

# Temperature Sensor

Model: WN34

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- \*Please scan the QR code to read English manual and keep it for future reference
- \*Bitte scannen Sie den QR-Code zudeutsche Anleitung lesen und aufbewahren füZukunftsbezug
- \*Si prega di scansionare il codice QR perleggi il manuale italiano e conservalo perReferenza futura

## **Instruction manuals**

**<https://s.ecowitt.com/APXBJB>**

## Help

Our product is continuously changing and improving, particularly online services and associated applications. To download the latest manual and additional help, please contact our technical support team:

**support@ecowitt.com**

**support.eu@ecowitt.net (EU/UK)**

# **1. Getting Started**

## **1.1 Parts List**

One Temperature Sensor

One Mounting bracket for sensor

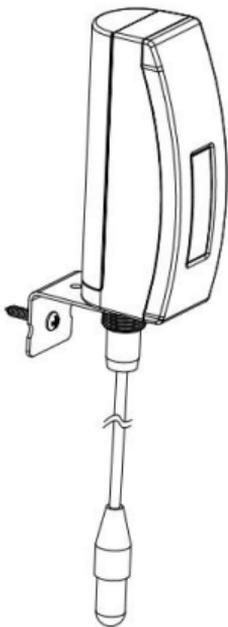
One Hose clamp for mounting to pole

One Hexagon M12 screw for mounting

One Screw ST D3.2\*M2.0\*6 for mounting

One User Manual

## 2. Overview



**Figure 1: Temperature Sensor (cabled version)**



**Figure 2: Temperature Sensor (probe version)**

**Note:** This temperature sensor has two versions: a probe version (WN34S) and a cabled version (WN34L) at your selection. The probe sensor is mainly used to test the soil temperature, while the cabled version is mainly used to test water temperature.

The two versions will be recognized as the same sensor type by the software. If you purchased both, they will share the eight channels together and the total supported quantity of the two sensors could not exceed eight for one receiver.

## 2.1 Features

### Temperature Sensor

- Measures temperature with a 3m (10ft) cabled sensor for the cabled version or a 30cm (11.81inch) stainless steel probe sensor for the probe version.
- Extended wireless range up to 300 feet (100 meters) in open areas.
- Transmits readings every 77 seconds.
- IP65 waterproof.
- LCD display for current reading.

### When paired with a GW1100/GW2000 Wi-Fi Gateway:

- View temperature reading on the Live Data page of the Ecowitt app (requires that the gateway and your phone are using the same Wi-Fi network).
- Up to 8 channels supported. Channel names can be edited on the app.
- Battery level information displayed on the Ecowitt App.

**When paired with a Weather Station Console (HP2551/HP3500/HP3501):**

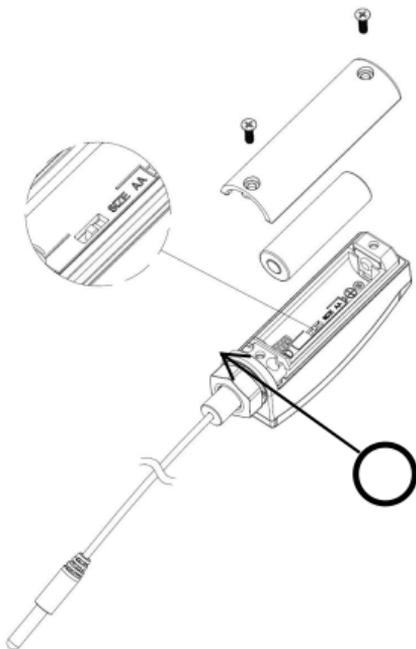
- View temperature data in real-time on the Display.
- Up to 8 channels supported. Channel names can be edited on the console.

**When uploaded to Ecowitt Weather Server:**

- View current temperature data, history records and graph on the website.
- Receive email alerts from the server.
- Remote monitoring with smart phone, laptop, or computer by visiting the website.

