

# **Wireless Multi-channel Thermometer Probe Sensor Model: WN30**

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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 für Zukunftsbezug
- \*Si prega di scansionare il codice QR perleggi il manuale italiano e conservarlo perReferenza futura

## Instruction manuals

<https://www.ecowitt.com/support/download/103>



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## **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. Introduction**

Thanks for purchasing this WN30 wireless thermometer probe sensor. This device has a 3M/10FT cabled waterproof probe sensor, and can be used to measure temperature in liquids (mainly water) or even bury it in soil or place the sensor into spaces like fridge etc. The sensor works at one of the 8 channels selected via dip switches. It can work by itself by showing current temperature on its own LCD, but also the data is transmitted under ISM bands and the signal can be received by our different consoles or gateways, which streams the sensor data to [www.ecowitt.net](http://www.ecowitt.net).

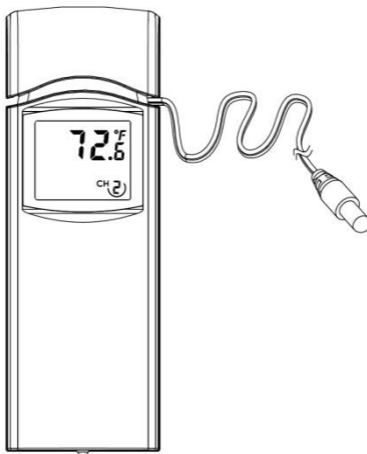
To ensure the best product performance, please read this manual and retain it for future reference.

## **2. Get Started**

### **2.1 Parts List**

One Multi-channel Temperature Probe Sensor  
One User Manual

### 3. Overview



**Figure 1: Multi-channel Thermometer Probe Sensor**

## **3.1 Features**

### **Temperature Sensor**

- Measures temperature with a 3m (10ft) cabled sensor.
- Long wireless range up to 300 feet (100 meters) in open areas
- Transmits readings every 61 seconds
- IP65 waterproof
- Data can be received by our consoles: HP2551/HP2553, the WiFi Gateway, WN1900, HP3500/HP3501, WH2910 and posting data to <https://www.ecowitt.net>.

### **When paired with a Wi-Fi Gateway:**

- View temperature reading on the Live Data page of the Ecowitt App (requires 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 low battery power detected

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

- View water temperature data in real-time on the Display
- Up to 8 channels supported. Channel names can be edited on the console (only for HP2551/HP2553 console).

**When paired with a weather station console (WS2910 with console software version V2.1.8 or above):**

- Sensor data can't be displayed on console



but being pushed to  
<https://www.ecowitt.net> for remote data  
hosting.

### **When uploaded to Ecowitt Weather Server:**

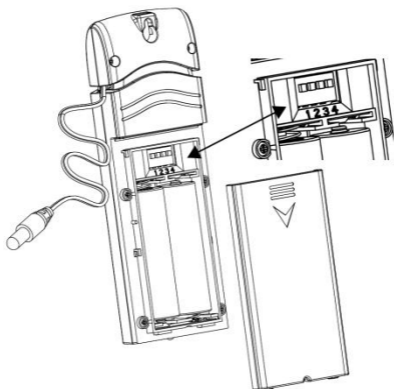
- View current water temperature data & history records & graph on the website
- Receive email alerts from the server
- Remote monitoring with smart phone, laptop, or computer by visiting the website

**Note:** The WN30 and WN31 (multi-channel temperature and humidity sensor) 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 quantity of the two sensors could not exceed eight.

## 4. Setup Guide

### 4.1 Install batteries

1. Remove the battery door on the back of the transmitter(s) by sliding down the battery door, as shown in Figure 2 .



**Figure 2: Battery installation**

2. Before inserting the batteries, find the dip switches above the battery compartment and set the temperature units and channel number:

**Temperature Units:** To change the transmitter display units of temperature measure ( $^{\circ}\text{F}$  vs.  $^{\circ}\text{C}$ ), change Dip Switch 4, as referenced in Figure 3.

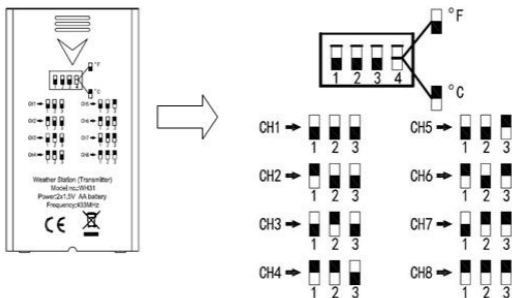
**Channel Number:** This device supports up to eight sensors. To set each channel number, change Dip Switches 1, 2 and 3, as referenced in Figure 3.



Switch in down position.



Switch in up position.



**Figure 3: Dip Switch diagram**

3. Insert two AA batteries.
4. Verify the correct channel number (CH) and temperature units of measure ( $^{\circ}\text{F}$  vs.  $^{\circ}\text{C}$ ) are on the display.
5. Close the battery door.

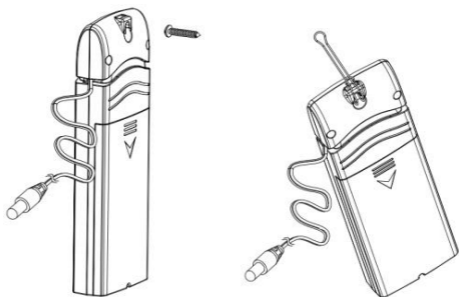
Repeat for the additional remote transmitters (sold separately), verifying each remote is on a

different channel.

