



# MerryIoT Sensors & MerryIoT for Amazon Sidewalk

## Quick Installation Guide

# Content

1. Safety Warning	-----	3
2. Amazon Sidewalk	-----	4
3. Package Content	-----	5
4. Sensor Input/Output	-----	7
5. Sensor Introduction	-----	9
6. Sensor Installation	-----	10
7. Sensor APP Functions	-----	18
8. Device System Configuration	..	22
9. Battery Replacement	-----	23
10. FAQ	-----	28
11. Copyright Notice	-----	29



# Safety Warning

## Read this manual before attempting to install the device!

Failure to observe recommendations included in this manual may be dangerous or cause a violation of the law. The manufacturer, **Browan Communications Inc.** will not be held responsible for any loss or damage resulting from not following the instructions of this user manual.

- The device must not be dismantled or modified in any way.
- The device is only intended for indoor use. Do not expose it to moisture.
- The device is not intended to be used as a reference sensor, and **Browan Communications Inc.** will not be held liable for any damage which may result from inaccurate readings.
- The battery should be removed from the device if it is not to be used for an extended period. Otherwise, the battery might leak and damage the equipment. Never leave a discharged battery in the battery compartment.
- The device must never be subjected to shocks or impacts.
- To clean the device, wipe with a soft moistened cloth. Use another soft, dry cloth to wipe dry. Do not use any detergent or alcohol to clean the device.

## Contact Us

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# What is Amazon Sidewalk?



## Amazon Sidewalk – Connecting Wireless IoT Devices at Homes and Beyond

Amazon Sidewalk connects homes and communities, forming a shared network to enhance device connectivity. Many Ring and Echo devices serve as Sidewalk Bridges, utilizing Bluetooth and the 900MHz spectrum to establish a secure connection for low-bandwidth devices within homes and neighborhoods. Users with an Amazon Sidewalk Bridge contribute a small portion of their internet bandwidth, creating a community network that benefits all Amazon Sidewalk-enabled devices. This allows MerryIoT devices to stay connected with Amazon Sidewalk coverage, and there are no recurring fees for customers to access Sidewalk.

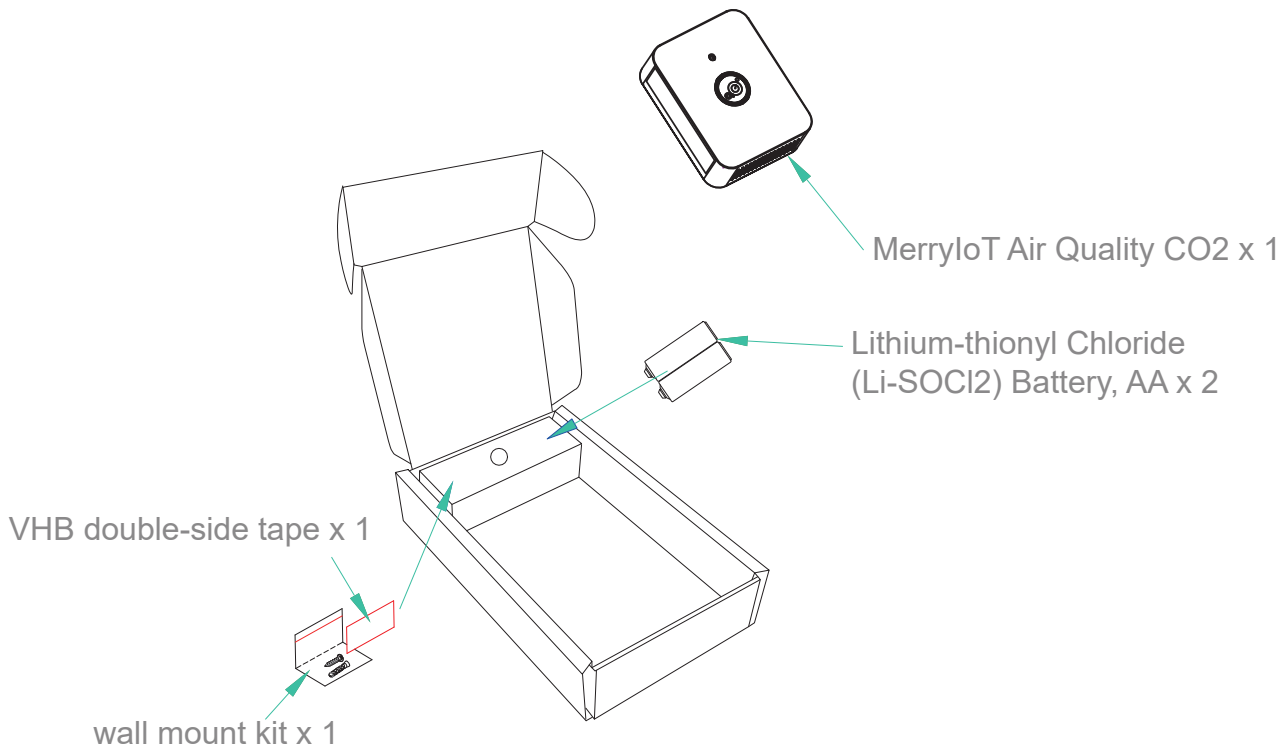
## How MerryIoT and Amazon Sidewalk can benefit your daily life

MerryIoT provides a complete solution for your home and asset monitoring that helps increase a level of security and safety to your property and loved ones. With the help of Amazon Sidewalk, all MerryIoT smart devices stay connected and continue to work over longer distances. A nearby Amazon Sidewalk gateway will pick up messages from the connected MerryIoT device and route them to the MerryIoT application via an integrated AWS cloud with multiple layers of data encryption for customer privacy protection. Today, Amazon Sidewalk include many Echo devices and select Ring devices that securely connect Sidewalk-enabled endpoints to the Amazon Sidewalk network and provide services to you and your neighbors.

