




# Indoor Temperature/Humidity Sensor for HP2550/3500 Operation Manual

## Model: WN32P

If you need more than one such sensor, please check on WN31 ( the multichannel general purpose temperature/humidity sensor, 8 such sensor can be supported at most). This WN32P sensor is a dedicated indoor temperature/humidity with barometer for HP2550/HP3500 console use.

Model	WN31	WN32	WN32P
			
Name	Multi-Channel temperature and humidity sensor	Outdoor temperature and humidity sensor unit for GW1102	Indoor sensor unit(temp/humidity/pressure) for HP2550/3500
Temperature & Humidity	Yes	Yes	Yes
Barometer	No	No	Yes
Protection Rating	IP44	IP44	IP44
Sensor ID Name	Multi-Channel T&H	T&H	T&HP



- \* 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 fürZukunftsbezug
- \* Si prega di scansionare il codice QR perleggi il manuale italiano e conservalo perReferenza futura

## Instruction manuals

<https://s.ecowitt.com/7XJM6A>



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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)**

# Table of Contents

<b>1 UNPACKING</b> .....	<b>4</b>
<b>2 OVERVIEW</b> .....	<b>6</b>
2.1 INDOOR SENSOR .....	6
2.2 FEATURES .....	7
<b>3 SET UP GUIDE</b> .....	<b>10</b>
3.1 INDOOR SENSOR SET UP .....	10
<i>3.1.1 Sensor Placement</i> .....	12
<b>4 SPECIFICATIONS</b> .....	<b>15</b>
<b>5 VIEW LIVE AND ONLINE DATA WITH HP2551</b> .....	<b>17</b>
<b>6 WARRANTY INFORMATION</b> .....	<b>20</b>

# 1 Unpacking

Open your weather station box and inspect that the contents are intact (nothing broken) and complete (nothing missing). Inside you should find the following:

QT	Item Description
1	Indoor sensor unit(temp/humidity/pressure)
1	User manual (this manual)

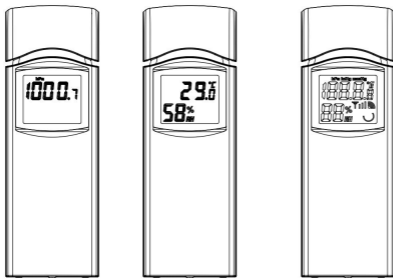
**Table 1: Package content**

If components are missing from the package, or broken, please contact customer service to resolve the issue.

**Note:** Batteries for the outdoor sensor package are **not included**. You will need 2 AA size batteries, alkaline or Lithium batteries (Lithium recommended for colder climates).

## 2 Overview

### 2.1 Indoor sensor



**Figure 1: Indoor sensor 2 display variations**

The indoor sensor will display indoor temperature, humidity and barometric pressure alternately.

## 2.2 Features

- Indoor temperature, humidity
- Absolute and Relative barometric pressure
- Work with HP2551/2552/2553/3500/3501 only

**Note:** The optional device can be purchased separately. If more info needed, please visit our website: <http://www.ecowitt.com>. Make sure to select the model of the units with the same RF frequency as your gateway (the frequency is different for various countries because of regulations).



**Note:** To pair the optional sensors with the HP2551 console, please follow the below operations:

1. Place the optional sensor next to the console(keep 5-10ft away from each other).
2. Install batteries on the sensor and wait for 1-2 minutes.
3. Check whether the console will pick up the sensor data automatically and display it on the screen
4. If not, press the gear icon and go to Setup page - find More and enter its Setup page - find Sensors ID and enter its Setup page.
5. In the Sensors ID Setup page, find the sensor you want to pair - select the ID number box and register it.

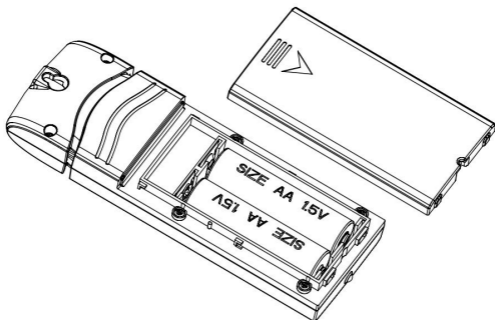
6. Once successfully, you may return to the main interface to check the data.
7. If you know exactly the sensor ID, and want console to pair that sensor only, you may enter the sensor ID, and save the change to make it effect.

## 3 Set up Guide

### 3.1 Indoor Sensor Set Up

**Note:** To avoid permanent damage, please take note of the battery polarity before inserting the batteries. Looking at Figure 12 from left to right the left-most (or bottom) battery is to be installed with its + terminal pointing down, and the other battery with its + terminal pointing up.

