



METER

ATMOS 51

Variance Bowen Ratio (VBR) ET Sensor



ATMOS 51 QUICK START

18594-00
03.2026

Preparation

Verify that all ATMOS 51 components arrived intact. Installation will require a 13-mm (1/2-in) and 8-mm (5/16-in) wrench and a secure mounting location. METER recommends a meteorological stand, pole in cement, or tripod with a 31.8- to 50.8-mm (1.25- to 2-in) diameter.

Set up and test the system (sensors and data loggers) in a lab or office. Ensure the data loggers are using up-to-date firmware and software. Verify all sensors read within expected ranges.

Before beginning installation, consider the surroundings and avoid obstructions. Many installations require the ATMOS 51 to be mounted 2 m above the canopy, but this can be adjusted as needed.

Please read the complete ATMOS 51 User Manual at metergroup.com. All products have a 30-day satisfaction guarantee.

Connecting

Plug into Data Acquisition System

Connect the stereo plug connector into any METER data logger and configure it to read the ATMOS 51 (refer to [ATMOS 51 Gen 2 User Manual](#)). Select a nonzero measurement interval to ensure data are being logged.

To connect to a non-METER data logger, see the ATMOS 51 Integrator Guide at metergroup.com.

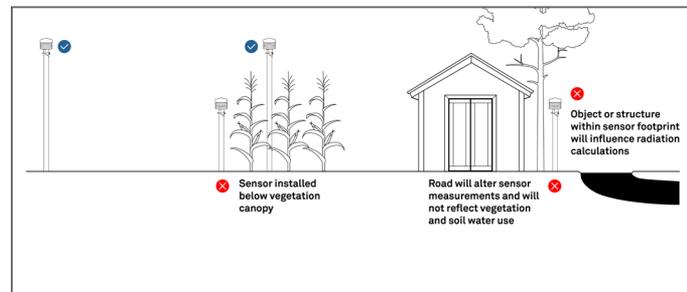
Verify Readings

Use the scan function in the software to show a list of readings. Verify these readings are within expected ranges.

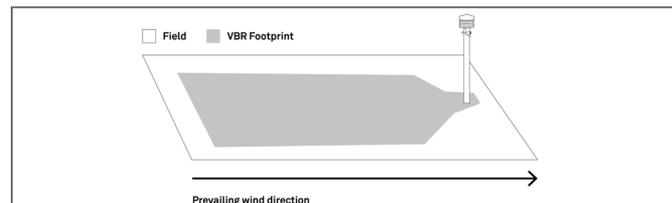
Installation

1. Mount in Location

The ATMOS 51 should be mounted at a height of 1.5 to 2 m above the top of the vegetation and 150 to 200 m from any edge or infrastructure.



If this isn't possible, determine the direction of prevailing wind and make sure that direction has at least 150 to 200 m of fetch.

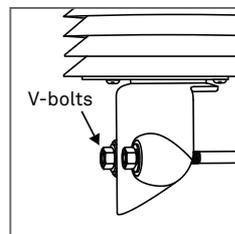


2. Mount and Secure Device

Place the top of the post under the mounting shelf.

Tighten the V-bolt nuts by hand until hand-tight, and then tighten with the 13-mm wrench (included).

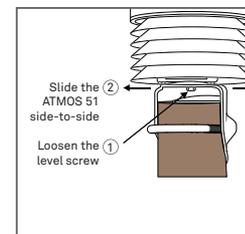
⚠ CAUTION
Do not overtighten the bolt.



3. Level the Device

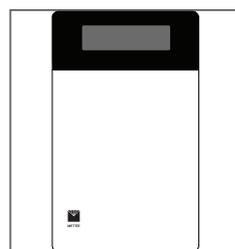
Use the bubble level underneath the ATMOS 51.

The ATMOS 51 angle can be adjusted by loosening the leveling screw attached to the bottom with the 8-mm wrench (included), moving the unit side to side as needed to level, and then retightening the screw. Do not over-tighten.



4. Plug Sensor In and Configure Logger

Plug stereo plug connector into the data logger. Use data logger software to apply appropriate settings to the sensors plugged into each data logger port.



⚠ ATTENTION

For best results, use the latest versions of METER software and firmware for the computer or mobile device, products, and sensors. Please use the software Help menu to find updates. Consult the sensor user manual for more troubleshooting tips.