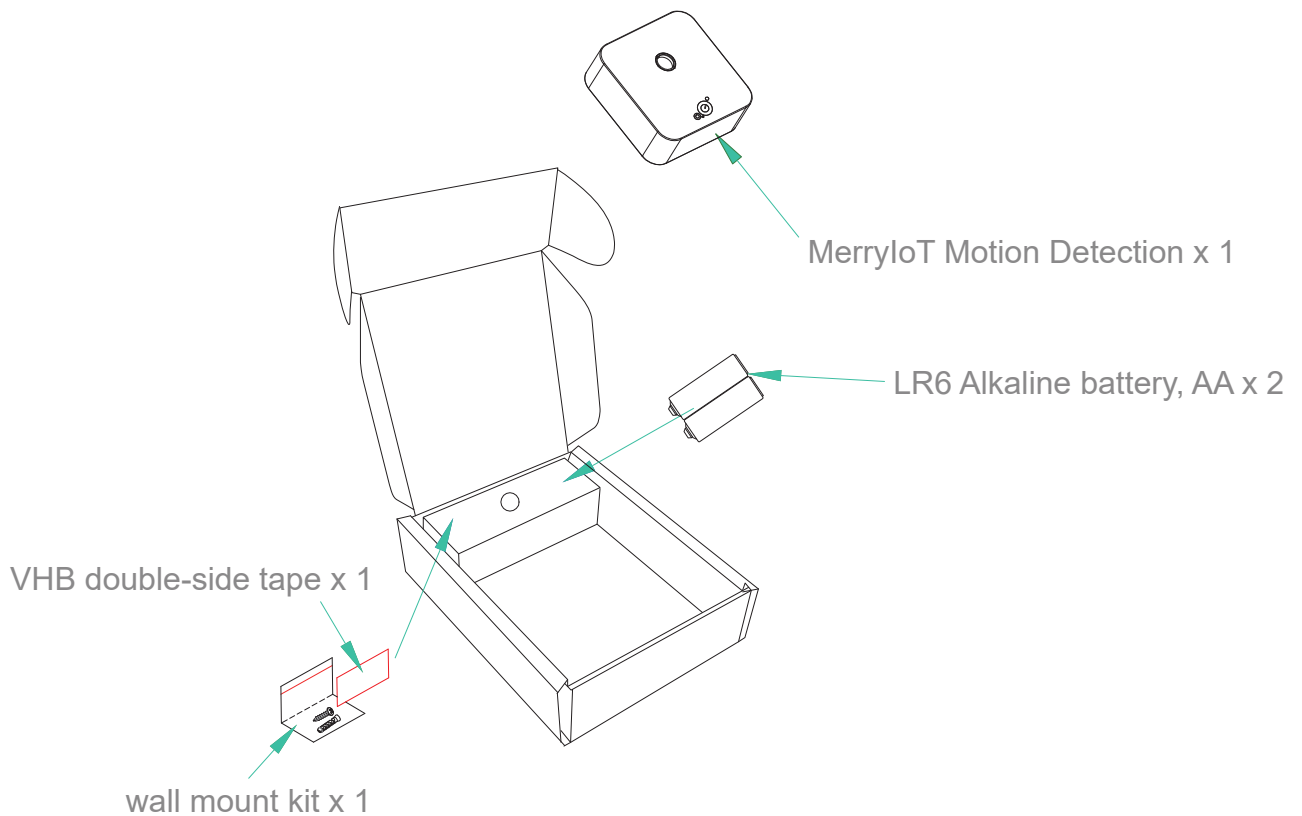


## Chapter 3 - Package Content

### MerryloT Air Quality CO2 (CD10)

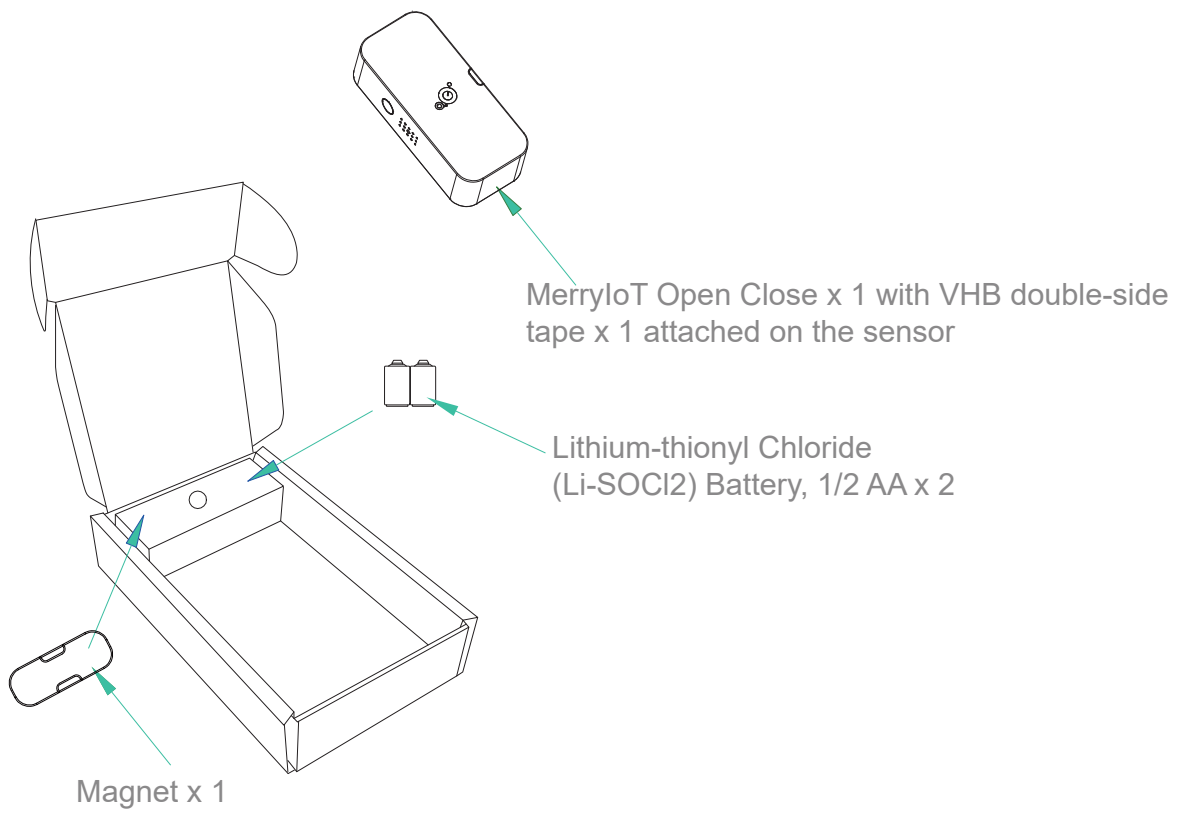


### MerryloT Motion Detection (MS10)

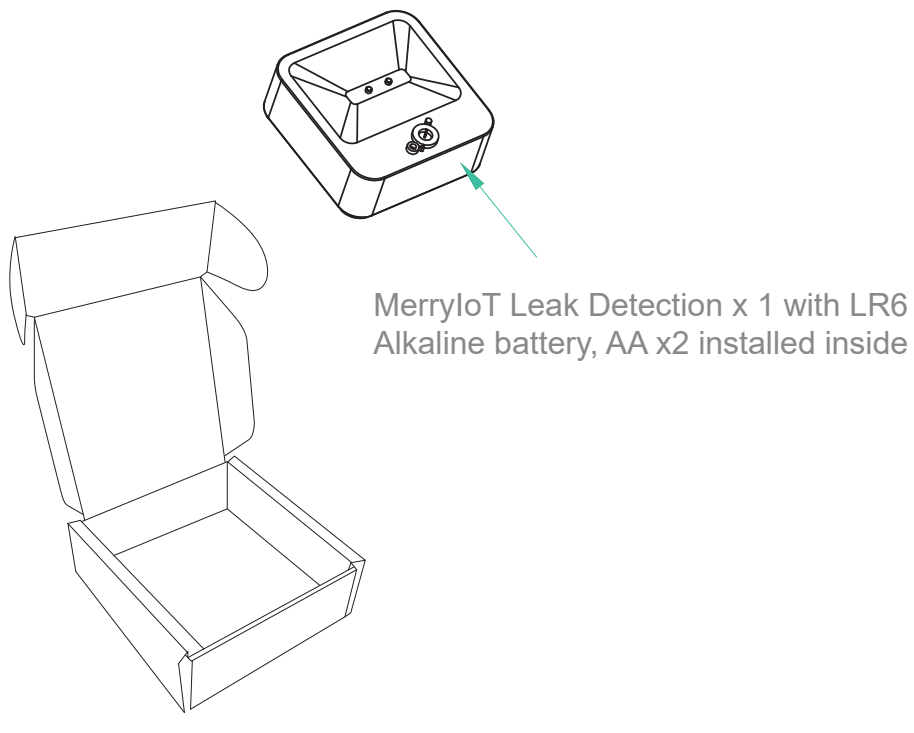


## Chapter 3 - Package Content

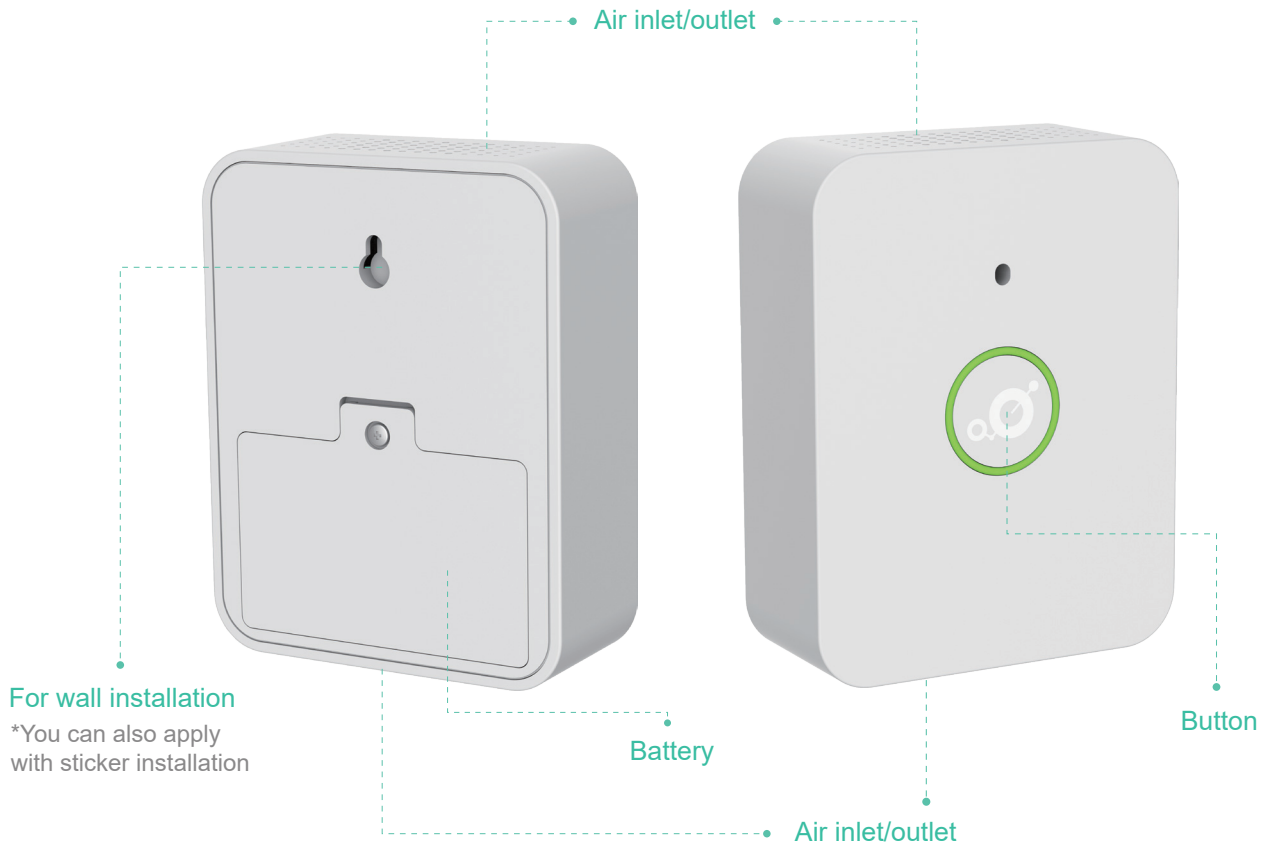
### MerryloT Open/Close (DW10)



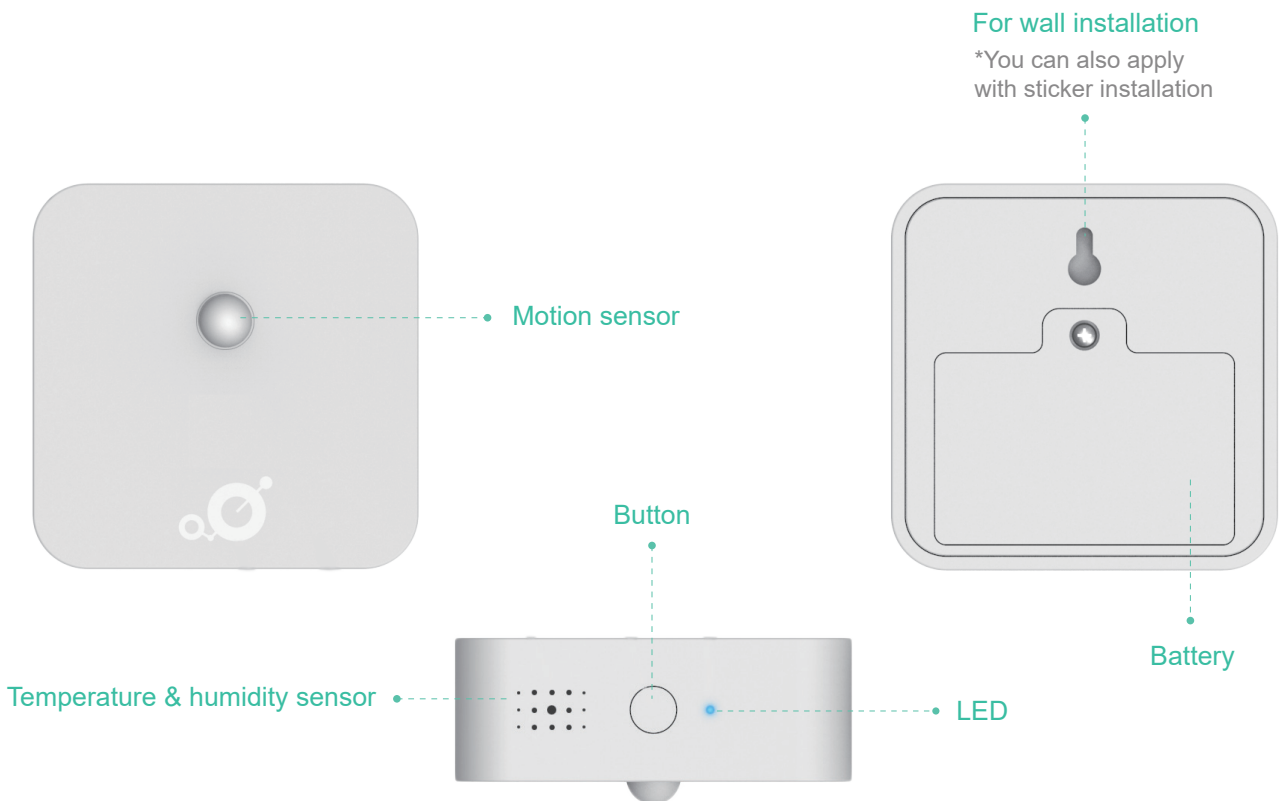
### MerryloT Leak Detection (WL10)



