ATMOS 41W Wi-Fi Board Replacement

METER

Replace the ATMOS 41W Wi-Fi board if it malfunctions or needs to be recalibrated. 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)
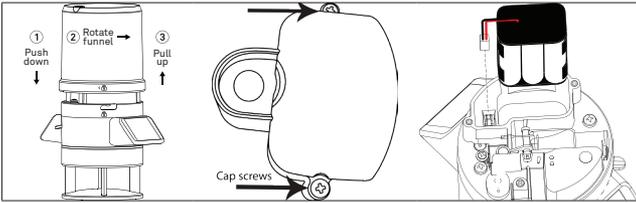- New modem (included)

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.**
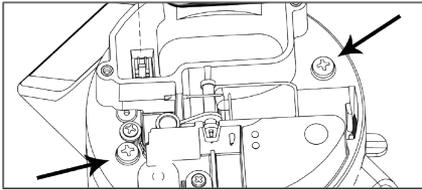
ACCESSING THE ATMOS 41W WI-FI BOARD

1. Put on the nitrile glove to protect Wi-Fi board and other internal components.
2. Remove the ATMOS 41W rain funnel and unscrew the battery cap to access and remove the battery pack. Gently unplug the battery pack wire connector to disconnect the battery pack from the ATMOS 41W.
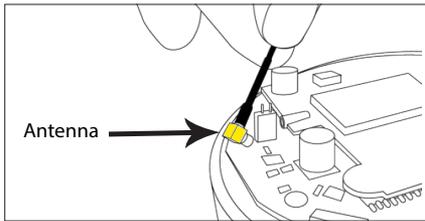
NOTE: Do not lift the batter pack out by the wire. Removing the battery pack before accessing the board is critical for protecting the board and other internal components from damage.
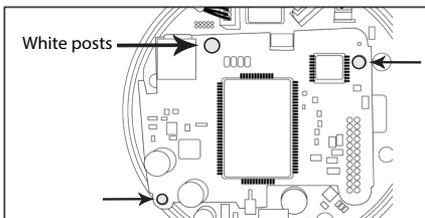

3. Using the Philips head screw driver, unscrew the rain assembly screws and set aside. Inspect the O-rings, if they appear fully in tact leave on the screw for later use or remove and discard if damaged.

4. Unplug the antenna connector by pulling directly out from the old board.
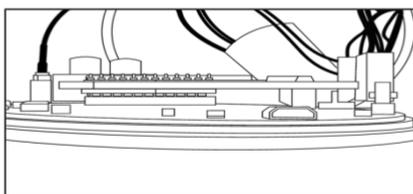

5. It is recommended to tape the antenna cable up to the inside of the ATMOS 41W housing. Alternatively, remove the antenna without damaging other internal cables, and then discard it.
6. Take the wooden stick and insert it underneath cellular board near the white posts.
7. Gently apply leverage to slowly 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 assebly 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.

    Do **not** over tighten. If the gasket is bulging the screws are likely 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

14. Use ZENTRA Utility Mobile terminal to send the command that updates the ATMOS 41W communications configuration to use Wi-Fi hardware.
    Start by connecting to the ATMOS 41W with ZENTRA Utility Mobile.

NOTE: If the Wi-Fi board is replacing an existing Wi-Fi board, this configuration step is not necessary. Switching from cellular communication to Wi-Fi networking requires this step.

15. Tap the `More` menu then `Device Tools` and select `Terminal`.
16. Type, **set trait 4**, in the command area and tap the send button.

17. Look for the logger to respond with **OK** in the terminal area of the window.
18. Tap the `Device` button on the lower left of the toolbar.
19. It is necessary for the software to disconnect and reconnect to the ATMOS 41W for these changes to take effect. To disconnect, tap the `Disconnect` button in the upper left corner.
20. Reconnect to the ATMOS 41W from the connect screen.
21. Once reconnected to the ATMOS 41W, follow the Quick Start instructions for configuring the logger to join the Wi-Fi network.
    Available by scanning the QR code on the front of the instruction sheet or by visiting https://meter.ly/41w-manual.
22. Re-install the ATMOS 41W rain funnel.
23. Verify that all measurements are within the expected range.
    If the measurments are not within range, see the ATMOS 41W User Manul by scanning the QR code on the front of the instruction sheet or by visiting (https://meter.ly/41w-manual) for troubleshooting options.