


O3 Sensor Hub 2.0

Quick Start Guide

This guide describes how to install and set up the O3 Sensor Hub 2.0. To set up the hub, you will need an Android or iOS phone with the O3 Setup app installed. You can get the app from Google Play or the App Store.

If your job site does not have power and if your phone supports NFC writes, you can transfer network settings to the hub before installation. Simply sign in to the app (or select **Lite mode** if you're not using cloud configuration) → select your job site → select the hub → select **NFC** → select **Apply settings to hub** → place your phone over the NFC location on the hub.

Installation

 Installation shall be in accordance with all applicable electrical codes and regulations. Connect to a Class 2 power source only.

Wiring guidelines

The sensor hub requires a 24 VDC power supply.

- For power and I/O wiring, use 22–12 AWG 2-conductor copper wire.
- For network cabling, use Cat5e or Cat6 cables.

Earth ground all devices in the same circuit at the power supply. Up to 30 hubs can be daisy chained using the ETH2 port as long as the distance between hubs does not exceed 100 m (330 ft).

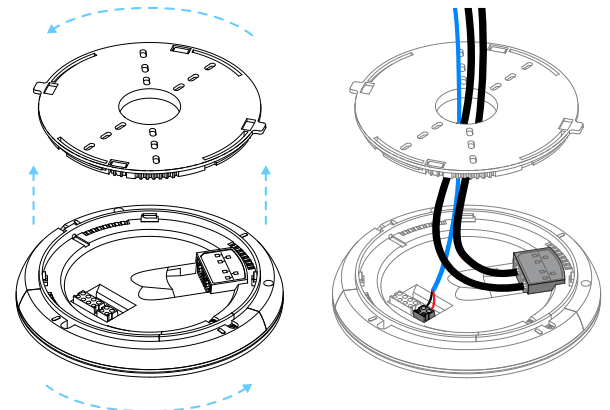
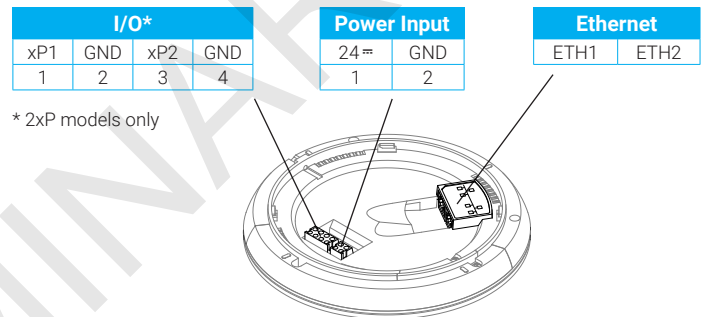
Placement guidelines

You can mount the sensor hub to a ceiling tile, finished ceiling, or junction box.

- The hub should be mounted 2.4 to 4.6 m (8 to 15 ft) off the floor.
- For best performance, place the hub in center of the room. Try to keep it at least 2.1 m (7 ft) away from windows or exterior walls.
- Choose a location where the motion sensor view is not obstructed by light fixtures, shelves, etc.
- Do not mount the hub next to hot or cold sources.
- Keep the hub at least 1.3 m (4 ft) away from ceiling diffusers and other sources of airflow.

Mounting the hub



1. If you are mounting the hub directly to the ceiling, cut a hole 32 mm (1¼ in.) in diameter and pull the wires through the hole.
2. Remove the backplate from the hub by twisting it counter-clockwise.
3. Pull the wires through the hole in the backplate.
4. Mount the backplate to the mounting surface using four M4 (#8) screws.
5. Connect the power wires, I/O wiring (if present), and Ethernet cables to the sensor hub.
6. Re-attach the hub to the backplate. Line up the tabs on the hub with the notches on the backplate, hold the hub firmly against the backplate, then twist clockwise.
7. Turn on power and check that the hub is working.



Setup

To set up the hub, you will need the O3 Setup app installed on your phone and access to the internet.


Configuring the hub

1. Enable Bluetooth  on your phone.
2. Open the O3 Setup app and sign in to your account (or select **Lite Mode** if you are not using cloud configuration).
3. Select your job site and then select the hub you want to set up.
4. Make sure **BLE** is selected, then select the **Settings** tab.
5. You can edit the network, BACnet, MQTT, and Bluetooth settings if needed (if you are using **Lite mode**, you must enter these settings manually). To edit a setting, select the edit icon , make the changes you want, then select **Save**.
6. When you're ready to send these settings to the hub, select **Connect**. A list of nearby hubs is displayed.
7. Select the hub you want to configure, then select **Verify**. The selected hub plays an audio/visual verification. If this is the hub you want to configure, select **Yes, connect to this hub**. The hub status changes to **Connected**.
8. Select **Apply settings to hub**. If the configuration was successful, the message "Hub successfully configured" appears.

Once the hub connects to the internet, it receives additional settings from the cloud (for temperature, occupancy, etc.). These settings are displayed in the **Diagnostics** tab.


Calibrating the hub

After a hub is installed and configured, it can be calibrated.

1. In the O3 Setup app, on the **Job site** page, select the hub you want to calibrate.
2. Connect to the hub if you haven't already done so (see steps 6 and 7 in the previous section).
3. Select the **Settings** tab and, under **Calibration**, select the edit icon .
4. Measure the current temperature and light level directly below the hub at occupant height and enter these values in the corresponding fields. The hub will do the rest.
5. If you want, you can also edit the motion sensitivity and occupancy acoustic sensitivity.
6. When you are finished making changes, select **Save**.

Resetting the hub

Configuration settings for hub attributes (temperature, occupancy, etc.) are stored in the cloud and linked to the hub through its MAC address. If you want to re-use the hub elsewhere with a different configuration, you need to sever this link and reboot the hub.

1. In the O3 Setup app, on the **Sensor Hub** page, select  in the upper right corner, then select **Detach config**.
2. To reboot the hub, select **Reboot hub** from the same menu.

The hub is now ready for re-use.

Need help? Contact support@o3hub.com

For regulatory and other product information, visit support.o3hub.com