

AcuRite B07VQPWW3Q

AcuRite Atlas Weather Sensor (Model B07VQPWW3Q)

INSTRUCTION MANUAL

Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your AcuRite Atlas Weather Sensor. Please read these instructions thoroughly before setting up your device to ensure optimal performance and longevity.

The AcuRite Atlas Weather Sensor is an advanced device designed to provide comprehensive environmental data, including temperature, humidity, wind speed, wind direction, rainfall, UV index, and light intensity. It is compatible with the Atlas HD touchscreen display (model 06061) and AcuRite Access (model 09155) for remote monitoring (sold separately).

Product Overview

The AcuRite Atlas Weather Sensor is an integrated unit featuring multiple sensors for accurate weather data collection. Key components include:

- Wind Vane: Measures wind direction.
- Anemometer (Wind Cups): Measures wind speed.
- Rain Collector: Measures rainfall.
- Temperature and Humidity Sensors: Located within the aspirated shield.
- Solar Panels: Power the internal aspirating fan and contribute to battery charging.
- UV and Light Intensity Sensors.
- Battery Compartment.



Figure 1: Front view of the AcuRite Atlas Weather Sensor, showing the wind vane, anemometer, rain collector, and solar panels.

Setup

1. Battery Installation

The AcuRite Atlas Weather Sensor requires 4 AA batteries (not included). For best performance, use lithium batteries in environments below -4°F (-20°C) and alkaline batteries for temperatures above that. Ensure batteries are inserted with correct polarity.

1. Locate the battery compartment on the underside of the sensor.
2. Remove the battery compartment cover.
3. Insert 4 AA batteries, observing the polarity markings (+/-).
4. Replace the battery compartment cover securely.

2. Mounting Instructions

Proper placement is crucial for accurate readings. The sensor includes a bracket for wall/post mounting and features an integrated tightening knob for pole mounting.

- **Location:** Choose an open location with no obstructions above or around the sensor to ensure accurate wind, rain, and light readings. Avoid placing near large metal objects, electronic devices, or areas with significant temperature fluctuations (e.g., exhaust vents, air conditioning units).
- **Height:** Mount the sensor at least 5 feet (1.5 meters) off the ground for optimal wind and rain collection.
- **Orientation:** Ensure the solar panels face directly south for maximum sun exposure throughout the day. This powers the internal aspirating fan, which is vital for accurate temperature and humidity readings.



Figure 2: The AcuRite Atlas Weather Sensor mounted on a pole in an open area, demonstrating ideal placement for unobstructed readings.



Figure 3: The AcuRite Atlas Weather Sensor positioned to maximize solar panel exposure, crucial for powering the internal fan.

Operating the Sensor

Once installed and powered, the AcuRite Atlas Weather Sensor will begin collecting data. It transmits data every 10 seconds.

1. Connecting to a Display or AcuRite Access

The Atlas sensor communicates wirelessly with compatible AcuRite displays or the AcuRite Access device (sold separately) using RF (433 MHz) technology. Refer to the instruction manual of your specific display or AcuRite Access for pairing instructions.

- Ensure your display or AcuRite Access is powered on and within range of the sensor (typically up to 330 feet / 100 meters, line of sight).
- Follow the pairing procedure outlined in your display's manual to establish a connection.
- Once connected, weather data will be transmitted and displayed.

2. Data Measurements

The sensor measures and transmits the following data:

- **Temperature:** Accuracy within 1°F (0.5°C) due to the aspirating fan.
- **Humidity:** Accuracy within 2% RH.
- **Wind Speed:** Measured by the anemometer.
- **Wind Direction:** Measured by the wind vane.
- **Rainfall:** Collected by the tipping bucket mechanism.
- **UV Index:** Measures ultraviolet radiation levels.
- **Light Intensity:** Measures ambient light levels.

The three solar panels maximize sun exposure to power an internal aspirating fan, which draws ambient air through the temperature and humidity sensors, providing more accurate readings by reducing the effects of radiant heat.

Maintenance

Regular maintenance ensures the continued accuracy and performance of your AcuRite Atlas Weather Sensor.

1. Cleaning the Rain Collector

Periodically inspect and clean the rain collector funnel to remove leaves, insects, or other debris that could obstruct the tipping bucket mechanism and affect rainfall accuracy.

- Remove the top cover of the rain collector.
- Gently clear any debris from the funnel and the tipping bucket.
- Ensure the tipping bucket moves freely.
- Replace the cover securely.

2. Checking Wind Cups and Vane

Ensure the wind cups and wind vane rotate freely without obstruction. Remove any spiderwebs, leaves, or other debris that may impede their movement.

3. Battery Replacement

Replace batteries annually or when indicated by your display unit. Always replace all 4 AA batteries at the same time with fresh batteries of the same type.

4. Solar Panel Cleaning

Keep the solar panels clean to ensure they can efficiently power the internal aspirating fan. Wipe them gently with a soft, damp cloth if dirt or grime accumulates.

Troubleshooting

If you experience issues with your AcuRite Atlas Weather Sensor, consult the following common troubleshooting steps:

- **No Data Transmission:**
 - Ensure batteries are fresh and correctly installed in the sensor.
 - Verify the sensor is within range of your display or AcuRite Access.
 - Check for sources of interference (e.g., large metal objects, thick walls, other RF devices).
 - Perform a hard reset: Remove batteries from both the sensor and display, wait 1 minute, then reinsert batteries into the sensor first, followed by the display.

- **Inaccurate Temperature/Humidity:**
 - Confirm the solar panels are clean and facing south to power the aspirating fan.
 - Ensure the sensor is not exposed to direct sunlight on the temperature/humidity housing (beyond the solar panels) or near heat sources.
 - Verify the aspirating fan is operating (it should run during daylight hours).
- **Inaccurate Wind Readings:**
 - Check that the wind cups and wind vane rotate freely without obstruction.
 - Ensure the sensor is mounted in an open area, free from buildings, trees, or other objects that could block wind flow.
- **Inaccurate Rainfall Readings:**
 - Clean the rain collector funnel and ensure the tipping bucket mechanism is free of debris and moves smoothly.
 - Verify the sensor is level to ensure accurate tipping bucket operation.

Specifications

Feature	Detail
Brand	AcuRite
Model Number	B07VQPWW3Q
Recommended Uses	Rainfall, Temperature, Humidity, Wind Speed, Wind Direction, UV Index, Light Intensity
Power Source	Solar Powered (for aspirating fan), 4 AA batteries (for sensor operation)
Special Feature	Multi-Parameter Measurement, Aspirated Fan for Temperature/Humidity Accuracy
Material	Plastic
Connectivity Technology	RF (433 MHz)
Color	White
Data Transmission Interval	Every 10 seconds

Warranty Information

AcuRite products are designed for reliability and performance. For specific warranty details, including coverage period and terms, please refer to the warranty card included with your product or visit the official AcuRite website. Keep your purchase receipt as proof of purchase for any warranty claims.

Customer Support

For further assistance, technical support, or to purchase replacement parts, please contact AcuRite Customer Support. You can typically find contact information on the AcuRite website or within the product packaging.

Online Resources: Visit the [AcuRite Store on Amazon](#) for product information and accessories.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question