Manuals+ — User Manuals Simplified.

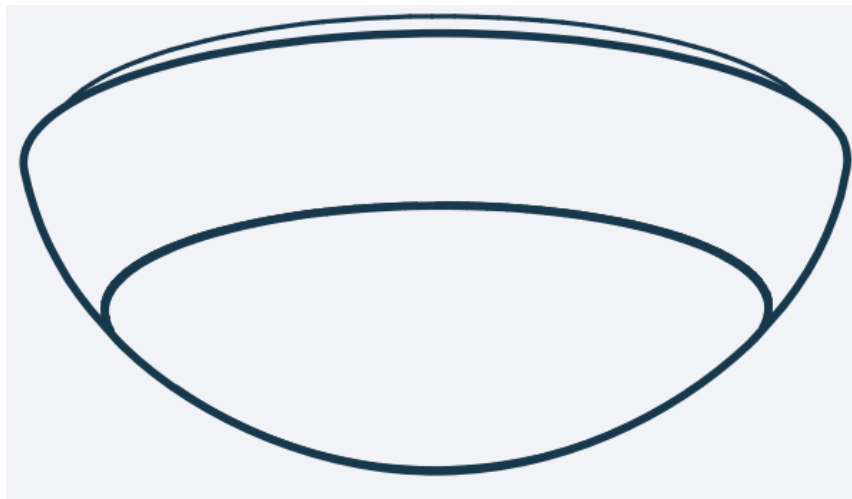# ARAS Security Wireless Motion Sensor Installation Guide

Contents

ARAS Security Wireless Motion Sensor

What is in the box
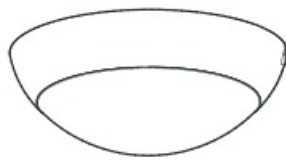
Wireless Motion Sensor   Mounting plate
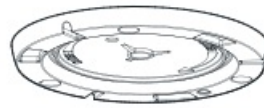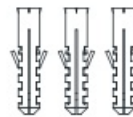
2 AA batteries   3 screws

1 safety screw   3 wall anchors

What you will need

- A laptop or smartphone running the DT Studio web application studio?d21s?com>
- If your company does not have a DT Studio organization, get started at d21s?com/start>
- Yne or more Cloud Connectors (gateway) to forward sensor data to the DT Cloud>
- A #1 Phillips screwdriver or power drill with a #1 Phillips driver bit.

Planning the installation

- **Number of Motion Sensors**
    - The number of motion sensors needed depends on the size of the area that needs to be monitored.
    - Each sensor can cover up to 150 sqm (1600 sqft) if installed at the maximum height of 3.6 meters (12 ft).

◦ See step 5 for more details about installation height and detection area.
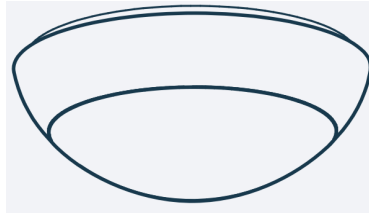
- **Number of Cloud Connectors**
  - ◦ The number of Cloud Connectors needed to cover a typical office space depends on the size of the space as well as the material the walls in the space are made up of.
  - ◦ For example, concrete will reduce the coverage area more than thin drywall.
 - ◦ See the following sections for how to plan Cloud Connectors for different types of installation sites.

