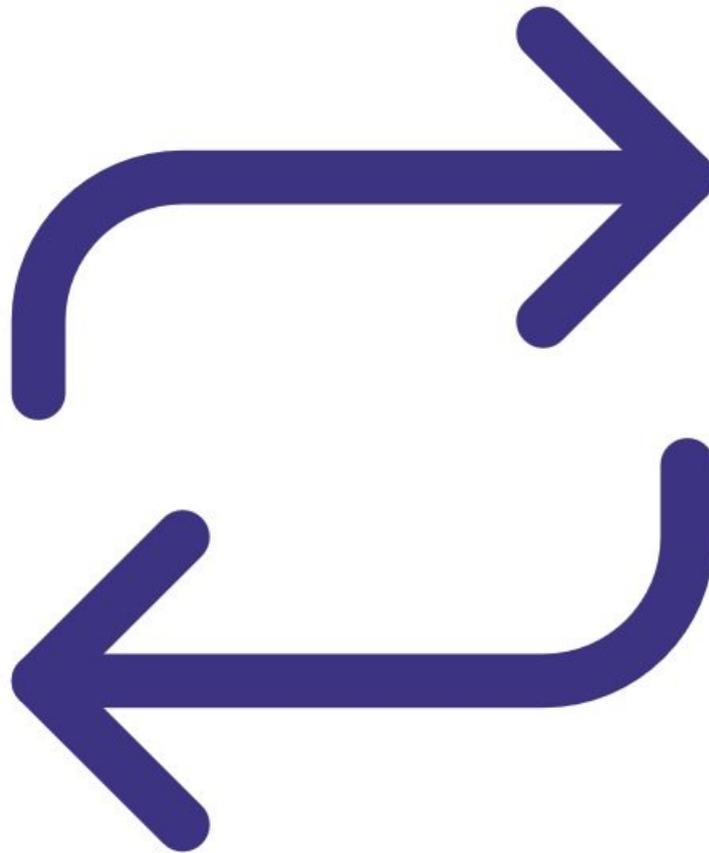




Replace sensors

Written By: StJohn Vuetilovoni

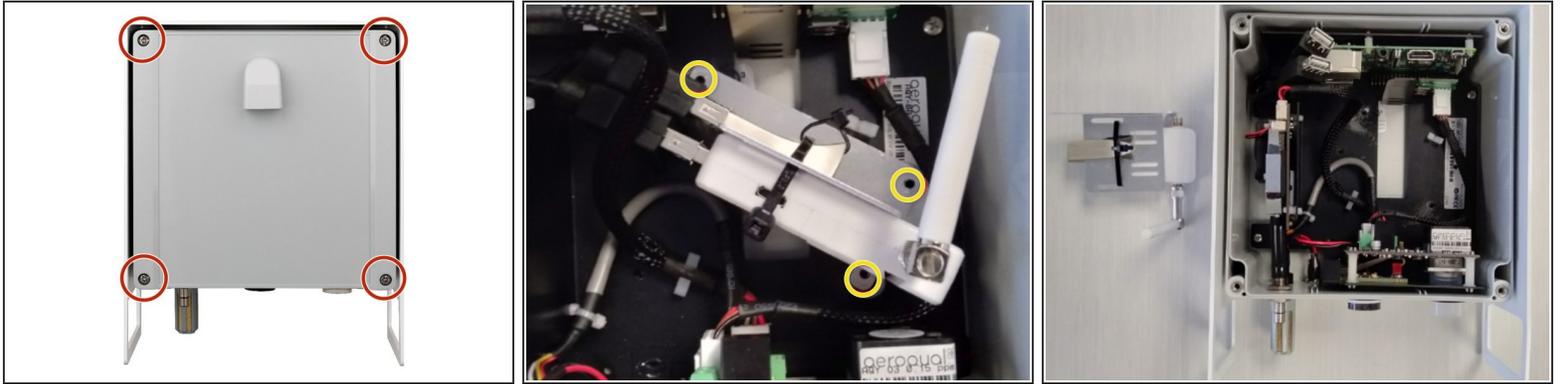




PARTS:

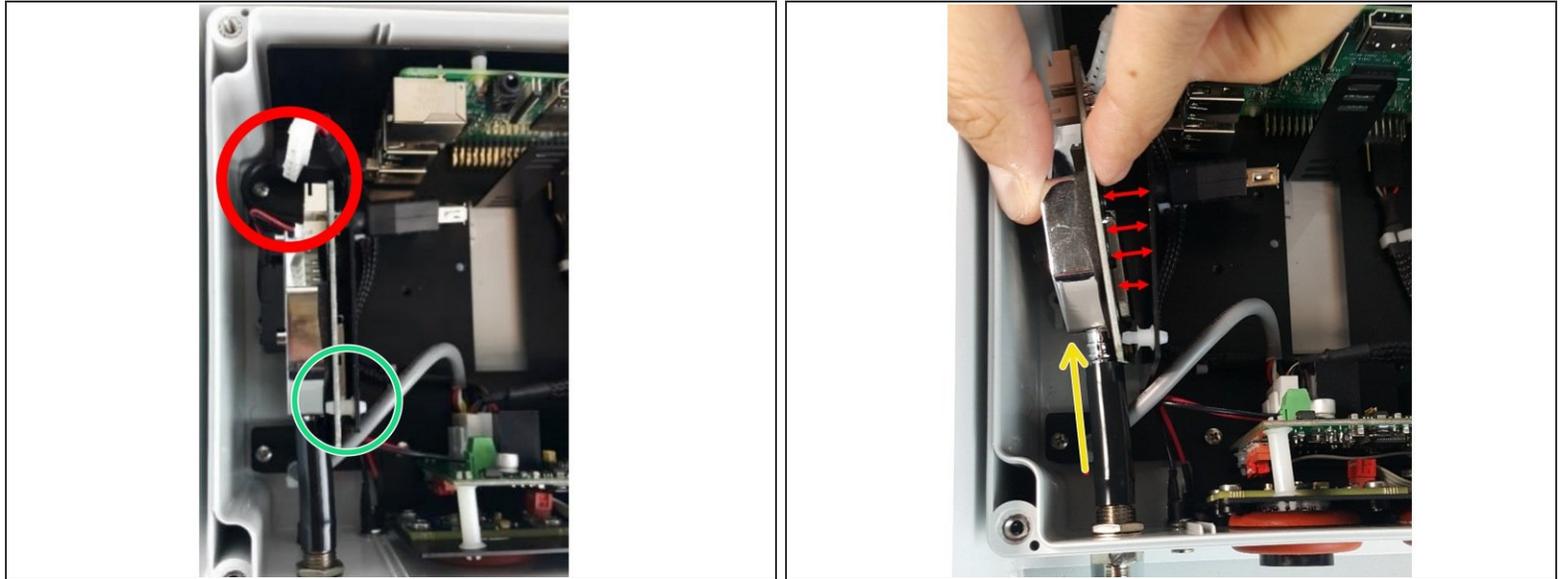
- [PM2.5 sensor](#) (1)
 - [NO2 and O3 sensor board](#) (1)
-

Step 1 — Remove modem



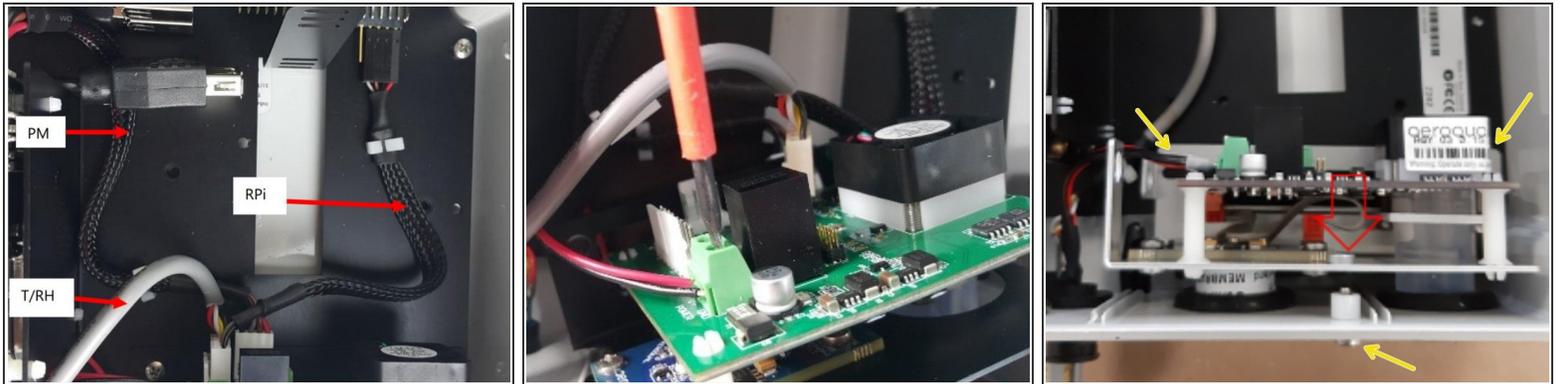
- Disconnect the power supply at the bottom of the AQY 1 unit.
- Remove the front cover by loosening all 4 screws (they won't come out of the casing).
- Unscrew the modem/USB mounting bracket.
- Disconnect the USB connections and remove the entire bracket with USB backup and modem attached.

Step 2 — Replace PM2.5 sensor



- Disconnect the white connector at the top of the PM sensor.
- Separate the sensor from the metal bracket by disconnecting the white spacers.
- Pull the sensor out of the sample tube (wiggling or rotating may be required).
- Insert the new PM sensor into the sample tube.
- Connect the sensor to the metal bracket using the white spacers.
- Connect the white connector at the top of the new sensor.
- If you're only changing the PM sensor, go to step 6 to reset its calibration parameters.