## 3. Setup Guide

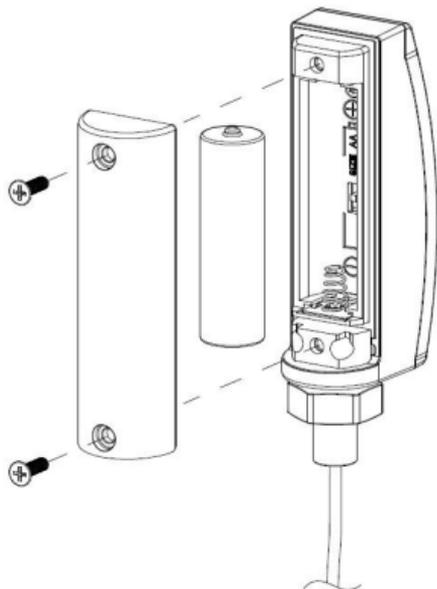
### 3.1 Switch (WN34L)



The dip switch inside battery compartment is for selecting temperature units in Celsius or Fahrenheit.

## 3.2 Installing battery

1. Remove the battery door on the back of the transmitter by removing the screw, as shown in Figure 2:



**Figure 2: Battery installation**

2. Insert one 1.5V AA battery (be aware of polarity: flat side of the battery goes to the spring side of the battery compartment).

The temperature reading will display on the LCD screen immediately and will normally update every 77 seconds (the sensor transmission update period).

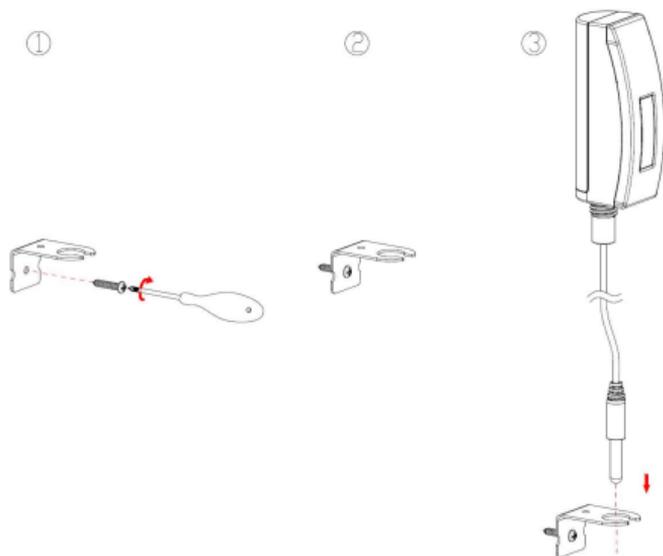
**Note:** If there is no reading on the screen, make sure the battery is inserted the correct way or a proper reset happens. Make sure the battery is inserted correctly. Do not install the battery backward.

4. Close the battery door by installing the screw.

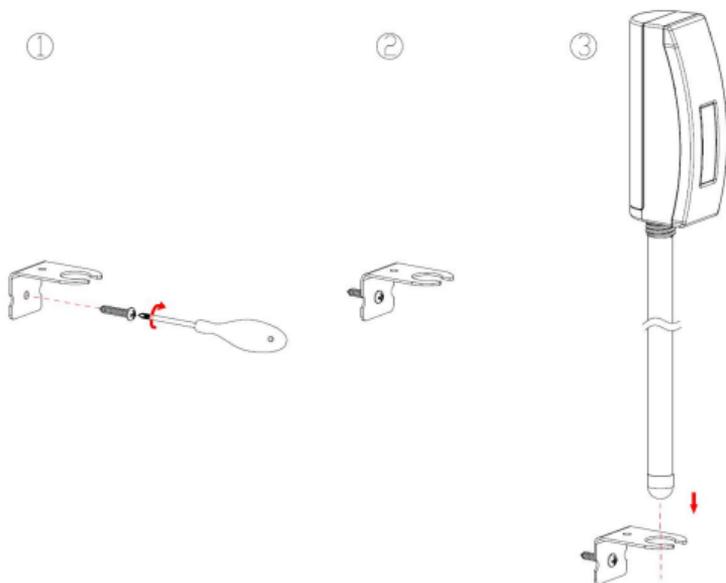
## 4. Sensor Placement

To mount the unit on a wall or wooden beam:

