

Exchanging the Envirosense and Particle Sensor Modules

Sensorbee Air Pro 2 · Rev. 1 · 2 October 2026

Purpose and scope

This guide shows how to replace the Envirosense module and the Particle sensor module in a Sensorbee Air Pro 2. Each exchange takes a few minutes. Use it when Sensorbee Support has confirmed that a module must be replaced, or when a scheduled module swap is due.

What you need

- The new module (Envirosense or Particle sensor), still in its packaging
- **Torx T10 screwdriver:** for the 8 enclosure screws and the Particle sensor
- **Flat screwdriver:** for the Envirosense module
- The unit's serial number, to report the exchange afterwards

Safety and handling

- **Turn the device off before you start and keep it off during the whole exchange.** Never unplug or plug in a module while the device is on.
- Work in a dry place. Do not open the unit in rain or high humidity.
- Hold modules by their edges and do not touch the sensor openings or inlets.
- Keep the old module: it may need to be returned to Sensorbee.

Screw handling

The enclosure and Particle sensor use 3×12 mm Torx T10 stainless screws in PA12 plastic. The plastic thread strips before the screw breaks, so handle them gently.

	Unscrewing	Tightening
Torque	0.6 Nm or less	0.4–0.6 Nm
Speed	200 rpm or less, or by hand	200 rpm or less, or by hand
Tool	Hand driver or driver with clutch	Hand driver or driver with clutch

- Never use an impact driver.
- Keep the T10 bit fully seated with light pressure, so it does not slip and damage the screw head.
- If a screw does not loosen at 0.8 Nm, stop. Do not force it, and contact Sensorbee Support.
- When refitting, first turn the screw anticlockwise by hand until it drops into the existing thread, then tighten. This prevents cutting a new thread in the plastic.
- Do not overtighten.
- Replace the screw if it spins without tightening, or if its head is damaged.

A. Exchanging the Envirosense module

- 1 Turn off the device. Keep it off during the whole exchange.
- 2 Open the enclosure by removing the **8 screws** with the Torx T10 screwdriver.
- 3 Locate the Envirosense module: the round, threaded module (M20) in the centre of the circuit board in the lid, with its cable running to a connector on the board.
- 4 **Unplug the Envirosense cable** from the board.



Cable unplugged from the board

- 5 Put the flat screwdriver in the slot of the module and turn it **anticlockwise** to unscrew it.



Unscrewing with the flat screwdriver

- 6 Remove the old module from the lid.



Empty Envirosense slot

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- 7 Insert the new Envirosense module and screw it in **clockwise** with the flat screwdriver until it is snug. Do not overtighten.
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- 8 Plug the Envirosense cable back into the same connector on the board.
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- 9 Close the Air Pro 2 and fasten the 8 enclosure screws with the T10 screwdriver.
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- 10 Restart the device.
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- 11 **Verify connectivity:** check in the platform that the device is online and that data from the new Envirosense module is arriving.
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B. Exchanging the Particle sensor module

- 1 Turn off the device. Keep it off during the whole exchange.
- 2 Open the enclosure by removing the **8 screws** with the Torx T10 screwdriver.
- 3 Locate the Particle sensor (SB4102) in the lid of the Air Pro 2.



Particle sensor in the lid, cable plugged in

- 4 Unplug the Particle sensor cable from the board.
- 5 Unscrew the **4 screws** holding the sensor, using the T10 screwdriver.



Unscrewing the sensor screws



Cable unplugged, screws removed

- 6 Remove the old sensor from the lid.



Empty sensor slot

- 7 Take the new sensor and place it in the lid, in the same position and orientation as the old one (see the photo in step 3).
- 8 Fasten the 4 screws with the T10 screwdriver.
- 9 Plug in the Particle sensor cable.
- 10 Close the Air Pro 2 and fasten the 8 enclosure screws with the T10 screwdriver.
- 11 Restart the device.
- 12 **Verify connectivity:** check in the platform that the device is online and that data from the new Particle sensor is arriving.