



WH51 SOIL MOISTURE SENSOR



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1. Introduction

Mode d'emploi en français

Téléchargez ce manuel d'instructions en français sur aercusinstruments.com/manuals/

Manuale Operativo in italiano

Scarica questo manuale di istruzioni in italiano da aercusinstruments.com/manuals/

Thanks for purchasing this WH51 soil moisture sensor. This device measures soil moisture expressed as a percentage and humidity and operates on one of 8 channels, meaning you can measure eight distinct areas. The data can be viewed on a WeatherMaster HP2550 weather station console or can be streamed by GW1000 Wi-Fi Gateway and can be viewed on the WS View App after configuration.

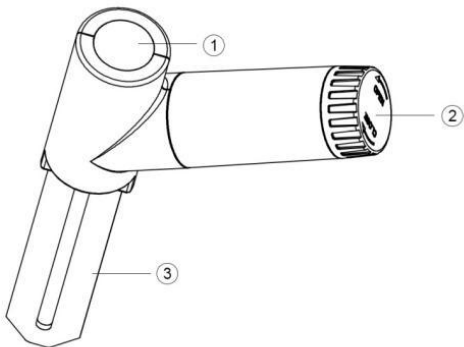


Please read this manual and retain it for future reference.

2. Get Started

One Soil Moisture sensor
One User Manual

3. Overview



- (1) LED indicator (RF Transmission)
- (2) Battery Cap
- (3) Soil Moisture Probe

3.1 Features

When paired with a WeatherMaster

Console:

- View soil moisture data in real-time on the Console
- Up to 8 channels supported.

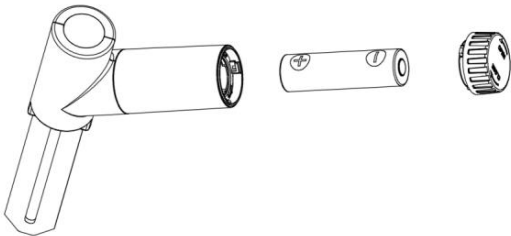
When uploaded to Ecowitt Weather Server:

- View current soil moisture data, history records and graphs on the website
- Set and receive email alerts from the server

When paired with a GW1000 Wi-Fi Gateway:

Advanced Mode: with 0%AD and 100%AD manual calibration of low/high moisture value so that you can get more accurate result for different soil types. This mode can only be activated through WS View app and in live data display mode

4. Setup Guide



1. Open the battery cap of the soil moisture sensor.
2. Insert one AA battery and close battery cap.
3. After inserting the battery, the remote sensor LED indicator will light for 4 seconds, and then flash once per 70 second thereafter. Each time it flashes, the sensor is transmitting data.

4. Before installing the sensor into its permanent location, we would suggest test the sensor in air, and see if moisture reading is 0. Secondly, put the sensor into a cup of water, the sensor should have its reading increased to 90% or above. Once sensor detected a significant data change, sensor will transmit every 10s. Once sensor has been confirmed working correctly, then you can go to next step.
5. Insert the sensor totally into the soil of your desired measurement location. Please do not use excessive force to push the sensor into the soil to avoid damaging it.

5. Connecting to your WeatherMaster

The WH51 sensor does not have its own screen and must be used with a compatible device such as a Weather Master console or other compatible device.

If you have never connected a WH51 to your WeatherMaster HP2550, it should automatically be seen by the console once data is transmitted.

For other devices such as the GW1000, please refer to your manual for those.

Once you have connected to your WeatherMaster, you can view the data using the WS View App.

6. Advanced Mode

The sensor can be calibrated for different soil types. This process requires a GW1000 gateway and instructions can be found with this device.

7. Specification

Power: 1 AA batteries (not included)

Frequency: 915 (AU/NZ), 868 (EU/UK)

Moisture range: -0% to 100%

Moisture resolution: 1%

0%AD setting range: 0-200

100%AD setting range: 0%AD+10-1000

Sensor reporting interval: 70 seconds

IP66 Waterproof

8. Contact Information

We warrant our products to be free of defects in components and workmanship, under normal use and service, for one year from the date of original purchase. For product support and warranty claims please contact the following:

Purchased in UK/EU: Please contact our local distributor **Greenfrog Scientific** greenfrogsscientific.co.uk and their team will be happy to help.

Purchased in AUSTRALIA: Please contact our local distributor **Monax Test & Weather** monaxtestandweather.com.au and their team will be happy to help.

Purchased in NEW ZEALAND: Please contact our local distributor **Scientific Sales**



scientificsales.co.nz and their team will be happy to help.

For all others, please contact the retailer who sold you this item.

This handbook may contain mistakes and printing errors. The information in this handbook is regularly checked and corrections made in the next issue. We accept no liability for technical mistakes or printing errors - or their consequences.

Manual version: 2021/1.1

EU DECLARATION OF CONFORMITY

Hereby, Aercus Instruments, declares that this Wireless Weather Station (Model: WH51) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the signed and dated Declaration of Conformity is available on request from contact@aercusinstruments.com.



**COUNTRIES RTTE
APPROVAL COMPLIED**

All EU countries

DECLARATION DE CONFORMITE UE

Par la présente, Aercus Instruments, déclare que cette station météo sans fil (Modèle : WH51) est conforme aux exigences essentielles et autres dispositions pertinentes de la Directive 1999/5/CE. Une copie de la Déclaration de conformité datée et signée est disponible sur simple demande auprès de contact@aercusinstruments.com.



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EXIGENCES NATIONALES RTTE**

Tous les pays de l'Union
européenne

DICHIARAZIONE DI CONFORMITÀ UE

Con la presente, Aercus Instruments dichiara che questa Stazione Meteorologica Wireless (modello: WH51) è conforme ai requisiti essenziali e alle altre disposizioni pertinenti della Direttiva 1999/5 / CE. Una copia della Dichiarazione di Conformità, firmata e datata, è disponibile su richiesta all'indirizzo contact@aercusinstruments.com.



PAESI RTTE DI COMPLETATA OMOLOGAZIONE

Tutti i paesi dell'UE

UK DECLARATION OF CONFORMITY

Hereby, Aercus Instruments, declares that this Wireless Weather Station (Model: WH51) is in compliance with the essential requirements and other relevant provisions of the Electromagnetic Compatibility Regulations 2016. A copy of the signed and dated Declaration of Conformity is available on request from contact@aercusinstruments.com.



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