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EMOS ESW5002

Emos ESW5002 Wireless Temperature and Humidity Sensor Instruction Manual

Model: ESW5002 (Manufacturer Reference: ESW9010S)

1. PRODUCT OVERVIEW

The Emos ESW5002 is a wireless temperature and humidity sensor designed to extend the capabilities of your compatible Emos weather station. It allows you to monitor environmental conditions in multiple locations, both indoors and outdoors, providing data for accurate weather forecasting and home climate management.

Key Features:

- Comprehensive Monitoring:** Track temperature and humidity in various indoor and outdoor areas.
- Extended Wireless Range:** Maintains a stable connection up to 100 meters from the main weather station.
- Multi-Sensor Support:** Connect up to 3 sensors to a single weather station for broader coverage.
- Indoor/Outdoor Versatility:** Suitable for both internal and external environments.



Image 1.1: Multi-Sensor Connectivity. This diagram illustrates how multiple Emos wireless sensors can be deployed throughout a home to monitor various areas, enhancing the weather station's data collection.

2. SETUP INSTRUCTIONS

Follow these steps to set up your Emos ESW5002 wireless sensor.

2.1. Battery Installation

1. Locate the battery compartment on the back of the sensor.
2. Open the battery compartment cover.
3. Insert two (2) AAA/Micro batteries (not included), ensuring correct polarity (+/-).
4. Close the battery compartment cover securely.



Image 2.1: Battery Information. This image shows the Emos wireless sensor, indicating a long battery life. While the image text suggests AA batteries, the product features specify 2x AAA/Micro batteries (not included) are required.

2.2. Pairing with Weather Station

The sensor automatically attempts to pair with your Emos weather station upon battery installation. Ensure your weather station is powered on and within range.

1. Place the sensor near your Emos weather station.
2. Once batteries are inserted, the sensor will begin transmitting data.
3. Refer to your weather station's manual for specific instructions on adding or searching for new sensors. The weather station's self-learning function will collect data over approximately 2 weeks to optimize forecasts.

2.3. Sensor Placement

Optimal placement is crucial for accurate readings and stable connection.

- **Range:** The sensor can be placed up to 100 meters (328 feet) from the weather station. However, local conditions such as walls, electronic interference, and other obstacles can affect this range.
- **Outdoor Placement:** For outdoor use, choose a location that is sheltered from direct sunlight and heavy precipitation to ensure accuracy and prolong sensor life. The sensor is water-resistant (IPX4 rated).
- **Indoor Placement:** For indoor use, place the sensor in the desired room away from direct heat sources (e.g., radiators, direct sunlight) or strong drafts (e.g., open windows, air conditioning vents) for accurate temperature and humidity readings.



Image 2.2: Water-Resistant Sensor. This image displays the Emos wireless sensor, highlighting its dimensions (113mm x 60mm) and IPX4 water resistance rating, making it suitable for outdoor use.

3. OPERATING INSTRUCTIONS

Once paired, the sensor continuously transmits temperature and humidity data to your Emos weather station.

- **Data Display:** The temperature and humidity readings from the sensor will be displayed on your main Emos weather station.
- **Switching Between Sensors:** If you have multiple sensors connected, your weather station's display typically allows you to cycle through the readings from each sensor. Refer to your weather station's manual for specific button functions to switch between sensor channels.
- **Self-Learning Function:** The weather station utilizes a self-learning function that gathers data from the sensor over approximately two weeks to provide more accurate weather forecasts.



Image 3.1: Weather Station Display. This image shows a typical Emos weather station display, illustrating how temperature and humidity data from connected sensors are presented.

4. MAINTENANCE

Proper maintenance ensures the longevity and accuracy of your sensor.

- **Battery Replacement:** Replace batteries when the low battery indicator appears on your weather station's display for the

corresponding sensor, or if the sensor stops transmitting data. Always use fresh AAA/Micro batteries.

- Cleaning:** Wipe the sensor's exterior with a soft, damp cloth. Do not use abrasive cleaners or immerse the sensor in water.
- Environmental Protection:** While the sensor is water-resistant (IPX4), avoid exposing it to extreme weather conditions such as heavy downpours, direct prolonged sunlight, or freezing temperatures for extended periods to maximize its lifespan.

5. TROUBLESHOOTING

If you encounter issues with your Emos ESW5002 sensor, refer to the following common solutions.

Problem	Possible Cause	Solution
No readings on weather station.	Batteries are dead or incorrectly inserted. Sensor is out of range. Interference from other electronic devices. Sensor not paired correctly.	Replace batteries, ensuring correct polarity. Move sensor closer to the weather station. Relocate sensor or weather station away from potential interference sources. Re-initiate pairing process (refer to weather station manual).
Inaccurate temperature/humidity readings.	Sensor exposed to direct sunlight, heat sources, or drafts. Sensor is wet or dirty.	Relocate sensor to a more stable environment. Clean the sensor and ensure it is dry.
Intermittent connection.	Weak signal due to distance or obstacles. Low battery.	Move sensor closer or adjust its position. Replace batteries.

6. SPECIFICATIONS

Feature	Detail
Model Number	ESW5002 (Manufacturer Ref: ESW9010S)
Brand	EMOS
Dimensions (Sensor)	Approximately 12.6 x 6.8 x 4.5 cm (4.96 x 2.68 x 1.77 inches)
Weight	120 grams (0.26 lbs)
Power Source	Battery powered (2 x AAA/Micro batteries, not included)
Connectivity Technology	Wireless (Radio Frequency - RF, 433MHz)
Wireless Range	Up to 100 meters (328 feet) in open air
Special Features	Wireless connection, self-learning function, supports up to 3 additional sensors, water-resistant (IPX4)
Specific Use	Temperature and Humidity monitoring
Temperature Accuracy	±2 °C
Upper Rated Temperature	38 Degrees Celsius

7. WARRANTY AND SUPPORT

Specific warranty details for the Emos ESW5002 sensor are not provided in the product information. For warranty claims or technical support, please contact your retailer or the manufacturer directly.

You can often find contact information on the manufacturer's official website or on the product packaging.

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