# Leaf Wetness Sensor Model: WN35

### Contents

1. Getting Started	4
1.1 Parts List	4
2. Overview	5
2.1 Features	6
3. Setup Guide	9
3.1 Installing battery	9
4. Sensor Placement	12
5.Wi-Fi Configuration with gateway	20
5.1 Pair with Gateway	20
5.2 Wi-Fi Connection for the Gateway	23
6. View Online Data with WS View Plus/ Ecowitt APP	23
7. Set Email Alerts	28
8.Specification	30
9. Warranty Information	31



- \*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://www.ecowitt.com/support/download/122



# 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 Leaf Wetness Sensor

One Hose clamp for mounting to crossbar (crossbar not included) One User Manual

### 2. Overview



### Figure 1: Leaf Wetness Sensor

### 2.1 Features

### Leaf Wetness Sensor

- This sensor can be simulated as a leaf and detects the moisture level of the nearby leaf or plant.
- Long wireless range up to 300 feet (100 meters) in open areas
- Transmits readings every 79.5 seconds
- LCD screen display for current reading.

# When paired with a GW1000/GW1100 Wi-Fi Gateway:

- View leaf wetness reading on the Live Data page of the WS View Plus/ Ecowitt APP (requires the gateway and your phone is 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 WS View Plus/ Ecowitt APP

### When paired with a Weather Station

### Console (HP2551/HP3500/HP3501):

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

# When uploaded to Ecowitt Weather Server:

- View current moisture 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

# 3. Setup Guide

### 3.1 Installing battery

1. Remove the battery door on the back of the transmitter by removing of the screw, as shown in Figure 2:( make sure the rubber seal is intact when mount or dismount the battery door )



### Figure 2: Battery installation

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

The moisture reading will display on the LCD screen immediately and normally update every 79.5 seconds (the sensor transmission update period).

Note: If no reading on the screen, make sure the battery is inserted the correct way or a proper reset happens. Do not install the battery backwards. You can permanently damage the sensor.

4. Close the battery door by installing the screw.

### 4. Sensor Placement

This device can be mounted to a crossbar (compatible diameter range: 19~29mm; not included) with the included hose clamp. If you need the crossbar and installation set, please contact us at support@ecowitt.com or support.eu@ecowitt.net(EU/UK)



To mount the unit on a vertical pole (compatible diameter range: 25.4~50.8mm; not included):

• Install the U-bolts set and crossbar (optional) on a vertical pole as shown on figure 2-1:





### Figure 2-1: Crossbar mounting

When tight the nut: hand turn the nut until no further turns to be turned, then use a wrench to turn  $1/3 \sim 1/2$ turn and no more.

Mount the unit to the crossbar (not included) with the included hose clamp:



Figure 2-2: Sensor mounting to crossbar

Orientation or Tilt: Make sure the sensing side (PCB grid visible) is facing upwards, and adjust the sensor to have the sensor leveled same as the leaf to be monitored. Usually it should be in the range between 0 - 30 degrees. And this will simulate the real wetness condition matched against leaves.

The optimal sensor placement should be with 60 degrees tilt with north facing to simulate the condition in most ideal way: https://cdnsciencepub.com/doi/10.4141/cj ps78-027

# 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 GW1000/GW1100 Wi-Fi Gateway or HP2551/HP3500/HP3501 Weather Station (sold separately).

### 5.1 Pair with Gateway

If the GW1000/GW1100 has been in operation, and you have never had any WN35 sensor setup before, just power up the sensor and GW1000/GW1100 will

pick the sensor data automatically.

Note: The gateway can support max 8 WN35 sensors. Each new sensor will be recognized as a new channel according to the Power-on sequence. You may attach a label of the channel on each sensor for distinction. The channel name can be edited both on the app and ecowitt.net (will not sync, and it should be edited on your device setup page on ecowitt.net separately).

If you want to use a new WN35 sensor to

replace the old one (already configured on certain channel), please try the following:

1. Open the Sensor ID page on the WS View Plus/ 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 GW1000/GW1100 Wi-Fi gateway.

# 6. View Online Data with WS View Plus/ Ecowitt APP

When the Wi-Fi configuration is done( to tell the gateway to be hooked to your WiFi network), your sensor data as well as the sensor battery voltage information will be displayed on WS View Plus/ Ecowitt APP at the live data page.

![](_page_24_Figure_0.jpeg)

< D	evice List	Live Data	1	More		
GW1000B-WIFI38B8						
Indoor Temperature Indoor Humidity				dity		
	28.7 °C		69 %			
0	Absolute Pressure		Relative Pressure			
994.6 hPa		i	994.6 hPa			
1	CH1 Leaf		0 %			
GW1000B_V1.6.6						

Note: It requires your phone and the gateway to be in the same network when viewing your sensor live data on the WS View Plus/ Ecowitt APP. Live data is referring to current data received by the gateway. Live data is not stored on WS View Plus/ Ecowitt APP. However data is always pushed and saved on www.ecowitt.net cloud( under your registered account, and data can always be accessed via your browser.)

Detailed operation instructions can be

found on the GW1000/GW1100 manual.

Any question, please feel free to contact our customer service at support@ecowitt.com or 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.

![](_page_28_Picture_0.jpeg)

# 8.Specification

Power: 1x1.5V AA battery(not included) Frequency: 433 / 868 / 915 MHz depending on location (North American: 915 MHz; Europe: 868MHz; Other areas: 433MHz)

Wireless transmitting range: 100M (300feet) Sensor reporting interval: 79.5 seconds Sensing moisture: 0~99%; Accuracy: +-10%

Battery life: 12 months minimum Waterproof level: IP66 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.