## MerryIoT Air Quality CO2 (CD10)



## MerryIoT Motion Detection (MS10)

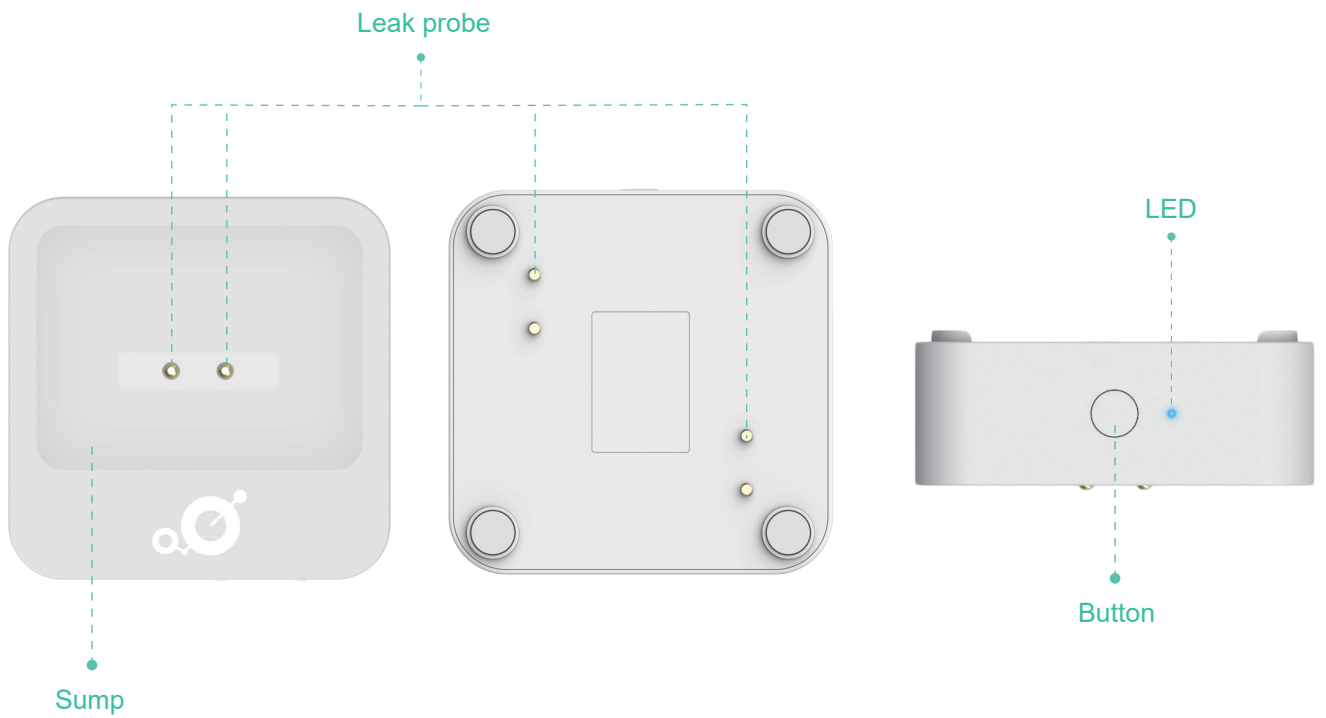


# Chapter 4 - Input / Output

## MerryIoT Open/Close (DW10)

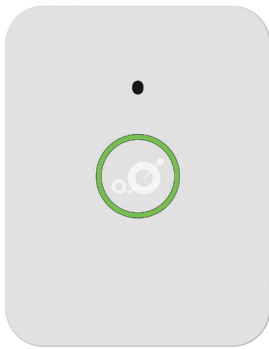


## MerryIoT Leak Detection (WL10)





## Chapter 5 - Sensor Introduction



MerryloT Air Quality CO2  
CD10

MerryloT Air Quality CO2 sensor (CD10) is a professional smart device that works with Amazon Sidewalk. Its minimalistic design makes it ideal for wall mounting, whether at home or in the workplace. This sensor offers comprehensive monitoring of CO2 levels, temperature, and humidity.

### Features:

- 3 sensors in 1 (CO2 & Temperature & Humidity)
- Built-in buzzer for alarm if the CO2 level is more than 1000ppm
- Long-range coverage over Amazon Sidewalk's 900MHz wireless network
- Coverage test button for easy installation
- Up to 2 years of battery lifetime

\*Note: Battery life is mainly determined by the reporting frequency. Other factors include moisture and high temperature.



MerryloT Motion Detection  
MS10

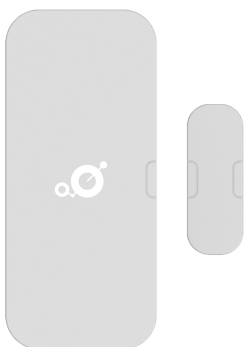
MerryloT Motion Detection (MS10) is an easy step toward a safer home. It monitors front and back doors, driveways, sheds, garages, and gates, making it suitable for all your properties. This sensor also provides an additional level of security for your loved ones. Moreover, it promptly alerts you in case of emergencies.

### Features:

- 4 sensors in 1 (PIR & Temperature & Humidity & Vibration)
- Detect human presence accurately
- Long-range coverage over Amazon Sidewalk's 900MHz wireless network
- Coverage test button for easy installation
- Alarm message for the device being moved or tampered
- Up to 3 years of battery lifetime

\*Note: Battery life is mainly determined by the reporting frequency. Other factors include moisture and high temperature.

- Ultrawide range detection
  - 125° Horizontal
  - 100° Vertical
  - Up to 7m distance



MerryloT Open/Close  
DW10

MerryloT Open/Close sensor (DW10) gives you peace of mind, anywhere, anytime. Get real time alerts at the exact moment you have unexpected guests, broken windows, opened safes, an opened mailbox or escaped pets.

### Features:

- 4 sensors in 1 (Open/Close & Temperature & Humidity & Vibration)
- Long-range coverage over Amazon Sidewalk's 900MHz wireless network
- Coverage test button for easy installation
- Alarm message for the device being moved or tampered
- Up to 3 years of battery lifetime

\*Note: Battery life is mainly determined by the reporting frequency. Other factors include moisture and high temperature.

## Chapter 5 - Sensor Introduction



MerryloT Leak Detection  
WL10

MerryloT Leak Detection (WL10) will instantly notify you as soon as it detects water leakage. You can now say goodbye to concerns about leaks or flooding in your basement, under your sinks, around your water heater, or anywhere else in your home.

### Features:

- 4 sensors in 1 (Drip/Leak/Flood & Temperature & Humidity & Vibration)
- Built-in water sensing probes on top and bottom for leak/flooding detection
- Long-range coverage over Amazon Sidewalk's 900MHz wireless network
- Coverage test button for easy installation
- Alarm message for the device being moved or tampered

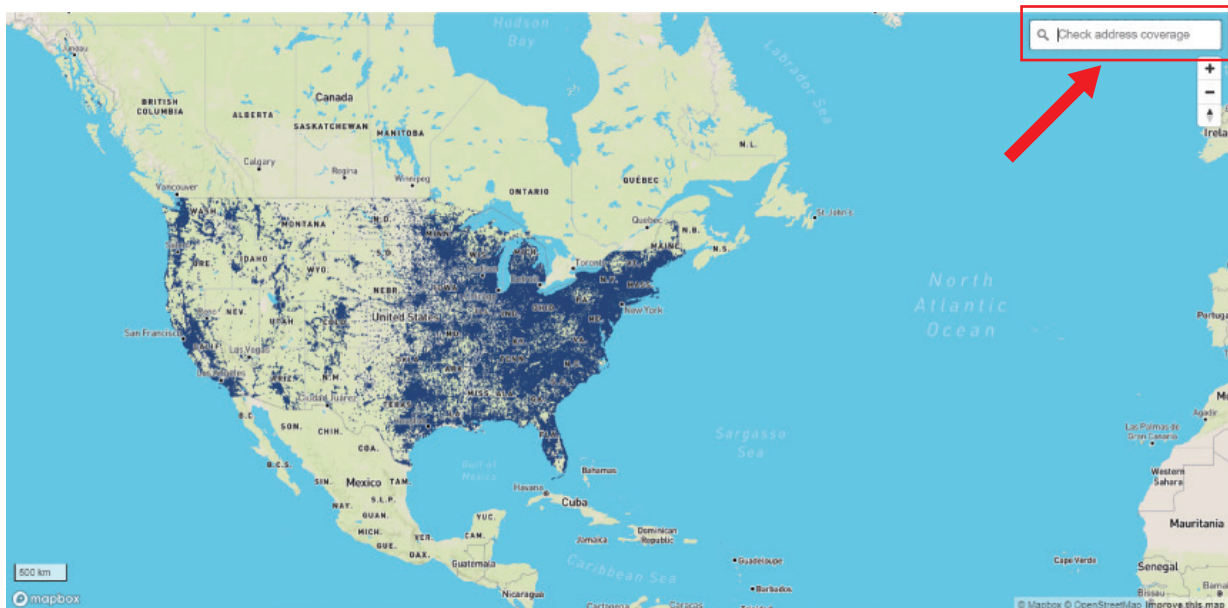
Up to 3 years of battery lifetime

\*Note: Battery life is mainly determined by the reporting frequency. Other factors include moisture and high temperature.

## Chapter 6 - Sensor Installation

- 1 Please make sure you have Amazon Sidewalk coverage before installing the MerryloT Sensors. To check the coverage in your neighborhood, visit <https://coverage.sidewalk.amazon/> and follow these steps:

- 1 Type your location on the top right corner.
- 2 Determine your location in proximity and check for Amazon Sidewalk in that area.



## Chapter 6 - Sensor Installation

- 2 Install and launch MerryIoT mobile application on your phone.

Google Play: [Download Here](#)

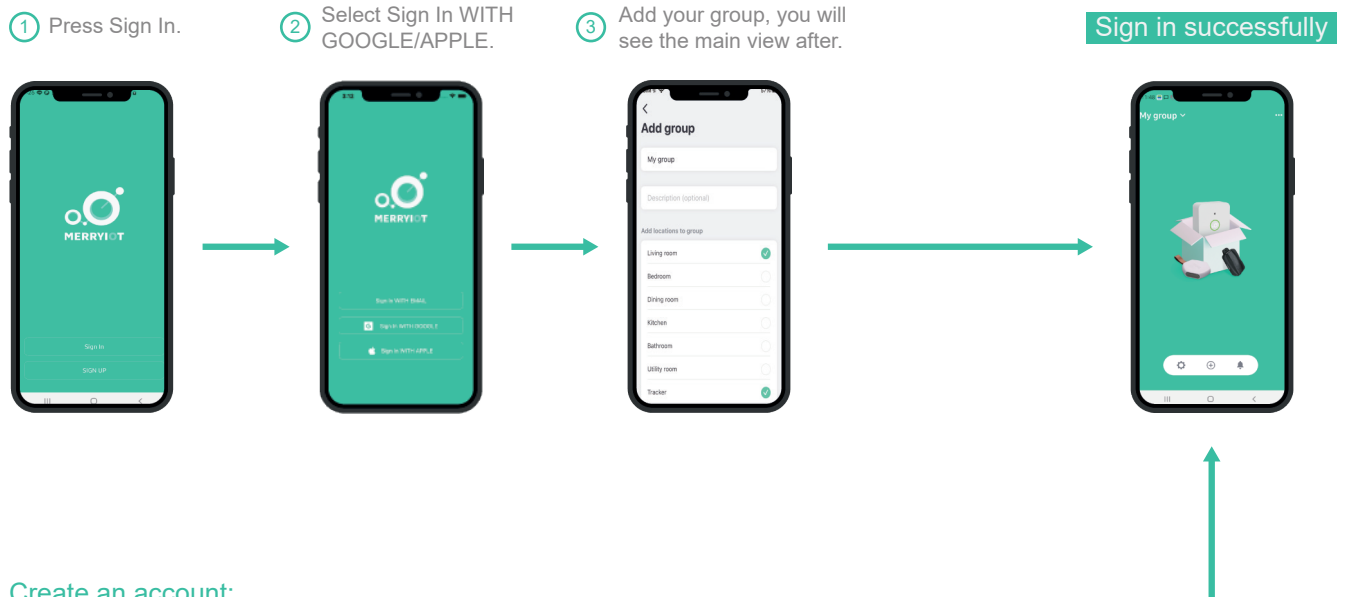
Apple App Store: [Download Here](#)