- Use a screw (Screw ST D3.2\*M2.0\*6) to fix the bracket on the wall, and then insert the probe through the hole of the bracket, as shown on figure 3-1:



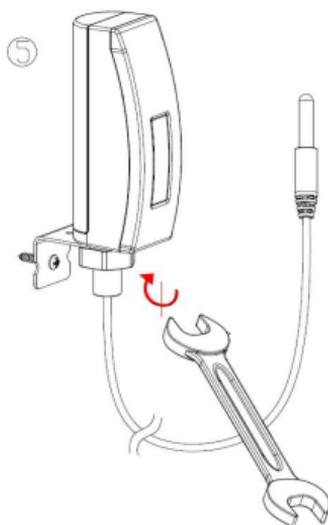
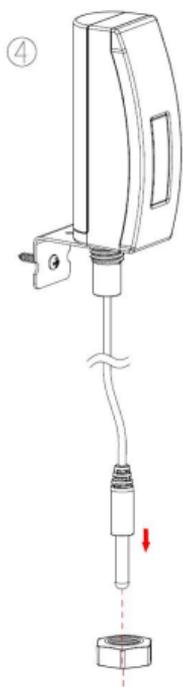
(cabled version)



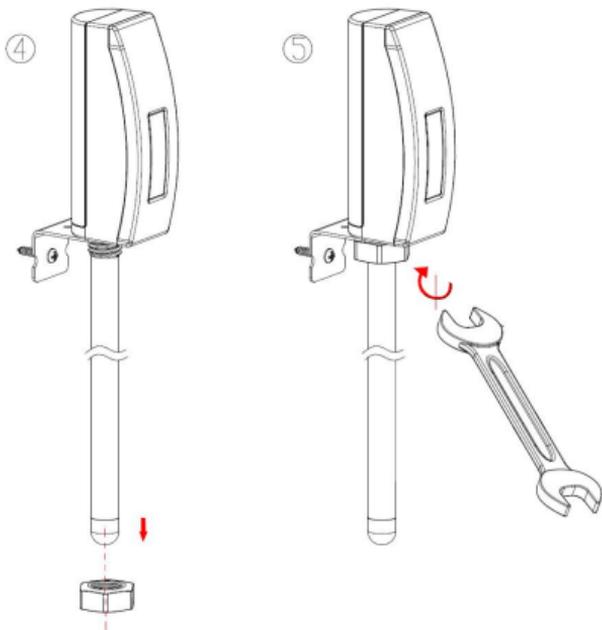
(probe version)

**Figure 3-1: Sensor mounting**

Fix the sensor to the bracket with the Hexagon M12 nut and tighten the screw as shown on figure 3-2: (hand turn the nut until firm, and then use a wrench to turn  $1/3 \sim 1/2$  turn and no more. Do not over tighten.)



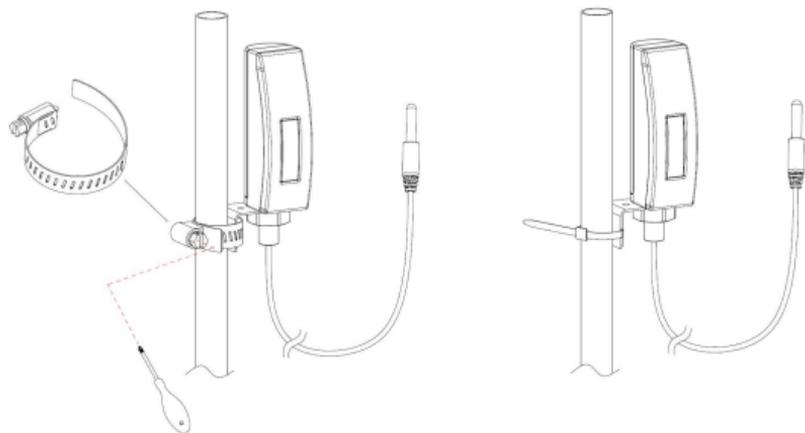
(cabled version)

