



METER

ATMOS 41W

ALL-IN-ONE WIRELESS WEATHER STATION



ATMOS 41W QUICK START

Introduction

Prior to field installation, please verify all ATMOS 41W components arrived intact. Please carefully follow [Step 1](#) and [Step 2](#) before taking the device into the field for installation. Read the complete user manual at meter.ly/atmos41W-support.

Verify Cellular Signal

When evaluating where to install the ATMOS 41W, METER recommends verifying adequate cellular signal ([Step 3C](#)) for the chosen location. The cellular signal must be strong enough for data to be transmitted to ZENTRA Cloud.

Data Access

ATMOS 41W data are accessed online via ZENTRA Cloud, a web application used to download, view, and share data as well as to change configurations.

The ATMOS 41W requires a paid subscription to use ZENTRA Cloud. See [Step 2](#) to learn how to add the ATMOS 41W to ZENTRA Cloud.

Save the orange device subscription card included with the ATMOS 41W in a safe location. This card contains the following information for the subscription:

- Device serial number
- Password
- Server name where sensor data is stored.

ATTENTION

For best results, use the latest versions of ZENTRA Utility Mobile software and ATMOS 41W firmware.

ZENTRA Utility Mobile will prompt with available updates for software and ATMOS 41W firmware. Consult the [ATMOS 41W User Manual](#) (meter.ly/atmos41W-support) for more troubleshooting tips.

Device Subscription

Device Serial Number: A4100000

Device Password: password

Server: zentracloud.com

Use this unique Device Serial Number and Device Password to subscribe to this device on zentracloud.com

Keep this information in a safe place.

Do not leave it inside the device case.

1. Power On and Connect With ZENTRA Utility Mobile

Prior to field installation, please do the following:

A. Install ZENTRA Utility Mobile

On a smartphone or tablet, use the appropriate QR code to install ZENTRA Utility Mobile.

If prompted, follow the instructions to update software or firmware.

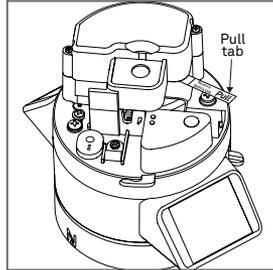


C. Power Up Device

Pull and remove the clear plastic pull tab to allow contact with installed batteries.

Status lights on blue overlay will blink, indicating power is available.

NOTE: The status lights will settle to a short, single green blink every 5 s, signaling the data acquisition component is ready for use.

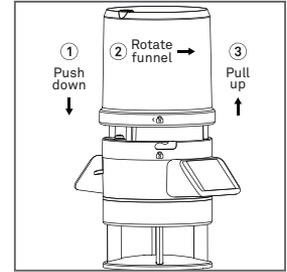


B. Remove Rain Funnel

Press and twist rain funnel counter-clockwise to unlock from the base.

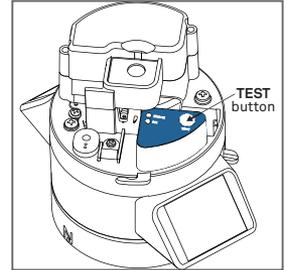
Carefully remove funnel.

⚠ CAUTION
Do not disconnect the attached wire.



D. Test Bluetooth® Module

With ZENTRA Utility Mobile app open and ATMOS 41W rain funnel removed, push the **TEST** button on the blue overlay.



E. Connect the ATMOS 41W

On the **Connect** screen in the app.

Select the desired device to connect.

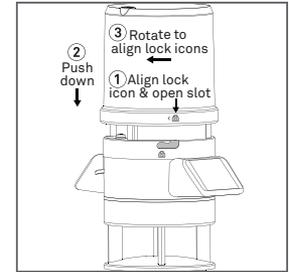
Bluetooth connection will be established and ATMOS 41W and sensor information will be retrieved.



F. Replace Rain Funnel

Line up the padlocks, press down, and twist rain funnel clockwise until it locks.

NOTE: Be sure the cable and connector are clear of the internal spring and are not pinched before closing.



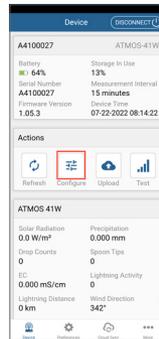
G. Configure ATMOS 41W

Select **Configure**.

Review the cellular data upload setting and the sensor measurement interval.

Make changes if desired.

Save changes.



H. Verify Readings

Select **Refresh** in the app to show a list of readings.

Verify that these readings are within expected ranges.

The ATMOS 41W is now ready for use.



2. Add ATMOS 41W to ZENTRA Cloud

Prior to field installation, please do the following. ZENTRA Cloud is best viewed on a laptop or tablet:

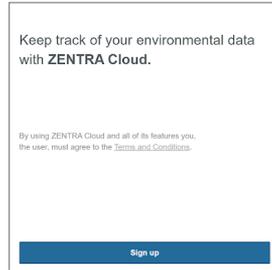
A. Create User Account

Using a web browser, navigate to the server listed on the orange Device Subscription card.

Select the **Sign Up** button.

Enter **valid email address** and user information.

Accept **Terms and Conditions**.



Keep track of your environmental data with **ZENTRA Cloud**.

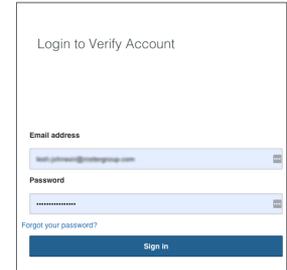
By using ZENTRA Cloud and all of its features you, the user, must agree to the [Terms and Conditions](#).