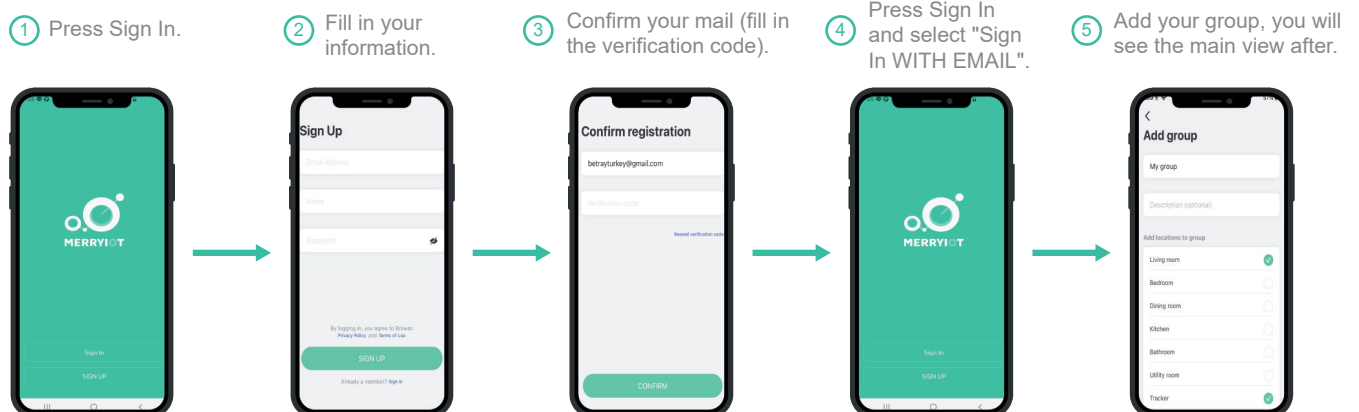
\*Search: MerryIoT for Amazon Sidewalk

- 3 Register your account.

Sign in by social media:



Create an account:

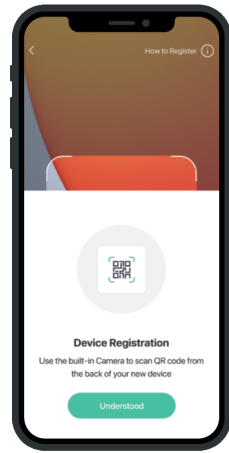
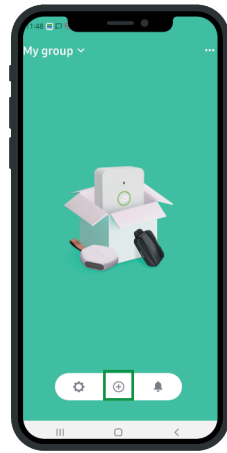


# Chapter 6 - Sensor Installation

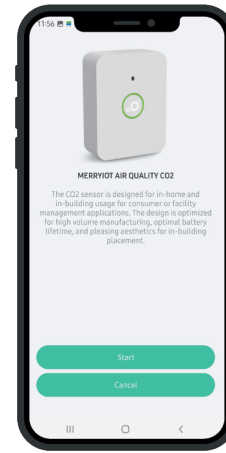
## 4 Add your device to the App.



MerryIoT Air Quality CO2  
CD10



After scan



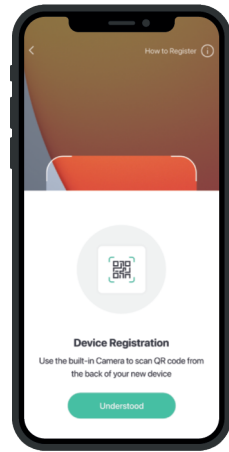
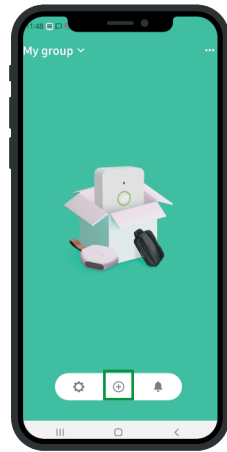
Fill in the name and the location



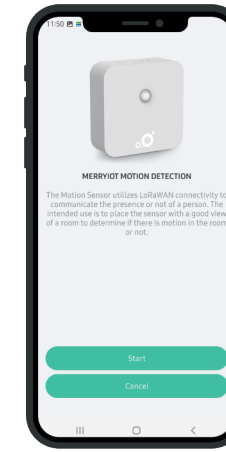
Click "complete".  
Once the group page appears, you will have successfully added your sensors!



MerryIoT Motion Detection  
MS10



After scan



Fill in the name and the location

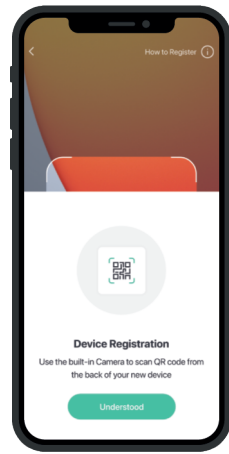
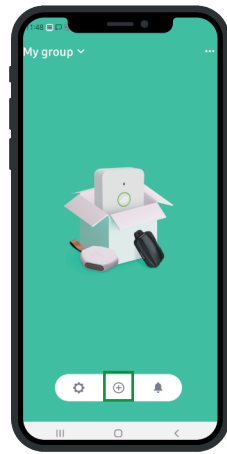


Click "complete".  
Once the group page appears, you will have successfully added your sensors!

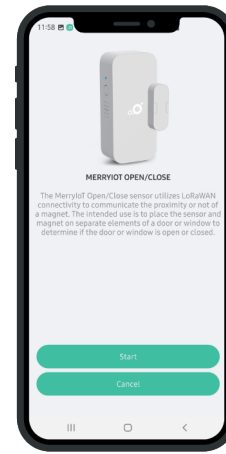
# Chapter 6 - Sensor Installation



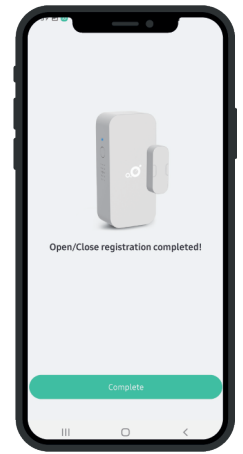
MerryIoT Open/Close  
DW10



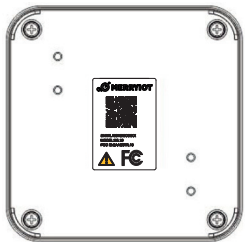
After scan



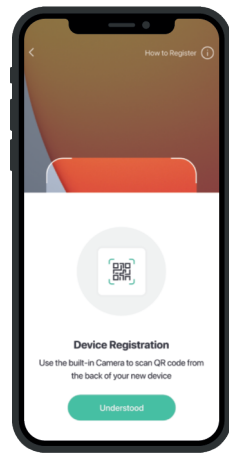
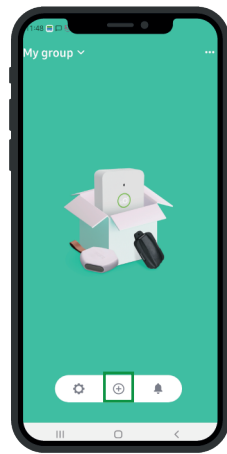
Fill in the name and the location



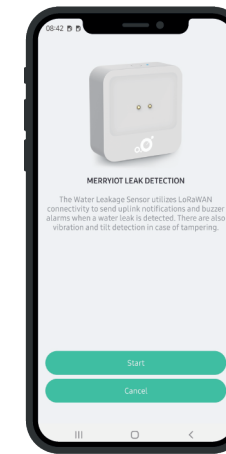
Click "complete".  
Once the group page appears, you will have successfully added your sensors!



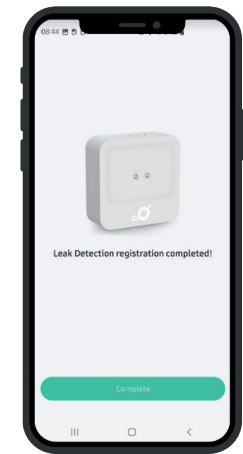
MerryIoT Leak Detection  
WL10



After scan



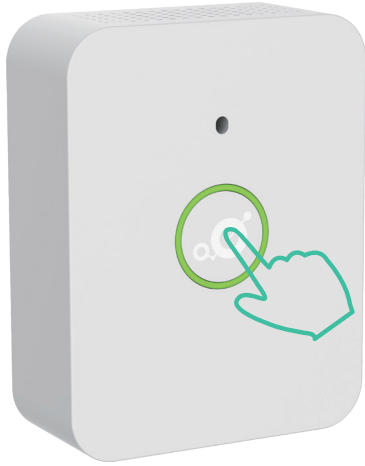
Fill in the name and the location



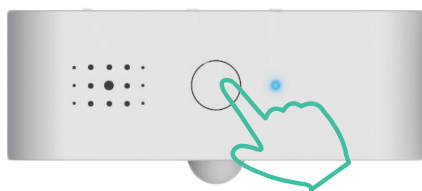
Click "complete".  
Once the group page appears, you will have successfully added your sensors!

## Chapter 6 - Sensor Installation

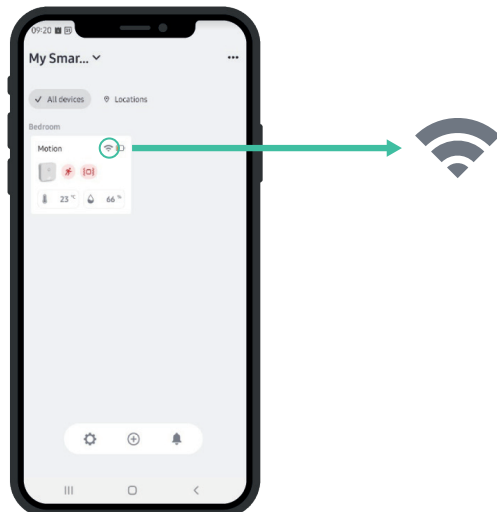
- 5 When the sensor is successfully connected to the Internet via the Amazon Sidewalk network, the LED will keep on for 3 seconds.
- 6 Press the button to activate the sensor and begin to send data for real-time status updates on the 'MerryloT for Amazon Sidewalk' app.
- 7 Once the sensor is successfully connected to the app, you will see this icon on your MerryloT device dashboard.



