AGUARDIO **PIPE SENSOR**

Placement & Activation Guide

1. Placement

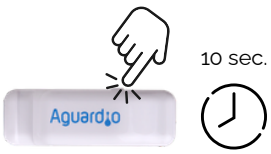
1.1 Contents of the product package

Each individual package contains a Pipe Sensor and a plastic tie. For large quantity packages, Pipe Sensors may be individually wrapped in plastic bags and accompanied by separately packed plastic ties.

Aguardio Pipe Sensor | Plastic tie

1.3 Activation of the Pipe Sensor

Activate the Pipe Sensor by pressing and holding the button on the side of the sensor for 10 seconds. before placing it on the pipework. This step will enable immediate collection of data.



1.2 Registering Pipe Sensors

Before proceeding with the physical installation, we strongly recommend to register each Pipe Sensor's location. This registration is essential for accurate data interpretation and for understanding where the water flow readings originate from. *Note: This step can also be completed or adjusted later in the process; However, we recommend not to delay.*

Click here to download registration form

1.4 Placement of the Pipe Sensor

Select a position for the sensor on the water inlet pipe to the toilet:

- It is recommended to place the sensor on heat-conductive materials, such as metal (e.g., copper or steel pipework), for optimal sensor performance.
- While it is possible to place a sensor on plastic pipework, the reading accuracy may be affected. This is because plastic can have an insulating effect, which affects the sensitivity to temperature fluctuations and potentially leads to less precise measurements.
- Ensure that the sensor's grey thermal sponge is fitted against the pipe, or metal surface
- It is recommended to install the sensor on pipes ranging from 8 to 25 mm, to ensure that the thermal pad is in direct contact with the pipework.

Secure the plastic tie:

- Loop the plastic tie loosely around the pipe, allowing enough room to position the sensor inside the loop
- Gradually tighten the plastic tie to firmly affix the sensor to the pipework.

Tip: *If you need extra security to fasten the Pipe Sensor, you can use any type of generic zip tie as an additional measure.*

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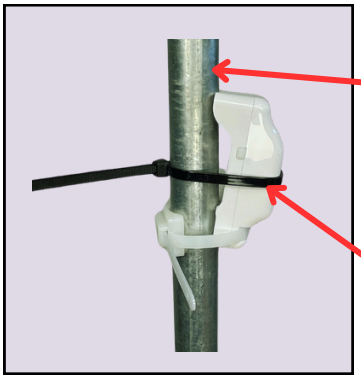
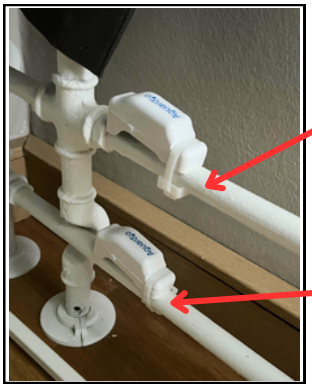
A. Placing the Pipe Sensor on water pipes:

Click here to see video guide

Or scan QR code:



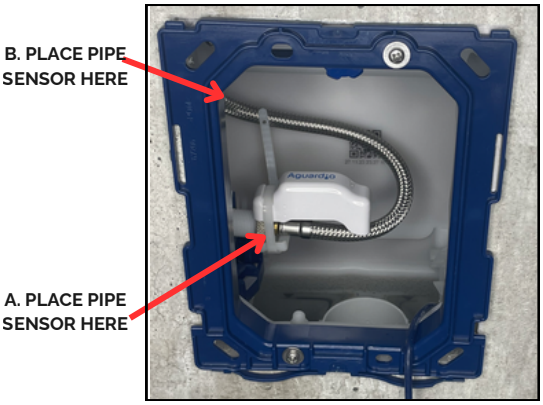
B. Placing the Pipe Sensor on a radiator



C. Placing the Pipe Sensor on a wall-mounted toilet:

Click here to see video guide (wall-mounted)

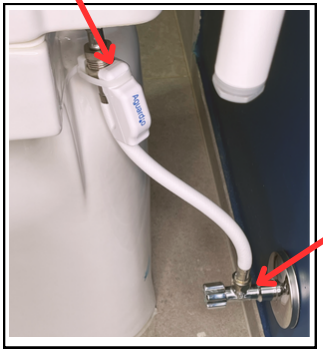
Or scan QR code:



D Placing the Pipe Sensor on a free-standing toilet:

Click here to see video guide

Or scan QR code:



2. Data collection

Click here to download set up guide

2.1 HPE ARUBA NETWORKING ACCESS POINTS

- In order to configure an HPE Aruba Networking Access Points to handle Aguardio sensor data, it is necessary to have access to the Aruba Central platform.
- Aguardio Sensors are communicating with HPE Aruba Networking Access Points via Bluetooth signal.
- On average, the signal between the Aguardio sensor and the access point can be captured within 40 meters, but in some cases, it may be as low as 5 meters. Signal strength is influenced by factors such as sensor placement and physical obstacles like walls, which can significantly impact the Received Signal Strength Indicator (RSSI) value. To determine signal strength and reach at a specific location, various apps can be used, such as nRF Connect. Aguardio can provide further guidance on this.
- For Aguardio sensors to work with access points, Pipe Sensors must be updated to the latest software. If you are unsure which version your device has, contact Aguardio support at ***support@aguardio.com***

2.2 AGUARDIO APP

2.2.1 Download Aguardio Connected Solution App

1.
2. Desktop links: Download on the App Store · GET IT ON Google Play
3. **Aguardio Connected Solutions**