Sign up

B. Verify User Account

Select the **Sign Up** button (generates email confirmation).

Click on the hyperlink in the confirmation email to verify the user account.



Login to Verify Account

Email address

Password

[Forgot your password?](#)

Sign in

C. Create Organization

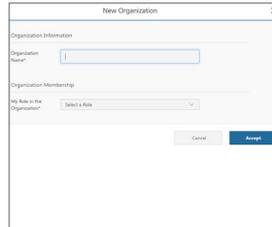
Log into ZENTRA Cloud.

Select **Create Organization**.

Enter **Organization name**.

Enter **Role**.

Select **Accept**.



New Organization

Organization Information

Organization Name:

Organization Membership

My Role in the Organization:

Cancel **Accept**

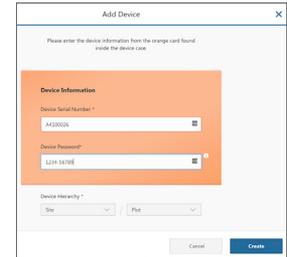
D. Add Device

Click on **Add New** button.

Select **Device** from the menu.

Enter the **Device Serial Number** and the **Device Password** from the orange Device Subscription card (remove from funnel and store in safe location).

Click the **Create** button to subscribe and add device to the organization.



Add Device

Please enter the device information from the orange card found inside the device case.

Device Information

Device Serial Number:

Device Password:

Device Hierarchy:

Cancel **Create**

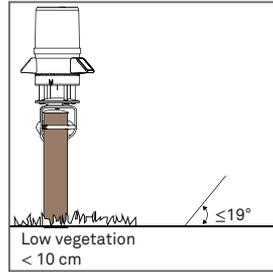
3. Field Site Preparation

At the field site and prior to final installation, please do the following:

A. Identify Mounting Location—Landscape

Consider vegetation cover throughout the season, livestock, solar exposure, and wildlife activity.

If adhering to World Meteorological Organization (WMO)[®] siting standards, make sure the mount location has minimal slope and low vegetation height.



a Guide to Meteorological Instruments and Methods of Observation 2017. WMO-No.8.

C. Check Cellular Signal

Remove the rain funnel. Press the **TEST** button, connect to device in ZENTRA Utility Mobile.

Tap **Test** in ZENTRA Utility Mobile to check the quality of the cellular signal before finalizing installation.

Replace the rain funnel.

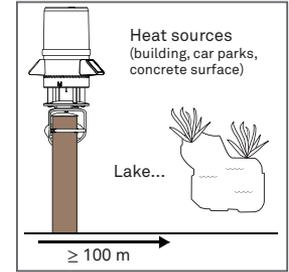


B. Identify Mounting Location—Interferences

Consider distance from interfering objects, power lines, metallic objects, sources of heat, bodies of water, and obstructions.

WMO siting standards recommend siting 100 m away from heat sources and bodies of water.

See the [ATMOS 41W User Manual](#) for more information.

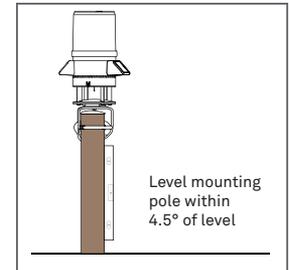


D. Install Mounting Pole

Use a mounting pole with a 31.8- to 50.8-mm (1.25- to 2.0-in) diameter.

Mount ATMOS 41W 2 m above ground (recommended). Height can be adjusted as needed.

Mounting pole should be within 4.5° of level.

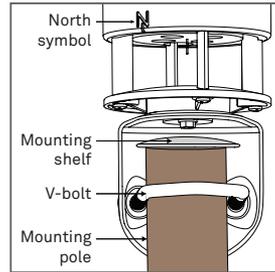


4. Field Installation

A. Mount ATMOS 41W Toward True North

Place the top of the post under the mounting shelf.

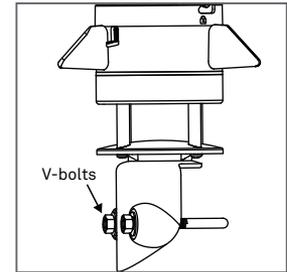
The ATMOS 41W must be set up with the engraved **N** on the instrument oriented to true north (not magnetic north).



B. Mount and Secure Device

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

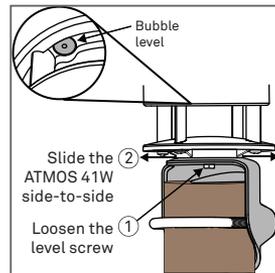
⚠ CAUTION
Do not overtighten the bolt.



C. Level the Device

Use the bubble level underneath the ATMOS 41W.

The weather station angle can be adjusted by loosening the leveling screw attached to the bottom with the 8-mm wrench (included), moving the weather station side to side as needed to level, and then retightening the screw.



D. Reverify Communication and Cellular Signal

Use ZENTRA Utility Mobile to review instantaneous measurements and verify the sensor is working as expected.

Press **Test** in ZENTRA Utility Mobile to check the quality of the cellular signal before finalizing installation.

The ATMOS 41W is now installed and data should be available after the first upload.



SUPPORT

Have a question or problem? Our support team can help.

We manufacture, test, calibrate, and repair every instrument in house. Our scientists and technicians use the instruments every day in our product testing lab. No matter what your question is, we have someone who can help you answer it.

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