MerryloT Air Quality CO2  
CD10



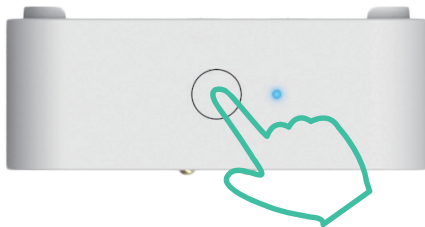
MerryloT Motion Detection  
MS10



## Chapter 6 - Sensor Installation



MerryloT Open/Close  
DW10



MerryloT Leak Detection  
WL10



## Chapter 6 - Sensor Installation

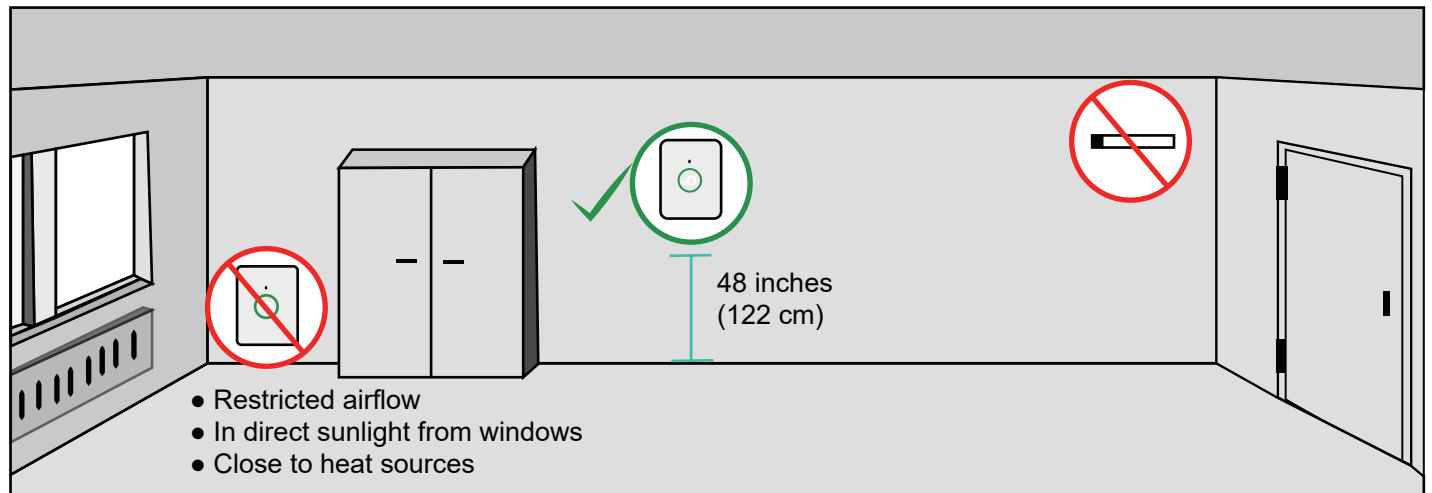
- Once the sensor is connected, install the sensor at your desired location.

### MerryloT Air Quality CO2 (CD10)

CO2 gas, being denser than regular air, tends to flow downward or accumulate in lower-lying areas in the indoor spaces. So it is important to mount the CO2 sensor unit at 48 inches (122cm) above the floor and position it away from door or window areas. This is to avoid the increased fresh air which can impact the accuracy of CO2 detection.

Therefore, please avoid these placements:

- Restricted airflow
- In direct sunlight from windows
- Close to heat sources



### MerryloT Motion Detection (MS10)

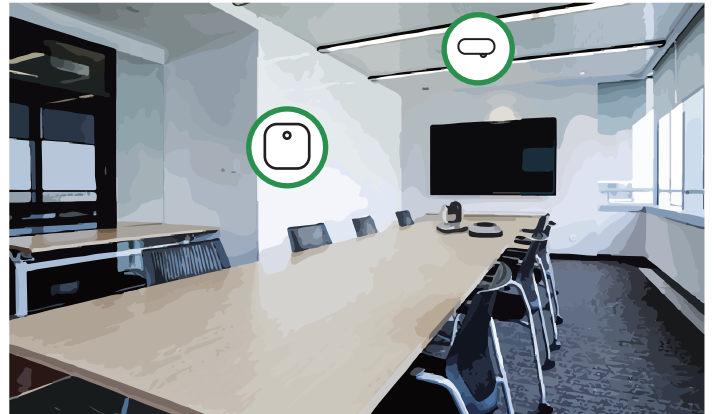
Assets where intruders are most likely to enter or for other applications related to occupied spaces include the following:

- Garage Entrance (for security purposes)  
The eye of the sensor should be oriented in the direction where intruders may approach.
- Meeting Room (for occupied space purposes)  
It is advised to deploy 2 MerryloT Motion Detection sensors within the designated space for optimal results. Place one sensor with its motion-detection eye directed towards the entrance, and the other directed towards the areas where individuals are expected to be present or seated.

Garage Entrance



Meeting Room

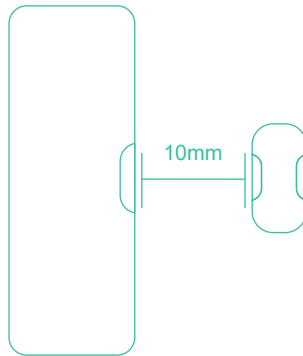
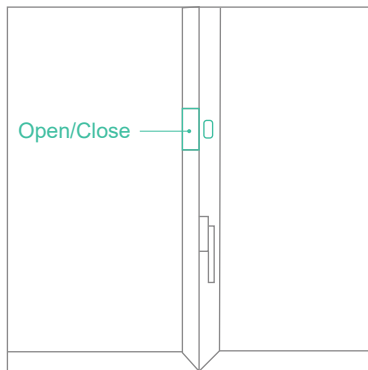




## Chapter 6 - Sensor Installation

### MerryIoT Open/Close (DW10)

1. Clean the installation area.
  2. Remove the protective layer from the double-sided tape on the door sensor, place the door sensor in the desired position (the fixed part of your door or window), and press firmly for at least 5 seconds.
  3. Remove the protective layer from the double-sided tape on the magnet, place the magnet in the desired position (align the magnet marking with the hall sensor marking on the sensor), and press firmly for at least 5 seconds.
- \*Note: the maximum sensing distance is 10mm.



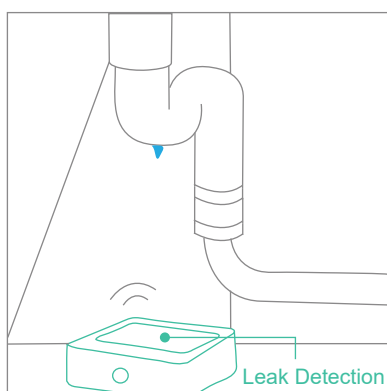
On the window or door in any room  
or on the mailbox door.

### MerryIoT Leak Detection (WL10)

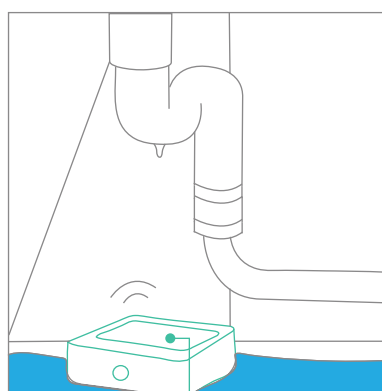
The most common application for our water detection sensors is placing them underneath AC units, which are prone to leaks. However, it is important to also address other possible risks, such as existing pipework, heating systems, kitchens, toilets and areas that might be likely to flood first during extreme weather conditions (by doors/windows).

It is recommended to install multiple MerryIoT Leak Detection Sensors in one space, where the potential leakage may occur.

1. For Home basement use.
2. For server rooms and data centers.



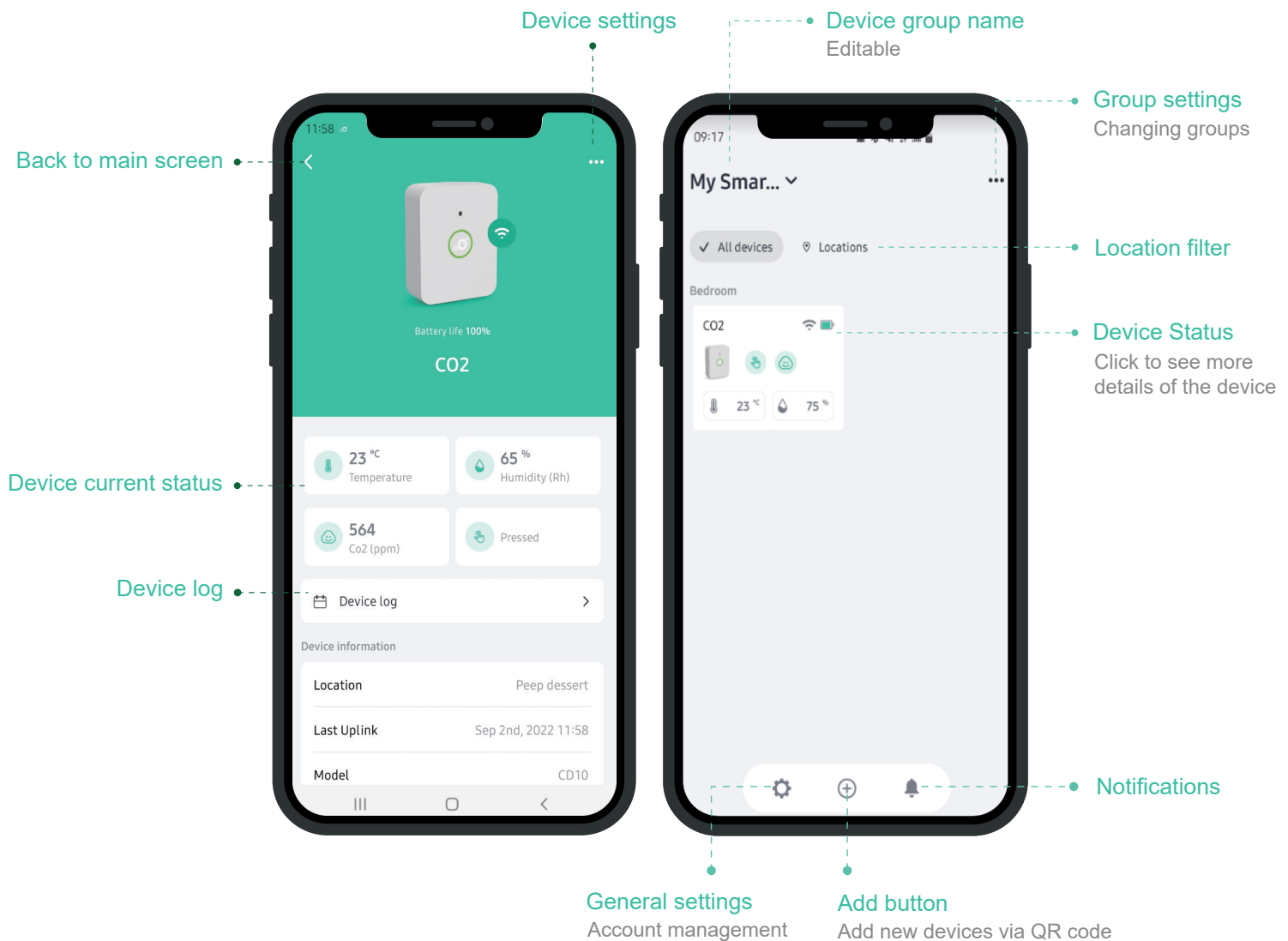
In the kitchen cabinet,  
where the water pipes locate



Leak Detection

# Chapter 7 - APP Functions

## MerryIoT Air Quality CO2 (CD10)



### Icons

Battery status  
 Sufficient (green): >3.0V  
 Low (yellow): >2.8V  
 Exhausted (red): ≤2.8V

Connection status  
 On/off

22°C Temperature (°C/°F)

50% Relative Humidity (%)

Both the icons of Temperature and Relative Humidity will be updated by 2 situations:  
 1. Periodically every 1 hour  
 2. Press the device's test button