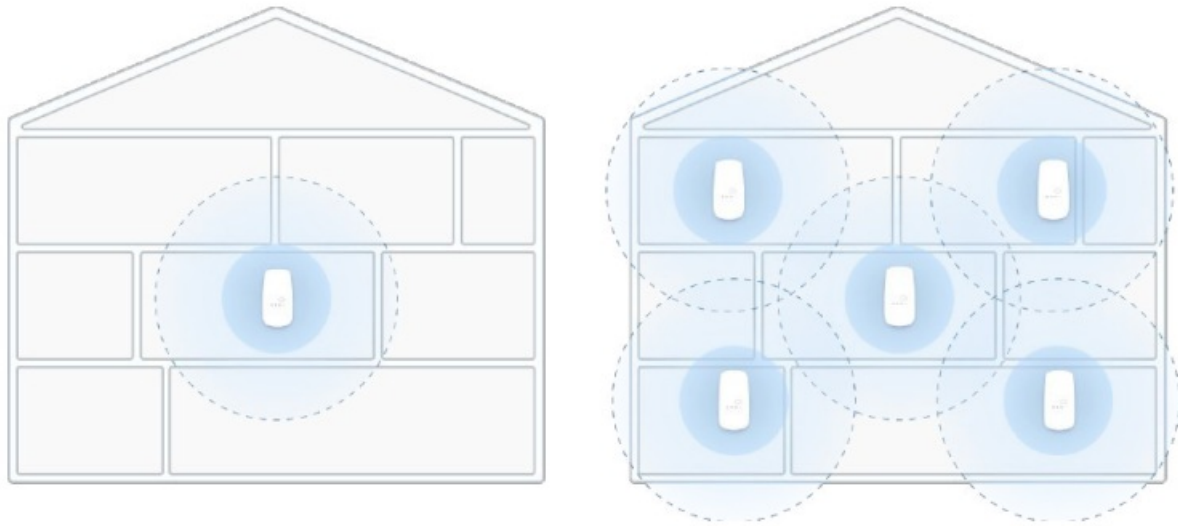

Cloud Connector

Small site
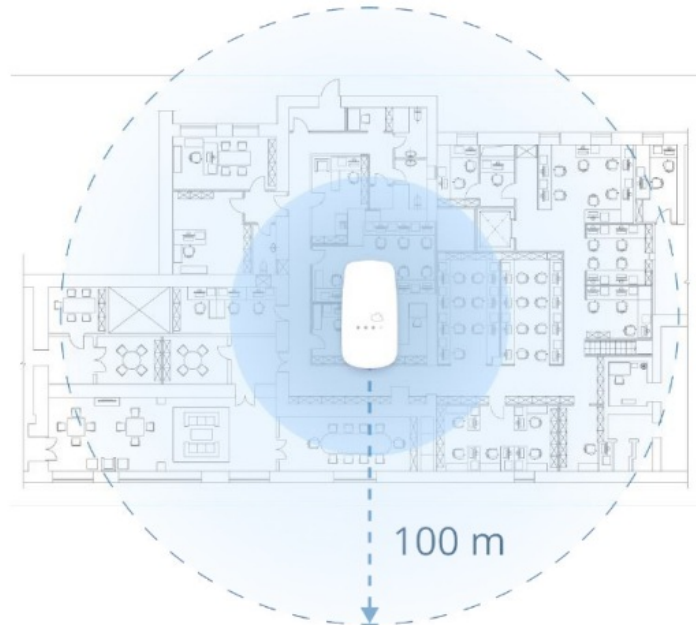
- One Cloud Connector is often enough to cover a smaller site.
- To estimate if a single Cloud Connector can cover your entire installation site, we recommend approximating a circle with a radius of 100 m (328 ft) on the floor plan to mark the expected coverage for the Cloud Connector.

Large site
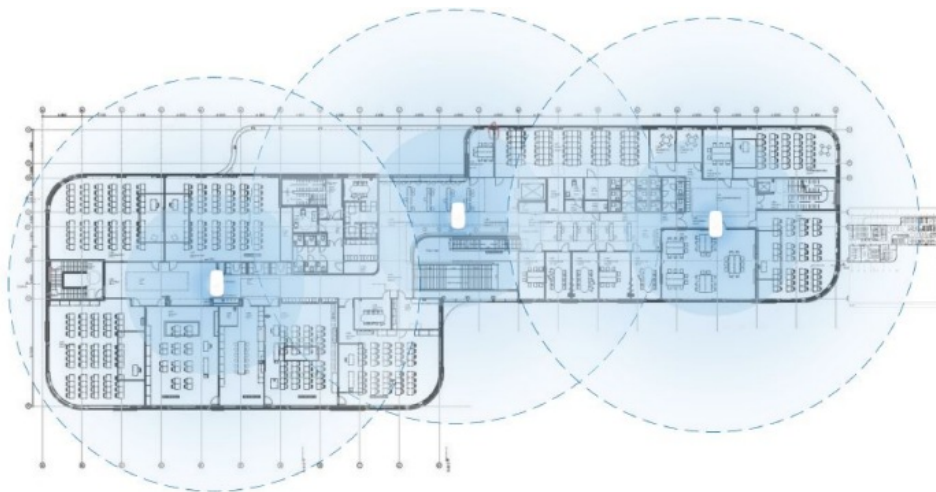
- A large site with many sensors requires multiple Cloud Connectors to provide good coverage.
- Estimate by approximating a circle with a 100 m (328 ft) radius on the floor plan.
- Place subsequent circles with approximately 120 m (393 ft) spacing