Remove the battery door on the back of the sensor by sliding it in the direction of the arrow. Insert two AA batteries as described and put compartment door back and slide it in the opposite direction to lock.



**Figure 2: Indoor sensor battery(not included)  
installation**

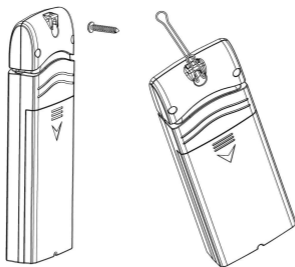
### **3.1.1 Sensor Placement**

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 sensor is meant to provide indoor conditions for display on the console, but if you would rather have a second source for outdoor conditions instead, you can mount this unit outside. 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 3
- Hang the remote sensor using a string, as shown in right side of Figure 16



**Figure 3: 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).

## 4 Specifications

Model: WN32P

Name:Indoor sensor unit

(temp/humidity/ pressure )

Dimensions: 122.3×42×18(mm)

Screen Size: 21.8×26.1(mm)

Weight: 45(g)

Material of Plastic Casing: ABS

Material of Screen: TN-LCD

Temperature Metering Range: -40°C to 60°C(-40°F to 140°F)

Temperature Metering Accuracy:  $\pm 0.2^{\circ}\text{C}(\pm 0.4^{\circ}\text{F})$

Temperature Metering Resolution:  $0.1^{\circ}\text{C}(0.2^{\circ}\text{F})$

Humidity Metering Range: 1% to 99%

Humidity Metering Accuracy:  $\pm 2\%$

Humidity Metering Resolution: 0.01



Barometric Pressure Metering range: 300 to 1100 hPa (8.85 to 32.5 inHg)

Barometric Pressure Metering accuracy:

$\pm 1.5$ hpa(absolute pressure );  $\pm 2$ hpa(relative pressure)

Barometric Pressure Metering resolution: 0.1 hPa (0.01 inHg)

Reading Update Interval: About 60 seconds

RF Connection Frequency: 920/915/868/433MHz (depending on local regulations)

RF Wireless Range: Over 100 meters (in open areas)

Operating Temperature Range of LCD Screen:  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$  ( $14^{\circ}\text{F}$  to  $122^{\circ}\text{F}$ )

Operating Temperature Range:  $-40^{\circ}\text{C}$  to  $60^{\circ}\text{C}$  ( $-40^{\circ}\text{F}$  to  $140^{\circ}\text{F}$ )

Power Supply: 2 AA Batteries (not included)

Battery Life: 1 Year

## 5 View Live and online Data with HP2551



**Figure 4: Indoor sensor reading on dashboard**

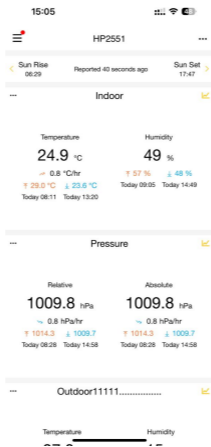
Usually the HP2551 will automatically search for WN32P's signal and receive data to display on the dashboard Figure 4 when WN32P is powered on. Otherwise you will need to manually enter the ID from the device(the ID

label on the back cover of the WN32P) on the sensor ID page Figure 5.

Sensor	Signal	ID	CH	Sensor	Signal	ID	CH	Sensor	Signal	ID
WH65/69	↓	d9	1	PM2.5	↓	c4ad	1	Soil	↓	2101c
T&HP	↓	9b	2	PM2.5	---	---	2	Soil	↓	c521
T&H	Disable	---	3	PM2.5	---	---	3	Soil	↓	c51a
WS80	↑	2ee0	4	PM2.5	---	---	4	Soil	↑	d4c6e
WH40	↓	c49c	1	T&H	↑	b9	5	Soil	↓	c550
WH57	---	---	2	T&H	↓	9e	6	Soil	↓	c553
WH45	---	---	3	T&H	---	---	7	Soil	↓	c516
WS68	---	---	4	T&H	↓	bd	8	Soil	↓	c4bc
WS90	↓	299d	5	T&H	↓	d2	1	WH55	---	---
			6	T&H	---	---	2	WH55	---	---
			7	T&H	---	19	3	WH55	---	---
			8	T&H	↓	af	4	WH55	↑	d4a7

**Figure 5: Indoor sensor reading on page sensor ID**

WN32P is the “T&HP” sensor, the “T&H” means temperature and humidity, and the “P” means pressure.



**Figure 6: Indoor sensor reading on ecowitt APP**

When the Wi-Fi configuration is done, you can view the live data of your sensor on the web page (ecowitt.net) or WS View Plus/ Ecowitt App.

## **6 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.