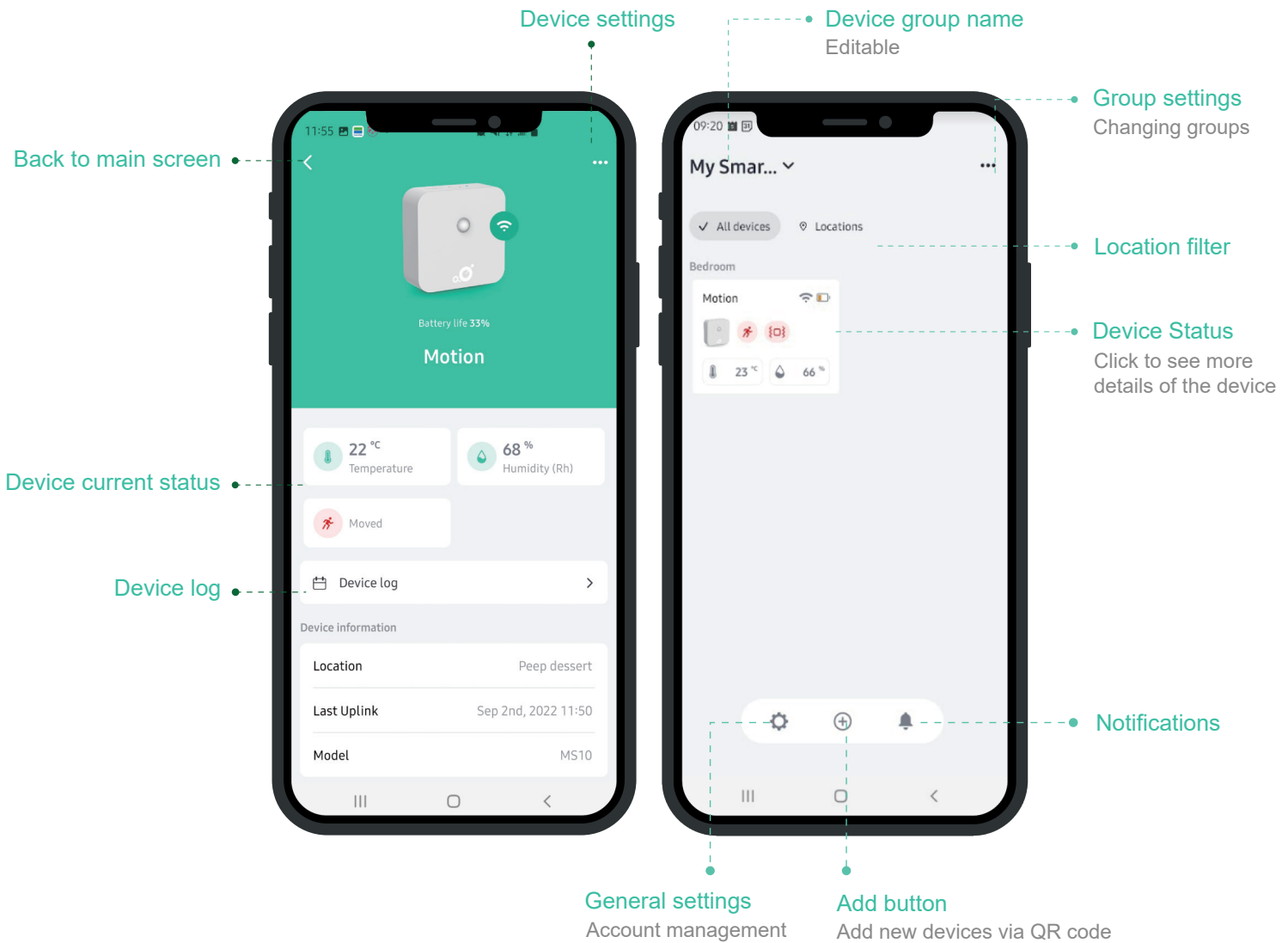
Button pressed  
 This icon will be displayed on your app dashboard when you press the device's test button, also the CO2 level, temperature and humidity will be updated at the same time.

Air quality/CO<sub>2</sub> concentration  
 Excellent (green): <800 ppm  
 Good (yellow): 800-1000 ppm  
 Bad (red): >1000 ppm

This icon will be updated by 3 situations:  
 1. Periodically every 1 hour  
 2. Immediately if the CO<sub>2</sub> level is more than 1000 ppm  
 3. Press the device's test button

# Chapter 7 - APP Functions

## MerryIoT Motion Detection (MS10)



### Icons



**Battery status**  
 Sufficient (green): >2.6V  
 Low (yellow): >2.5V  
 Exhausted (red): ≤2.5V



**Connection status**  
 On/off



**Temperature (°C/°F)**



**Relative Humidity (%)**

Both the icons of Temperature and Relative Humidity will be updated by 2 situations:

1. Periodically every 1 hour
2. Press the device's test button



**Button pressed**

This icon will be displayed on your app dashboard when you press the device's test button, also the CO2 level, temperature and humidity will be updated at the same time.



**Motion detected**

This icon will be displayed on your app dashboard immediately when the device detect a human motion, and the icon will disappear if there is no human detection in the last 5 minutes.

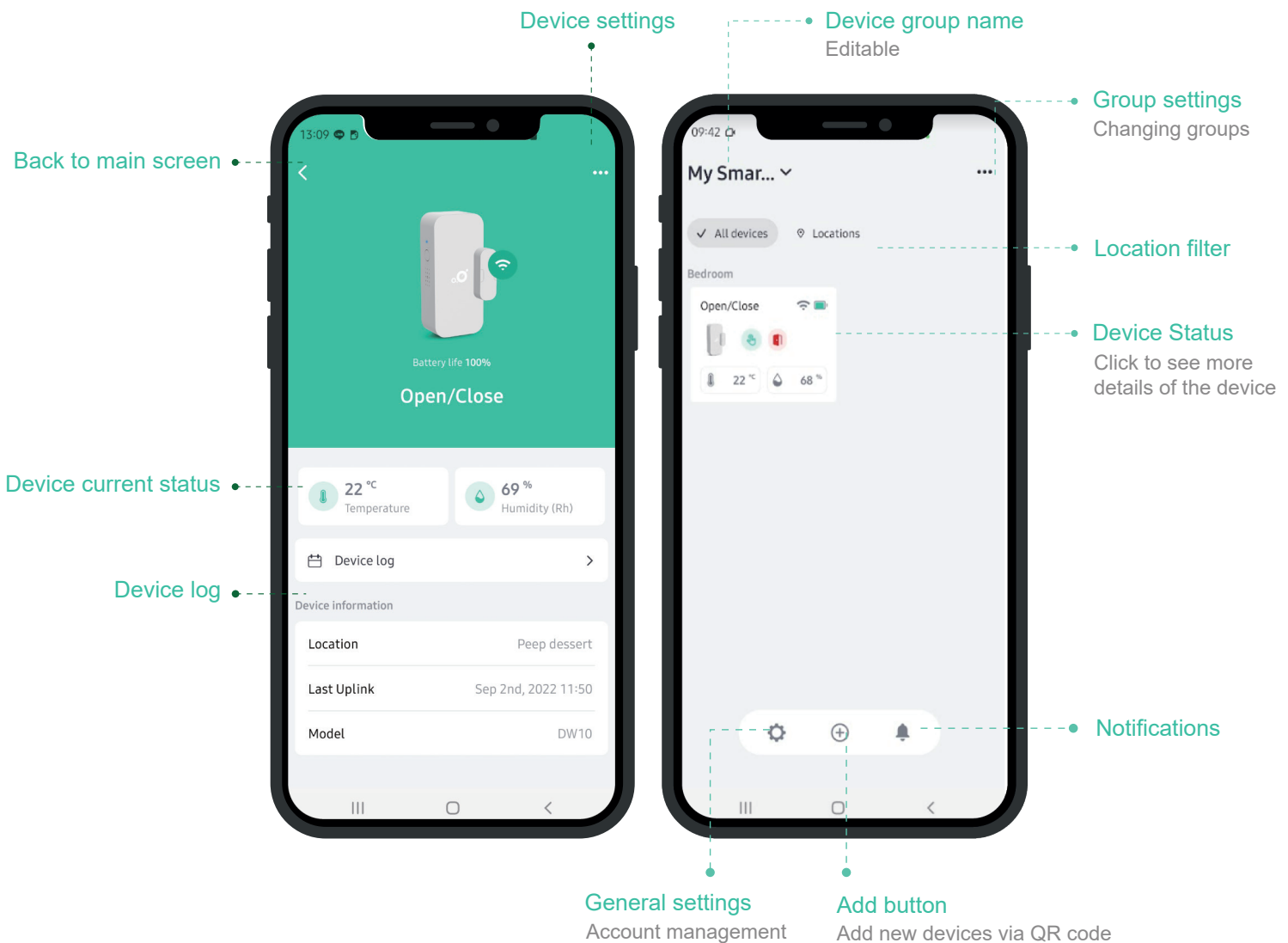


**Device is being tampered**

This icon will be displayed on your app dashboard immediately when the device is been moved or tampered.

# Chapter 7 - APP Functions

## MerryIoT Open/Close (DW10)



### Icons



**Battery status**  
 Sufficient (green): >3.0V  
 Low (yellow): >2.6V  
 Exhausted (red): ≤2.6V



**Button pressed**  
 This icon will be displayed on your app dashboard when you press the device's test button, also the CO2 level, temperature and humidity will be updated at the same time.



**Connection status**  
 On/off



**Door or window status**  
 This icon will be updated every 6 hours, and when each door/window opens/closes.



**Temperature (°C/°F)**



**Device is being tampered**  
 This icon will be displayed on your app dashboard immediately when the device is been moved or tampered.