Step 3 — Remove old NO2/O3 sensor board



- Disconnect the 3 white data connections from the NO2/O3 sensor board. The connections are labelled:
 - **PM** = PM
 - **T/RH** = Temperature/RH
 - **Rpi** = Raspberry Pi
- Unscrew the positive and negative power supply cables from the sensor board.
- Unscrew the entire sensor board - 1 screw underneath and 2 on the backplate.
- Remove the sensor board by gently pulling it vertically to free the sensors from their grommets.

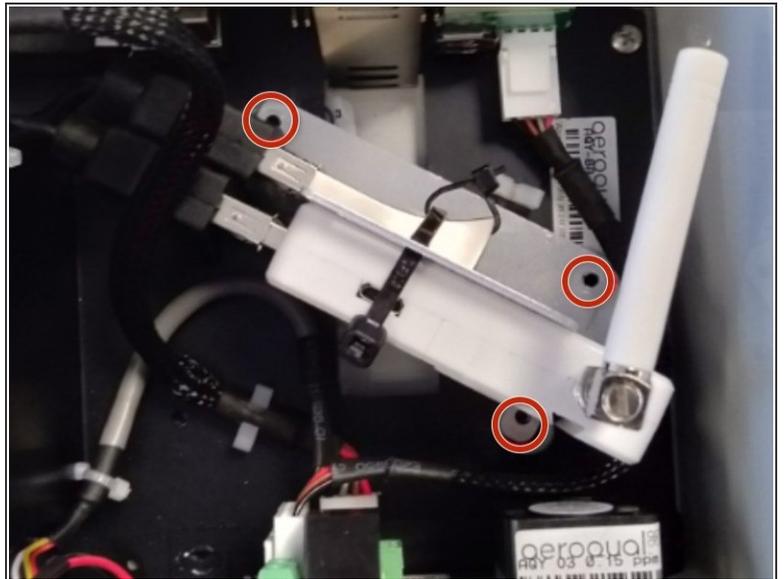
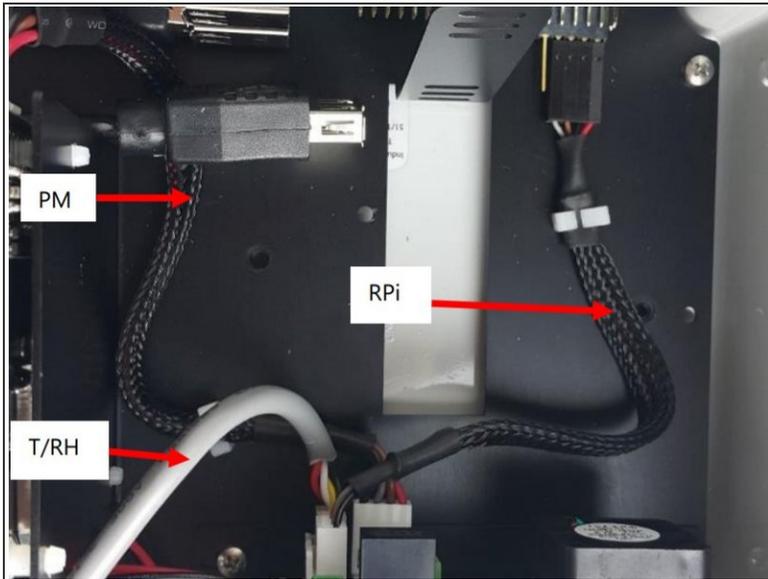
Step 4 — Connect new NO₂/O₃ sensor board



⚠ Never directly touch the exposed NO₂ sensor at the bottom. If it becomes disconnected from your replacement sensor assembly, grip the sides of it when reconnecting.

- Connect the positive and negative power supply cables to the replacement sensor board. Double check the polarity.
- Align the NO₂ and O₃ sensors with the appropriate holes in the base and push the sensor board into position.
- Screw the new sensor board in, bottom screw then backplate screws.

Step 5 — Reconnect cables and modem



- Re-connect the data connections to the correct terminals.
- Reconnect the USB backup and modem to their USB cables and screw the bracket back onto the backplate.
- Replace the front cover ensuring the front vent is at the top with the opening pointing down.
- Reconnect the power supply.

Step 6 — Reset calibration

i After replacing the PM2.5 sensor, you need to reset its calibration parameters.

- Connect to the monitor via Aeroqual Connect or Aeroqual Cloud.
- Ensure the monitor is in **Normal operation** and not displaying an error message. If an error is displayed, check the PM2.5 sensor and connections.
- Enter the **Calibration and Service** app and select **Particles** from the drop-down.
- Select the **PM2.5 raw** channel and check the **New offset** is set to **0.0** and the **New gain** is set to **1.0**.

⚠ Don't adjust these parameters for any other particle channel.

For further support, contact [Technical Support](#).