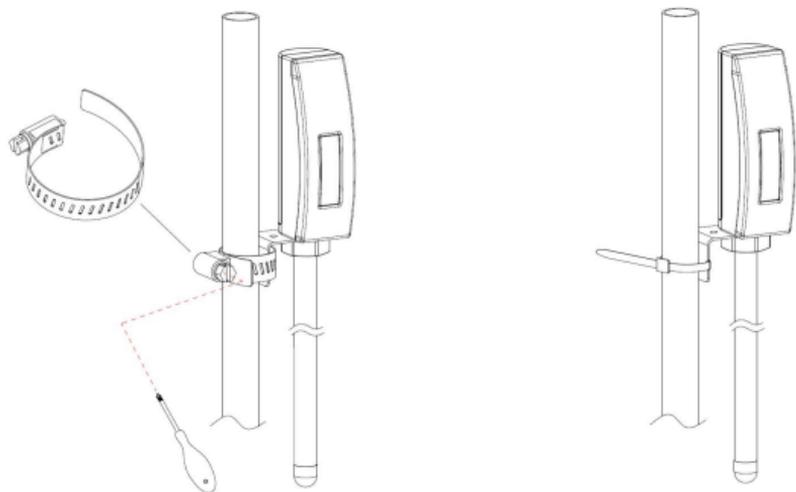


(probe version)

### **Figure 3-2: Sensor mounting**

To mount the unit to a pole (not included) with the included hose clamp:





**Figure 4: Sensor mounting to pole (up for the cabled version, down for the probe version)**

**Note:**

When installing the soil temperature sensor in the soil, please do not push the probe into the soil by holding

the main unit body instead of the probe itself. The unit is fragile between the probe and main body attachment and can only withstand a maximum force of 3KGs.

Please don't insert the sensor into corrosive liquids or hard rock to avoid any damage.

## **5. Wi-Fi Configuration with gateway**

To view the sensor data on your mobile application and receive email alerts on our weather server, you need to pair this device with our GW1100/GW2000 Wi-Fi Gateway or HP2551/HP3500/HP3501 Weather Station (each sold separately).

### **5.1 Pair with Gateway**

If the GW1100/GW2000 has been in operation, and you have never had any WN34 sensor setup before, just power up the sensor and GW1100/GW2000 will

pick the sensor data automatically.

**Note:** The gateway can support a maximum of 8 WN34 temperature sensors. Each new sensor will be recognized as a new channel according to the Power-on sequence. You may attach a label to the channel on each sensor for distinction. The channel name can be edited both on the app and ecowitt.net (The edited name on the app will not sync to the ecowitt.net website, and it should be edited on your device setup page on ecowitt.net separately).

If you want to use a new WN34 sensor to replace the old one (already configured on certain channel), please try the following:

1. Open the Sensor ID page on the Ecowitt app, and find your old sensor ID.
2. Power off the old sensor and power on the new sensor.

3. Click Re-register on the Sensor ID page.

Then the new sensor will be learned and the old sensor will be erased.