See APP video guide here

Or scan QR code:

2.2.2 Log in to the app

Log in to the app with these credentials:

Username: setup@aguardio.com
Password: SuperDemo

Click here to review extended APP guide

AGUARDIO **PIPE SENSOR**

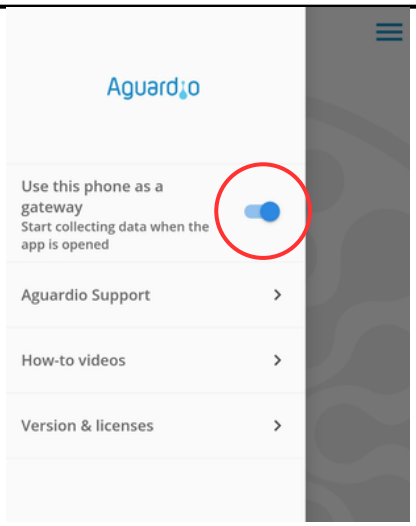
Placement & Activation Guide

2.2.3 Activate the app

Activate "Gateway" mode on your device

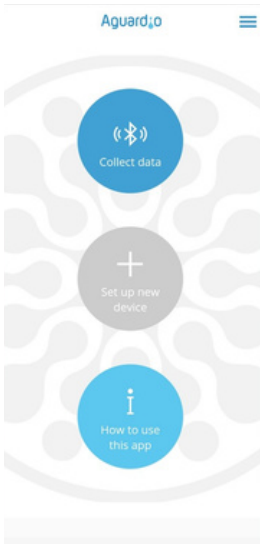
Remember to enable "Bluetooth" mode on your device for the APP to work

Press the "user menu" in the top right corner.

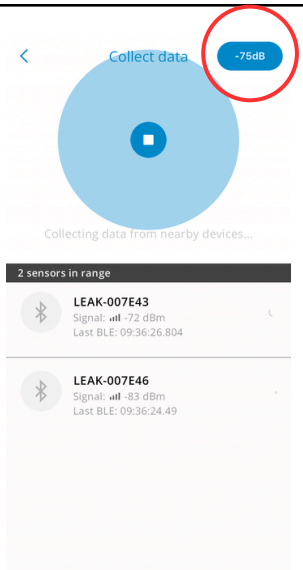


Press the "user menu" in the top right corner.

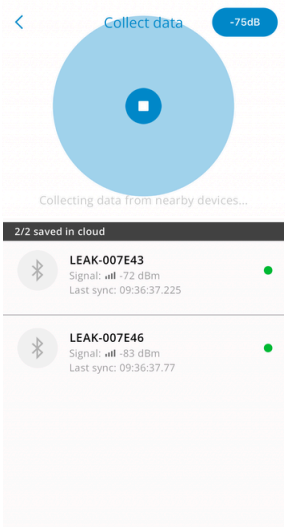
2.2.4 Data Collection



Click "Collect Data"



Choose the desired Bluetooth range by clicking on the blue icon in the upper-right corner. If you are close to sensors, we recommend starting from -65 dBm. Wait until data from the detected sensors are collected, then increase the Bluetooth range incrementally. This approach allows you to collect data from the nearest sensors first, ensuring better and faster data retrieval.



After successfully collecting data, the sensor will be moved to the bottom of the list, categorized under 'Saved in Cloud.' There, you will see only a green light and a timestamp indicating the last synchronization of data, referred to as 'Last sync'.
To clear the list of sensors that you collected data from, please close and reopen the app.

Practical tips for collecting data

Click here to download APP guide

- Set the app on -65dBm, then the app collects data from the nearest sensors first. If the app stops detecting new sensors, increase the Bluetooth range incrementally. This can be done by tapping the blue icon in the upper-right corner of the app. After increasing the range, continue moving at a gentle pace. Pause briefly to allow the app to collect data from any newly visible sensors.
- If you set the app to -95 or -128 dBm, it will detect all the sensors within the Bluetooth range. If you have many sensors installed, this can overload the app, causing difficulties in establishing connections with the sensors.
- If you see a long list of sensors, perhaps 10-20, all showing as 'green' in the app, it might become difficult to manage further data collection effectively. In this case, it is advisable to close and reopen the app.
- If your sensors show a red indication or show no indication, try to move closer to the sensor or increase Bluetooth range in the app.

2.3 GATEWAY

- Data from Aguardio's Pipe Sensor can be collected automatically via a Gateway. The Gateway uses NB-IoT/LTE-M sitgnal to transmit a data
- The Gateway can be paired with up to ten Pipe Sensors. It connects to the sensors via Bluetooth, requiring the sensors and the Gateway to be within Bluetooth range of each other (approximately 5-10 meters).
- The Gateway is configured to deliver data four times a day, though the frequency can be adjusted based on wishes/needs.
- Only the Aguardio Team can modify the pairing of the Pipe Sensors and Gateway.

2.3.1 Gateway Activation

- If the pairing wasn't discussed with Aguardio in advance, please specify to which Gateway each sensor has to be paired
- Once the sensors are installed and the Gateway is placed in the intended location, please press the button on the Gateway to activate it.
- The Gateway should start flashing blue, and after a couple of minutes, it will display a green light to indicate a successful activation.

3. ACCESS DATA IN AGUARDIO HUB

To learn more about how to access your bathroom data and use it to optimise building maintenance, please download "Aguardio HUB" guide.

Click here to download HUB guide