supply	DC 5V 1A or 3 fresh AA alkaline/lithium batteries (not included)
Battery Life	24 Hours (Back-up only)

**Table 10: Specifications**

**Note:** When working with other transmitters, the screen displays the following range of data:

Indoor Temperature	-9.9 to 60°C
Outdoor Temperature	-40 to 60°C
Humidity	1% to 99%
Wind Speed	0 to 180km/h
Wind Direction	0 to 359 degrees
Rainfall	0 to 9999mm
UVI	0 to 15
Solar	0 to 300Klux
CO <sub>2</sub>	0 to 40000ppm
PM1.0, PM2.5, PM10	0 to 999ug/m <sup>3</sup>
AQI	0 to 500

**Table 11**

## 7. Warranty

We disclaim any responsibility for any technical error or printing error or the consequences thereof.

All trademarks and patents are recognized.

We provide a 1-year limited warranty on this product against manufacturing defects or defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased, and only to the original purchaser of this product. To receive warranty service, the purchaser must contact us for problem determination and service procedures.

This limited warranty covers only actual defects within the product itself and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, or claims based on misrepresentation by the seller, or performance variations resulting from installation-related circumstances.

**Manufacture:** Shenzhen Fine Offset Electronics Co., Ltd.

**Address:** 4/F, Block C, JiuJiu Industrial City, Shajing Town, Baoan District, Shenzhen City, China

## 8. Care and Maintenance

When batteries of different brand or type are used together, or new and old batteries are used together, some batteries may be over-discharged due to a difference of voltage or capacity. This can result in venting, leakage, and rupture and may cause personal injury.

- Do not mix Alkaline, Lithium, standard, or rechargeable batteries.
- Always purchase the correct size and grade of battery most suitable for the intended use.
- Always replace the whole set of batteries at one time, taking care not to mix old and new ones, or batteries of different types.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+ and -).
- Remove batteries from product during periods of non-use. Battery leakage can cause corrosion and damage to this product.
- Remove used batteries promptly.
- For recycling and disposal of batteries, and to protect the environment, please check the internet or your local phone directory for local recycling centers and/or follow local government regulations

## 9. Contact Us

### 9.1 After-sales Service

#### Order Issues:

If you encounter any missing or incorrect shipments of Ecowitt products purchased, please reach out to the respective platform's customer service from the store where you bought the product for assistance.

#### Usage Inquiries:

Our product is continuously changing and improving, particularly online services and associated applications. To download the latest manual, and additional help, and for any issues related to product usage feel free to contact our customer support team at [support@ecowitt.com](mailto:support@ecowitt.com). We are committed to providing assistance and resolving any concerns you may have.

### 9.2 Stay in Touch

Ask questions, watch setup videos, and provide feedback on our social media outlets. Follow Ecowitt on Discord, YouTube, Facebook and Twitter.



## **FCC Caution:**

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this 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 device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

**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.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.