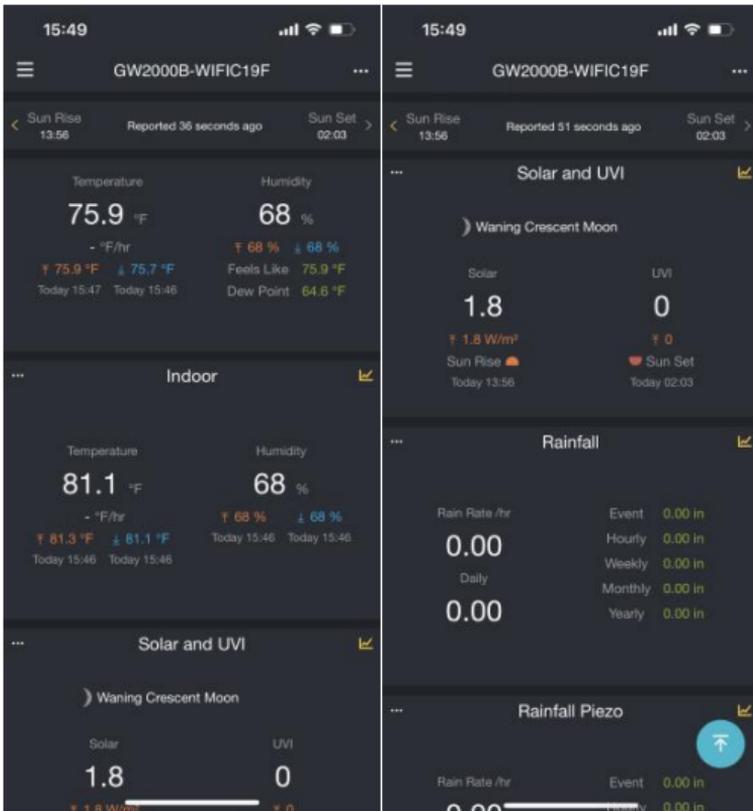
## **5.2 Wi-Fi Connection for the Gateway**

For this part, please refer to the manual of the GW1100/GW2000 Wi-Fi gateway.

If you have any questions, please contact the customer service at [support@ecowitt.com](mailto:support@ecowitt.com) or [support.eu@ecowitt.net](mailto:support.eu@ecowitt.net) (EU/UK).

## **6. View Online Data with Ecowitt APP**

When the Wi-Fi configuration is done (to tell the gateway to be hooked to your Wi-Fi network), your sensor data as well as the sensor battery voltage information will be displayed on Ecowitt App at the Live Data page.



**Note:** It requires your phone and the gateway must be in the same network when viewing your sensor live data on the Ecowitt app. Live data refers to current

data received by the gateway and is not stored on Ecowitt app. However data is always pushed and saved on [www.ecowitt.net](http://www.ecowitt.net) cloud (under your registered account, and it can always be accessed via your browser.)

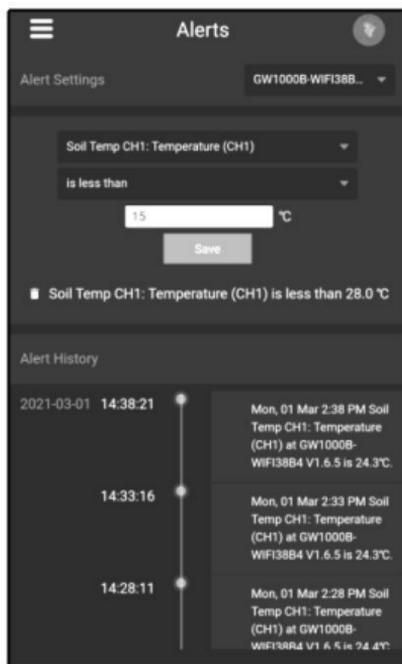
Detailed operation instructions can be found in the GW1100/GW2000 manual.

For any questions, please feel free to contact our customer service at [support@ecowitt.com](mailto:support@ecowitt.com) or [support.eu@ecowitt.net](mailto:support.eu@ecowitt.net) (EU/UK).

## **7. Set Email Alerts**

Once your device is added successfully on the Ecowitt

Weather server, you may set alerts for the sensor on the website to get email notifications.



## 8. Specification

Power: 1x1.5V AA battery (not included)

Sensor type: Epoxy Sealed Thermistor of NTC

Frequency: 433 / 868 / 915MHz depending on location  
(North American: 915MHz; Europe: 868MHz; Other  
areas: 433MHz)

Wireless transmitting range: 100M (300feet)

Sensor reporting interval: 77 seconds

Sensing temperature: -40~60 °C(40~140 °F)

Cable sensor length: 3m (10ft)

Probe sensor length: 30cm (11.81inch)

Battery life: 12 months minimum

Waterproof level: IP65

## **9. FCC**

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this

device must accept any interference received, including interference that may cause undesired operation.

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.

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

IC Caution:

English:

This device contains licence-exempt transmitter(s) /receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt

RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

## **10. Warranty Information**

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 is only applicable 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.