

# Wireless Multi-channel Thermometer and Hygrometer Sensor

**Model: WH31**

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# **1. Introduction**

Thanks for purchasing this WH31 wireless thermometer and hygrometer sensor. This device measures temperature and humidity and supports up to 8 channels(one unit for one channel, optional sensors sold separately). The data can be streamed by GW1000 Wi-Fi Gateway(sold separately) and can be viewed on our WS View mobile application after the Wi-Fi configuration done.

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 and

Humidity sensor  
One User Manual

### 3. Overview



Figure 1: Multi-channel Thermo-Hygro Sensor

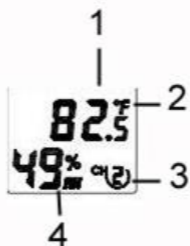


Figure 2: Sensor LCD display

- (1) temperature
- (2) temperature units ( $^{\circ}\text{F}$  vs.  $^{\circ}\text{C}$ )
- (3) channel number
- (4) relative humidity

## 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 3 .

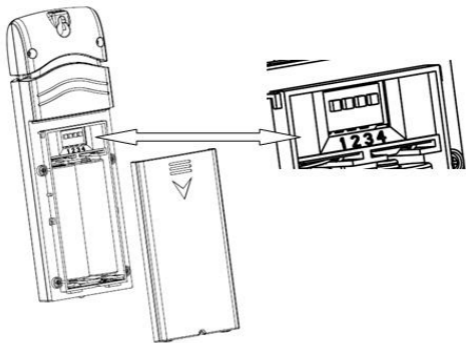


Figure 3: Battery installation

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 4.



Switch in down position.



Switch in up position.

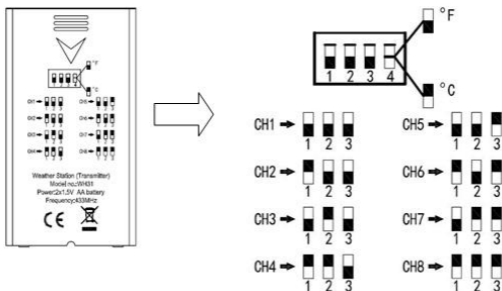


Figure 4: Dip Switch diagram

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

The best mounting location for the indoor sensor is in a location that never receives direct sunlight, not even through windows. Also, do not install in a location where a nearby radiant heat source (radiator, heaters, etc.) will affect it. Direct sunlight and radiant heat sources will result in inaccurate temperature readings.

The unit is weatherproof, but besides heeding the placement instructions above, you should also attempt to mount the unit under cover (eave or awning or similar).

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 5, or



- Hang the remote sensor using a string, as shown in right side of figure 5.

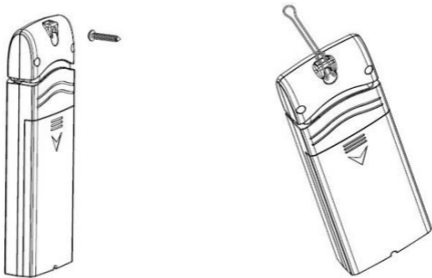


Figure 5: Indoor sensor mounting

**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. Setup Guide (using with Wi-Fi gateway)**

If you want to view the multi channel sensor data on your mobile application, you need to pair this device with our GW1000 Wi-Fi Gateway(sold separately).

### **6.1 Pair with Gateway**

If the GW1000 has been in operation, and you have never had any WH31 multi-channel temperature and humidity sensor(s) setup before, just power up the sensor(s) and GW1000 will pick multi-channel temperature and humidity data automatically.

If a WH31 sensor has been hooked on GW1000 before, and you have a new WH31 sensor to replace the old one, unplug GW1000 from USB socket and power up again, then the new sensor will be learned and old sensor will be erased.

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

For this part, please refer to the manual of the GW1000 Wi-Fi gateway.

Any question, please contact the customer service.

## **7. View Online Data on WS View**

When the Wi-Fi configuration is done, you can view the local data of your multi temperature and humidity sensor(s) on the WS View application.

<b>Back</b>	Live Data GW1000B-WIFI4716	<b>More</b>
CH1 Temperature	27.2 °C	CH1 Humidity 58 %
CH2 Temperature	29.2 °C	CH2 Humidity 54 %
CH3 Temperature	29.2 °C	CH3 Humidity 55 %
CH4 Temperature	29.3 °C	CH4 Humidity 53 %
CH5 Temperature	29.4 °C	CH5 Humidity 54 %
CH6 Temperature	29.2 °C	CH6 Humidity 54 %
CH7 Temperature	29.2 °C	CH7 Humidity 53 %
CH8 Temperature	29.4 °C	CH8 Humidity 53 %
Firmware Version		

## 8. Specification

Power: 2 AA batteries(not included)

Sensor Size: 123x42x14mm

Frequency: 915/868/433Mhz(optional)

Temperature range: -10°C – 60°C (14°F - 140°F)

Temperature resolution: 0.1°C, or 0.1°F

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

Humidity range: 10% ~ 99%

Humidity resolution: 1%

Humidity accuracy:  $\pm 5\%$

Sensor reporting interval: 48 seconds

Note: A low battery icon will display on the APP to indicate the battery status of the sensor(s).

## **9.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.