## **5. Sensor Placement**

To mount or hang the unit on a wall or wood beam:

- Use a screw or nail to affix the remote sensor to the wall, as shown on the left side of figure 4, or
- Hang the remote sensor using a string, as shown in right side of figure 4.



**Figure 4: Sensor mounting**

**Note:** Make sure the sensor is mounted vertically and not lying down on a flat surface. This will insure optimum reception. Wireless signals are impacted by distance, interference (other weather stations, wireless phones, wireless routers, TVs and computer monitors), and transmission barriers, such as walls. In general, wireless signals will not penetrate

solid metal and earth (down a hill, for example).

## **6. 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 the Wi-Fi Gateway or HP2551/HP3500/HP3501 Weather Station (sold se-parately).

### **6.1 Pair with Gateway**

If the WiFi Gateway has been in operation, and you have never had any WN30 sensor setup before, just power up the sensor and the WiFi Gateway will pick the sensor data automatically.

If you want to use a new WN30 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.

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

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

Any question, please contact the customer service.



## 7. View Online Data with Ecowitt App

When the Wi-Fi configuration is done, you may view sensor data as well as the sensor battery voltage information on Ecowitt App at the live data page.

Device List		Live Data	More
GW1000B-WIFIDA59			
Indoor Temperature		Indoor Humidity	
25.8 °C		60 %	
Absolute Pressure		Relative Pressure	
999.5 hPa		999.5 hPa	
CH3		Humidity	✎
Temperature		None	
26.8 °C			
GW1000B_V1.6.7			

Back	Live Data	More
	GW1000B-WIFIDA59	
Indoor Temperature		Indoor Humidity
25.5 °C		61 %
Absolute Pressure		Relative Pressure
999.2 hPa		999.2 hPa
CH3		Humidity
Temperature		None
26.0 °C		
Firmware Version		
GW1000B_V1.6.7		

**Note:** It requires your phone and the gateway using the same network as the APP is talking to the Wi-Fi Gateway directly on the local Wi-Fi network.

To remote monitor the sensor data, please upload the data to our free Ecowitt Weather Server: <https://www.ecowitt.net>.

Detailed operation instructions can be found on the Wi-Fi Gateway manual.

Any question, please feel free to contact our customer service at [support@ecowitt.com](mailto:support@ecowitt.com)

## 8. 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.

The screenshot shows the 'Alerts' configuration interface for a device. At the top, there is a hamburger menu icon, the title 'Alerts', and a user profile icon. Below this is the 'Alert Settings' section, which includes a dropdown menu for the device name 'GW1000B-WIFI38B...'. The main configuration area shows a sensor selection dropdown set to 'Soil Temp CH1: Temperature (CH1)', a comparison operator dropdown set to 'is less than', and a numerical input field containing '15' with a '°C' unit indicator. A 'Save' button is positioned below the input field. A confirmation message below the settings reads: '■ Soil Temp CH1: Temperature (CH1) is less than 28.0 °C'. The bottom section is titled 'Alert History' and features a vertical timeline with three entries. Each entry consists of a timestamp on the left and a detailed alert message on the right. The first entry is at 14:38:21 with a message: 'Mon, 01 Mar 2:38 PM Soil Temp CH1: Temperature (CH1) at GW1000B-WIFI38B4 V1.6.5 is 24.3°C'. The second entry is at 14:33:16 with a message: 'Mon, 01 Mar 2:33 PM Soil Temp CH1: Temperature (CH1) at GW1000B-WIFI38B4 V1.6.5 is 24.3°C'. The third entry is at 14:28:11 with a message: 'Mon, 01 Mar 2:28 PM Soil Temp CH1: Temperature (CH1) at GW1000B-WIFI38B4 V1.6.5 is 24.4°C'.

Alert Settings: GW1000B-WIFI38B...

Sensor: Soil Temp CH1: Temperature (CH1)

Condition: is less than

Value: 15 °C

Save

■ Soil Temp CH1: Temperature (CH1) is less than 28.0 °C

Alert History

2021-03-01 14:38:21	Mon, 01 Mar 2:38 PM Soil Temp CH1: Temperature (CH1) at GW1000B-WIFI38B4 V1.6.5 is 24.3°C.
14:33:16	Mon, 01 Mar 2:33 PM Soil Temp CH1: Temperature (CH1) at GW1000B-WIFI38B4 V1.6.5 is 24.3°C.
14:28:11	Mon, 01 Mar 2:28 PM Soil Temp CH1: Temperature (CH1) at GW1000B-WIFI38B4 V1.6.5 is 24.4°C.

## 9. Specification

Power: 2 AA batteries (not included)

Sensor Size: (LxHxW): 4.75 x 1.5 x 0.6 in  
(123x 42 x 14 mm)

Cable Length: 3M(10FT)

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

Temperature range: -40°C~60°C (40°F~140°F)

Temperature resolution: 0.1°C, or 0.1°F

Temperature accuracy:  $\pm 1^{\circ}\text{C}$  /  $\pm 2^{\circ}\text{F}$

Waterproof Level for the probe: IP65

Sensor reporting interval: 61 seconds

## **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 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.