Multiple floors

- Consider that Cloud Connectors can provide coverage on the floor above and below for multifloor installations.
- The range will depend on the construction of the building, especially the material of the floor separators.
- If possible, plan for Cloud Connectors on each floor shifted horizontally to maximize the signal coverage, as seen in the image.

On the installation day

1. Install the Cloud Connectors in the locations found during planning.
   Visit **support.d21s.com** to see best practices for Cloud Connector installations.
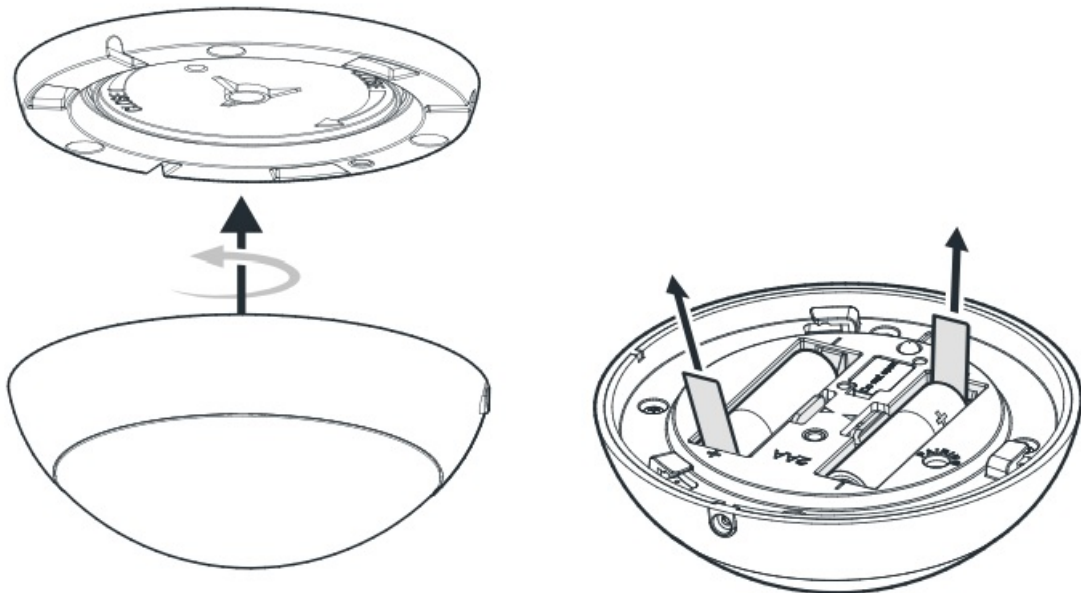
2. Remove the bracket by rotating it counter clockwise and remove the battery tabs to activate the sensor.
   The Cloud Connector will automatically start to relay data from the sensor to the cloud service.
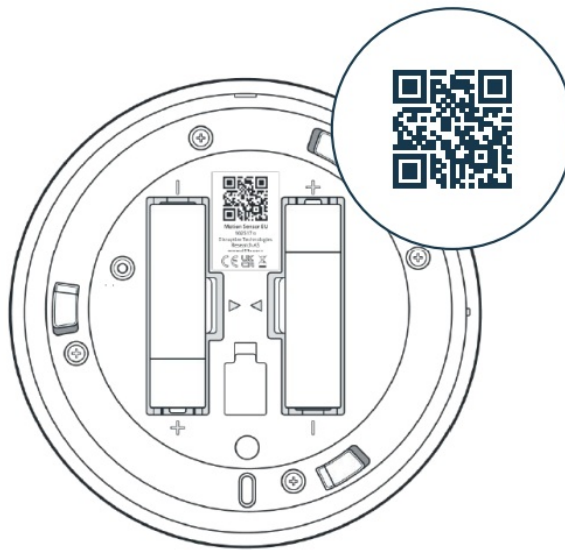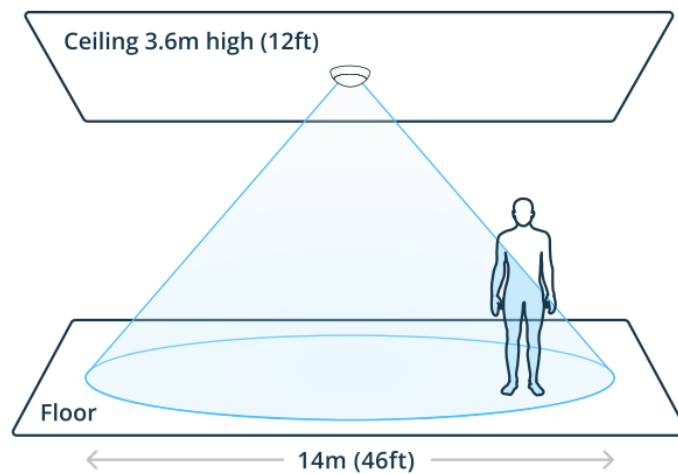
3. Claim the sensor in Studio by scanning the QR code found on the device. The same code is printed on the packaging label.