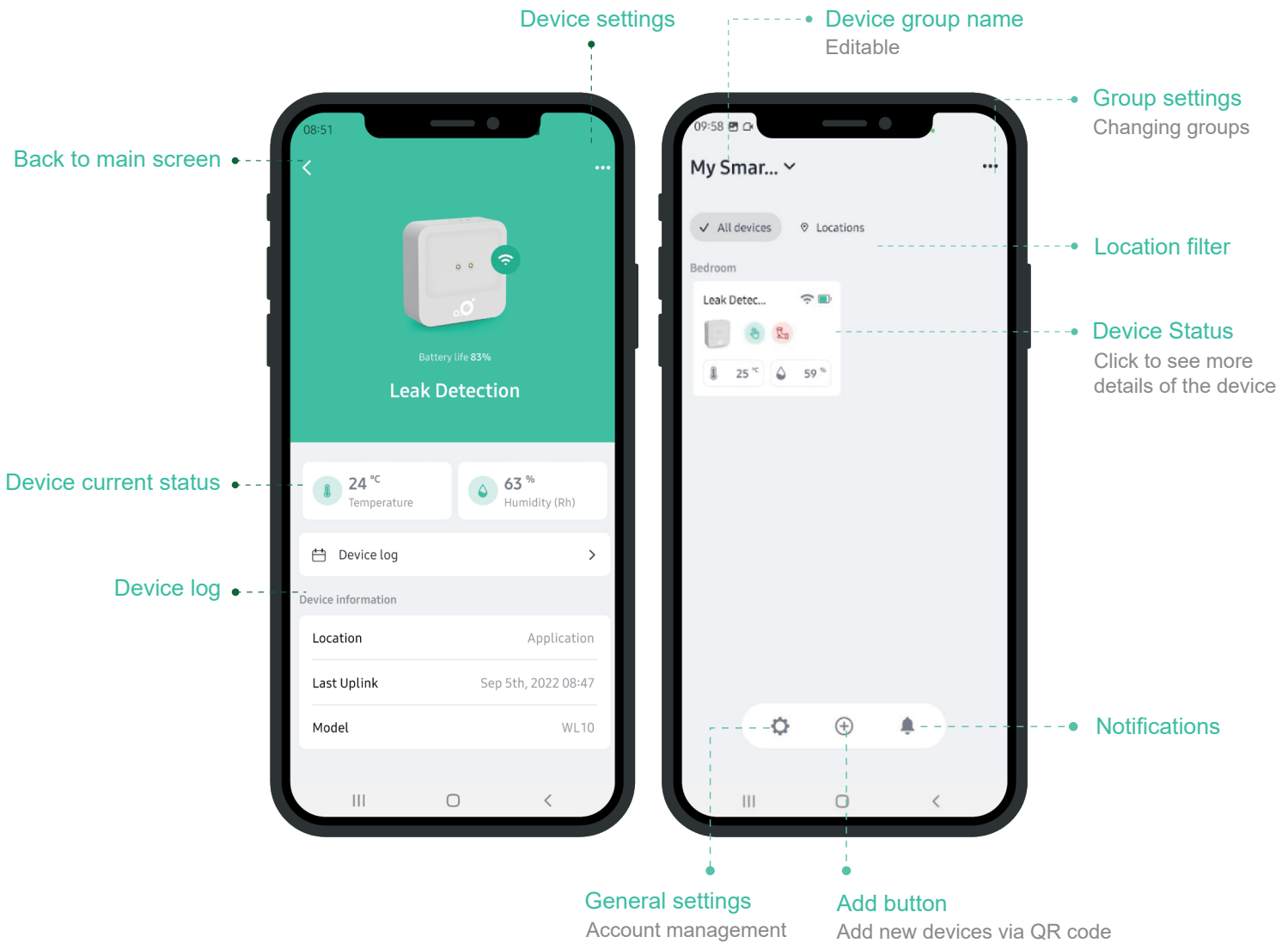
**Relative Humidity (%)**

Both the icons of Temperature and Relative Humidity will be updated by 2 situations:

1. Periodically every 1 hour
2. Press the device's test button

# Chapter 7 - APP Functions

## MerryIoT Leak Detection (WL10)



### Icons



**Battery status**  
 Sufficient (green): >2.6V  
 Low (yellow): >2.5V  
 Exhausted (red): ≤2.5V



**Connection status**  
 On/off



Temperature (°C/°F)



Relative Humidity (%)

Both the icons of Temperature and Relative Humidity will be updated by 2 situations:

1. Periodically every 1 hour
2. Press the device's test button



**Button pressed**

This icon will be displayed on your app dashboard when you press the device's test button, also the CO2 level, temperature and humidity will be updated at the same time.



**Water leak detected**

This icon will be displayed on your app dashboard immediately when the device detect a leak/flooding event, and the icon will disappear when the water dry up.



**Device is being tampered**

This icon will be displayed on your app dashboard immediately when the device is been moved or tampered.

## Chapter 8 - Device System Configuration

### MerryloT Air Quality CO2 (CD10)

When the environmental CO2 concentration is below 1000ppm, the device is set to an inactive state and periodically updates the temperature, relative humidity, and CO2 values on the app every 60 minutes. If the environmental CO2 concentration surpasses 1000ppm or the button is pressed, the app will generate a notification.


To recalibrate the CO2 value, take the device outdoors into fresh air, then press and hold the button for more than 10 seconds until the Green LED begins to blink. After 10 minutes, the recalibration process will be complete.

The LEDs show the CO2 status for 5 seconds when waving in front of the device.




### MerryloT Motion Detection (MS10)

The app will automatically push a notification to indicate the device's inactivity every hour. Besides, the app will also push a notification when the device is moved, or its button is pressed.

Once the device detects motion, it triggers a 'motion detected' notification and the icon  will be displayed within the app. There will be no notification during motion detection but continuous notifications will be sent every 10 minutes. After there is no human detection in the last 5 minutes, the icon disappears, and the time interval of inactivity notifications switches back to 1 hour.


### MerryloT Open/Close (DW10)

The app will automatically push a notification to indicate the device's inactivity every 6 hour. Besides, the app will also push a notification when the device is moved, or its button is pressed.

Whenever the device detects a transition of the magnet, it triggers an 'open/close' notification and the following icon will be displayed within the app:  

### MerryloT Leak Detection (WL10)

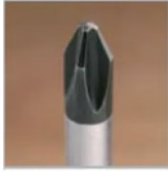
The app will automatically push a notification to indicate the device's inactivity every hour. Besides, the app will also push a notification when the device is moved, or its button is pressed.

Once the device detects a leak/flooding event, it triggers a 'motion detected' notification and the icon  will be displayed within the app. During the wet state, prompt notifications will be pushed every 5 minutes. After the area has been dry for the last 5 minutes, the icon disappears, and the time interval of inactivity notifications switches back to 1 hour.

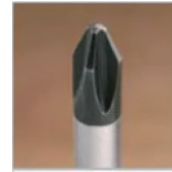
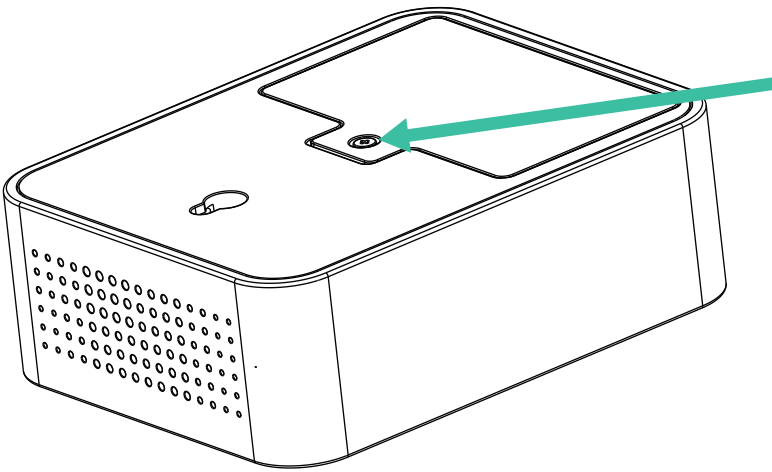
## Chapter 9 - Battery Replacement

### MerryIoT Air Quality CO2 (CD10)

- 1 Tools: Cross-type screwdriver x1 (PH0).

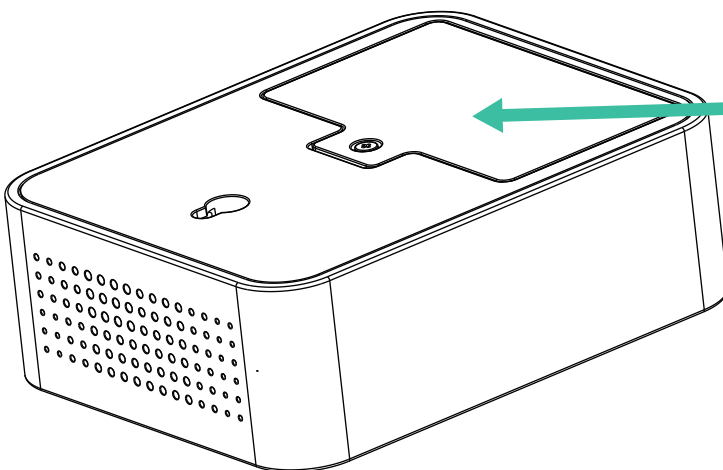


- 2 Remove the battery cover of the sensor with a cross-type screwdriver (PH0 size).



- 3 Replace the battery with new ones (Li-SiO<sub>2</sub> battery, "ER14505", AA size x2 pcs).

\*Caution: Using batteries other than the ones provided may lead to performance loss, reduced battery life, and device damage. Ensure proper disposal according to environmental regulations. Mixing of cells can result in battery leakage and suboptimal device performance.



X2

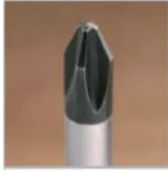
ER14505\*  
Lithium-thionyl Chloride  
(Li-SOCl<sub>2</sub>) Battery, AA

- 4 Re-assemble the battery cover.

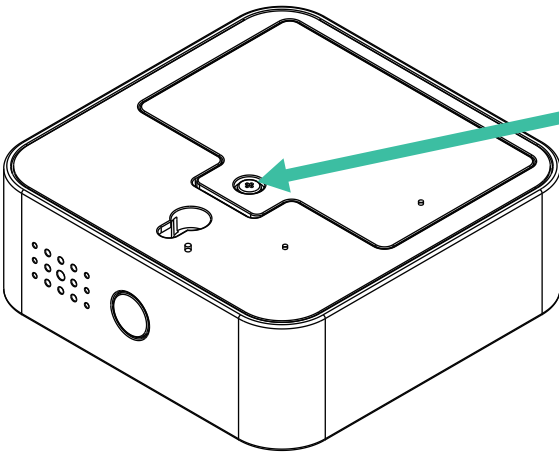
## Chapter 9 - Battery Replacement

### MerryIoT Motion Detection (MS10)

- 1 Tools: Cross-type screwdriver x1 (PH0).

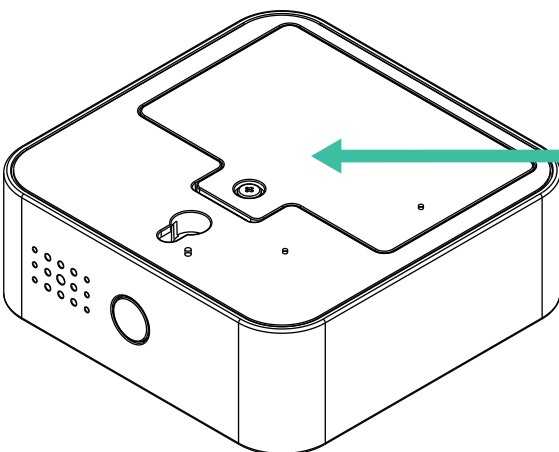


- 2 Remove the battery cover of the sensor with a cross-type screwdriver (PH0 size).



- 3 Replace the battery with new ones (Alkaline Battery, "LR6", AA size x2 pcs).

\*Caution: Using batteries other than the ones provided may lead to performance loss, reduced battery life, and device damage. Ensure proper disposal according to environmental regulations. Mixing of cells can result in battery leakage and suboptimal device performance.



X2

Alkaline AA  
LR6 Alkaline battery, AA

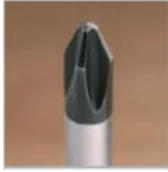
- 4 Re-assemble the battery cover.



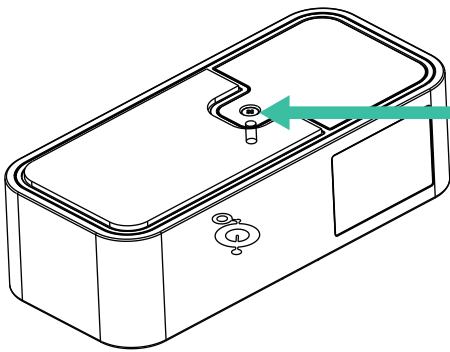
## Chapter 9 - Battery Replacement

### MerryIoT Motion Detection (MS10)

- 1 Tools: Cross-type screwdriver x1 (PH0).



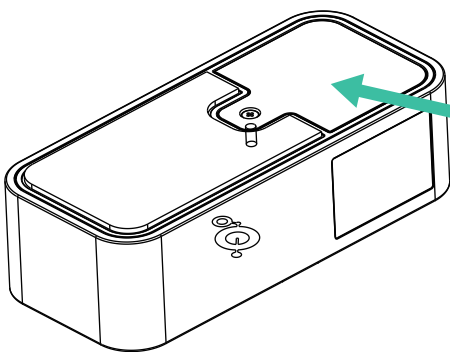
- 2 Remove the battery cover of the sensor with a cross-type screwdriver (PH0 size).



