



METER

ATMOS 41W Wi-Fi Board Replacement

18566-01
4.2026

Replace the ATMOS 41W Wi-Fi board if it malfunctions or needs to be upgraded. These step-by-step instructions will explain the replacement process. Before replacing the board check that the tools needed for installation are present.

Tools needed:

- Small Phillips (PH1) head screw driver
- Tape (optional)
- Wooden stick (included)
- 2 small O-rings (included)
- 1 Nitrile glove (included)
- New modem (included)
- ZENTRA Utility Mobile is required to configure the ATMOS 41W for the new communication hardware.



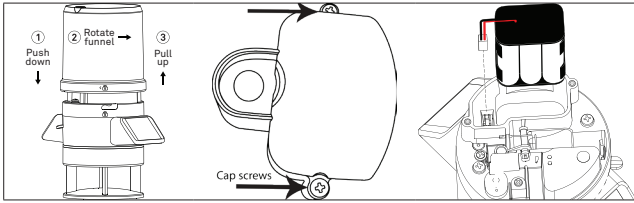
ATMOS 41W Support Page



CAUTION: Only replace the ATMOS 41W Wi-Fi board indoors. Replacing the Wi-Fi board outdoors may result in damage to the board and/or internal mechanisms of the ATMOS 41W.

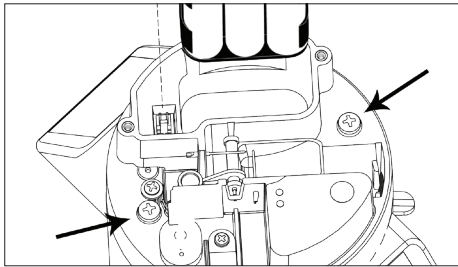
ACCESSING THE ATMOS 41W WI-FI BOARD

1. Put on the nitrile glove to protect Wi-Fi board and other internal components.
2. Remove the rain funnel and unscrew the battery cap to access and remove the battery pack.



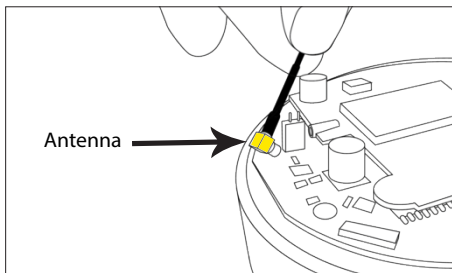
NOTE: Do not lift the battery pack out by the wire. Removing the battery pack before accessing the board is critical for protecting the board and other internal components from damage.

3. Gently unplug the battery pack wire connector to disconnect the battery pack from the ATMOS 41W.
4. Using the Philips head screw driver, unscrew the rain assembly screws and set aside. Inspect the O-rings, if they appear fully in tact leave on the screw for later use or remove and discard if damaged.

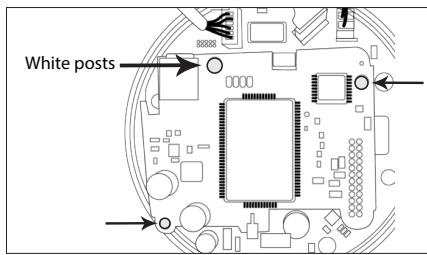


5. If updating from cellular to Wi-Fi, unplug the antenna connector by pulling directly out from the old board.

It is recommended to tape the antenna cable up and out of the way. Alternatively, remove the antenna without damaging other internal cables, and then discard it.



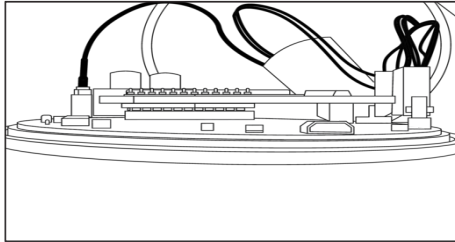
6. Take the wooden stick and insert it underneath cellular board near the white posts.
7. Gently apply leverage to slowly lift up the cellular board. Internal cables may need to be moved in order to properly lift cellular board. Adjust cables as needed but do not unplug.



8. Position new board so the port is aligned with the white posts and communication pins.
9. Once the new board is aligned correctly, gently push the board straight into place.

NOTE: Do not apply too much pressure to Wi-Fi board.

10. Check that the new board is snugly in place and the communication pins are connected correctly as depicted on the following image.



11. Put the rain gauge assembly back into place.
12. If the O-rings were removed slide the new O-rings onto screws. Place the screws in the screw holes and tighten.



CAUTION: DO NOT over tighten. If gasket is bulding the screws are too tight. The gasket must be flush with the sides of the unit..

NOTE: If the screws do not easily screw into place they may be caught on a cable. Lift the rain gauge assembly and adjust cables as needed.

13. Re-install battery pack.

UPDATE ATMOS 41W CONFIGURATION

ZENTRA Utility Mobile automatically updates the ATMOS 41W for the newly install communication hardware. Go to **Device Tools** and select **Update Communication Hardware**. Follow the prompts in this software tool. When the hardware is configured, the app prompts to return to the **Settings Menu** to configuere your ATMOS 41W for a Wi-Fi network.

1. Tap the **Configure** on the main screen, then use the **Configure Wi-Fi** Network feature of the app to connect the ATMOS 41W to the Wi-Fi network.

The app lists up to 12 Wi-Fi networks reported by the ATMOS 41W. Select the network that the ATMOS 41W should use to communicate with ZENTRA Cloud.

Enter the passphrase if the network is secured. Refer to the user manual if using an enterprise Wi-Fi network (common on univeristy or corporate networks). The user manual is available by scanning the QR code on the front of this instruction sheet or at meter.ly/41w-manual.

2. Tap **Join** to send settings to the ATMOS 41W. The device proceeds to connect to this Wi-Fi network and communicate with ZENTRA Cloud. The app will report any errors. See the user manual for troubleshooting recommendations.
3. Use the **Test** toolbar button on the main device screen to perform additional connection tests with ZENTRA Cloud.
4. Re-install the rain funnel.
5. Verify all measurements are within the expected range.

If the measurements are not within range, see the user manual for troubleshooting options (QR code or meter.ly/41w-manual).