- 3 Replace the battery with new ones (Li-SiO<sub>2</sub> battery, "ER14250", 1/2 AA size x2 pcs).

\*Caution: Using batteries other than the ones provided may lead to performance loss, reduced battery life, and device damage.

Ensure proper disposal according to environmental regulations. Mixing of cells can result in battery leakage and suboptimal device performance.



X2

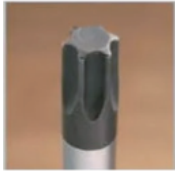
ER14505\*  
Lithium-thionyl Chloride  
(Li-SOCl<sub>2</sub>) Battery, AA

- 4 Re-assemble the battery cover.

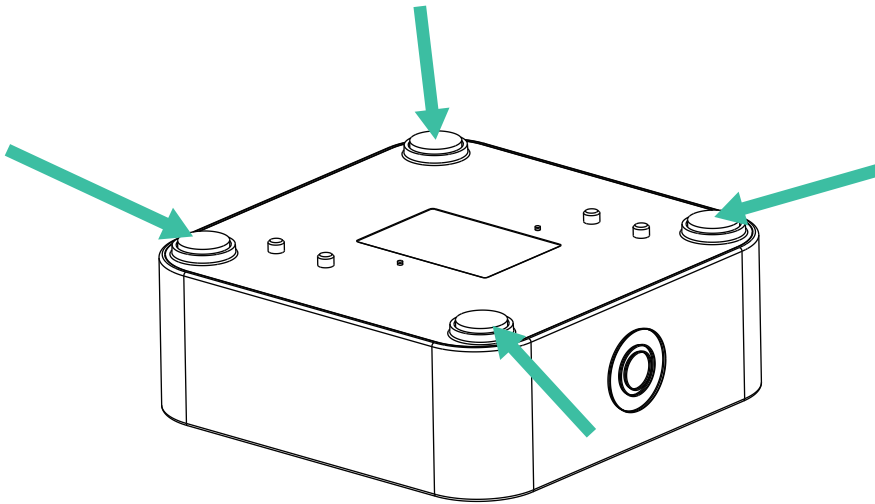
## Chapter 9 - Battery Replacement

### MerryIoT Leak Detection (WL10)

- 1 Tools: Cross-type screwdriver x1 (PH1), Star-type screwdriver x1 (T8H), Plastic disassembly stick (recommended).

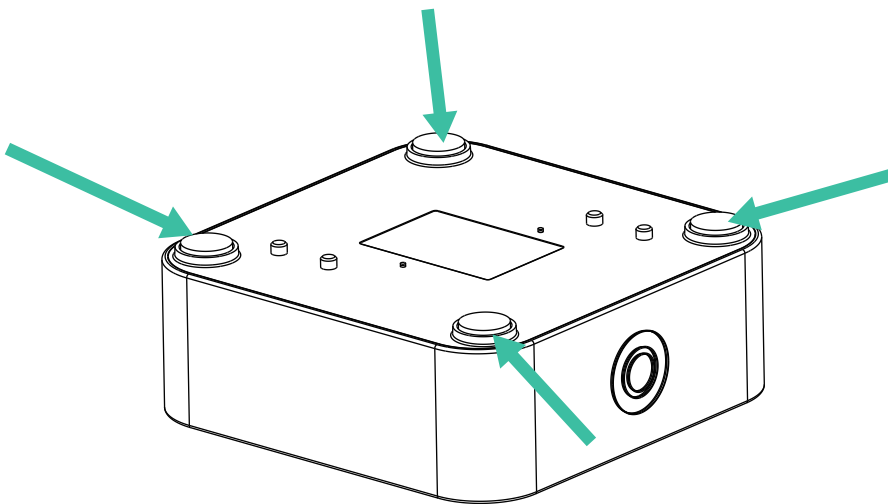


- 2 Remove 4 rubber stands of the sensor with disassembly stick.



- 3 Remove the bottom cover of the sensor with a star-type screwdriver (T8H size).

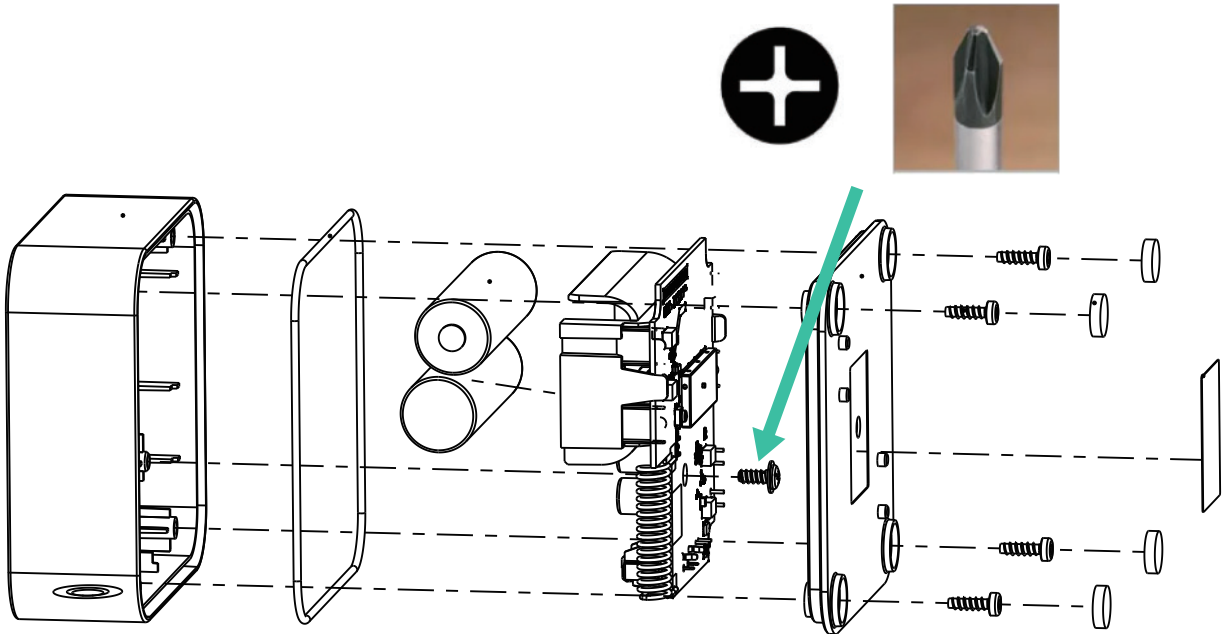
\*Caution: Removing the bottom cover may affect the water-tightness. Please get help from Browan team before you do so.



## Chapter 9 - Battery Replacement

- 4 Remove the circuit board of the sensor with a cross-type screwdriver x1 (PH1).

\*Caution: Avoid touching the circuit board with bare hand. Touching boards can release static discharge. Please wear a plastic/rubber glove.

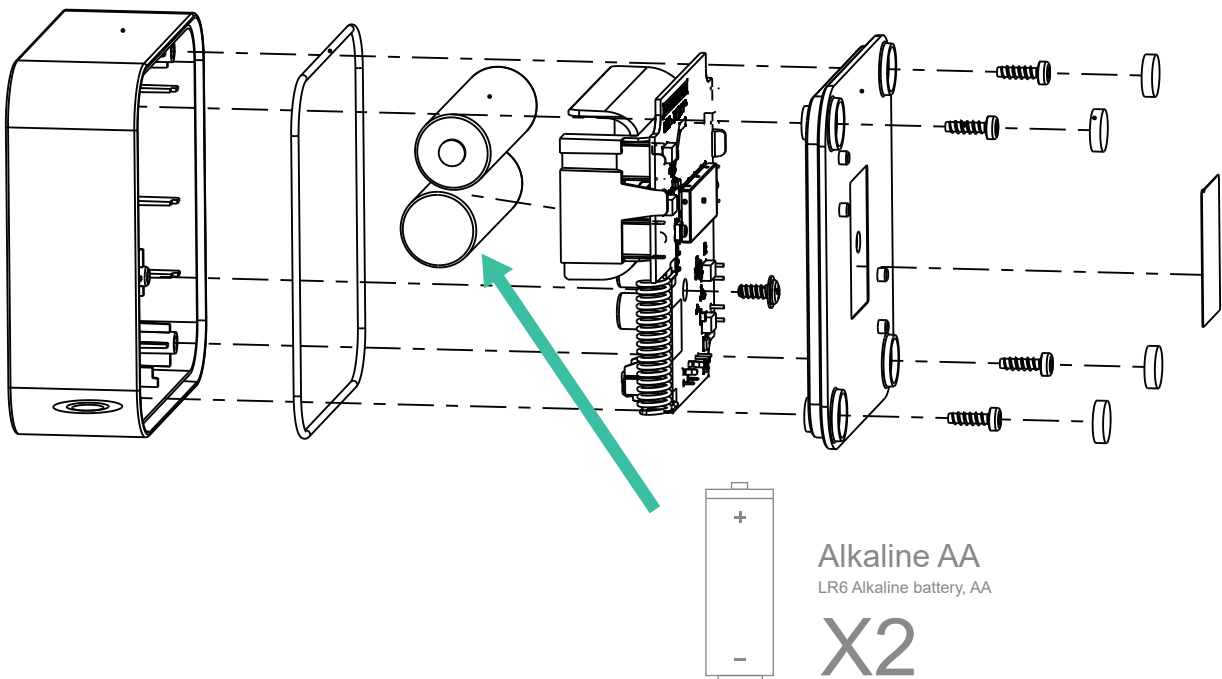


- 5 Replace the battery with new ones (Alkaline Battery, "LR6", AA x2 pcs).

\*Caution: DO NOT remove the battery holder.

\*Caution: Using batteries other than the ones provided may lead to performance loss, reduced battery life, and device damage.

Ensure proper disposal according to environmental regulations. Mixing of cells can result in battery leakage and suboptimal device performance.



- 6 Re-assemble the battery cover.

## Chapter 10 - FAQ

1.

Why do I get the error message 'Device was not found' while connecting the MerryloT sensor through the MerryloT Sidewalk sensor app?



**Answer:**

Please ensure that the app you downloaded is correct. The accurate app is 'MerryloT for Amazon Sidewalk'. This app is specifically designed for MerryloT sensor versions that are compatible with Amazon Sidewalk, so please also verify with your supplier whether the MerryloT sensor version you purchased is correct.

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2.

How long will it take to get the CO2 value?

**Answer:**

It takes at least 20 minutes to obtain the CO2 value through manual activation or 1 hour when using automatic activation.

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3.

Why do I have to 'sign in' via Google/Apple ID twice?

**Answer:**

The first 'sign in' is identified as a pre-sign up process in AWS Cognito which the MerryloT Sensor uses to manage third-party social media registration. Once the presign-up is complete, the mobile App page will redirect you to the 'sign in' page again, then, you can sign in to the mobile APP successfully.

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4.

Why does the app malfunction when I log in or switch accounts?

**Answer:**

If the app displays abnormality after logging in for the first time or switching accounts, please fully close the app and then reopen it.

---

5.

Why isn't my MerryloT sensor working?

**Answer:**

Your current location may not be within the coverage of Amazon Sidewalk. Please check the Amazon Sidewalk coverage in your neighborhood by visiting <https://coverage.sidewalk.amazon/>

## Chapter 11 - Copyright Notice

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