4. The sensor is now be available in Studio and you can give it a name, e.g. "Main Meeting Room".

5. The size of the detection area depends on the installation height of the sensor.

Installation Height	Detection Diameter
2.4 meters (8ft)	9.5 meters (31ft)
3 meters (10ft)	12 meters (40ft)
3.6 meters (12ft)	14 meters (45.9ft)

- The maximum installation height possible is 3.6 meters (12 ft) which will result in a detection area diameter of 14 meters (46 ft).
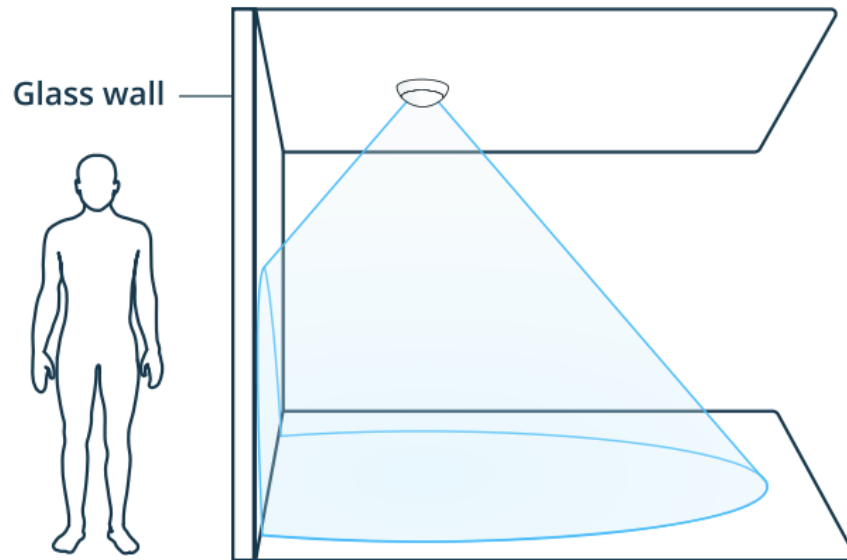

- The sensor reacts to heat from people moving across its field of view and will not detect people behind a glass wall.
- In high sensitivity mode, the sensor will detect the presence of people with minimal movement, like sitting in a chair. Low sensitivity mode requires more motion to trigger the sensor.

6. There are two options for mounting the sensor.
   - **Option 1**
     - Attach the mounting plate to a clean ceiling surface using the adhesive backing.
     - Add a single screw to the center for extra safety.
     - Please note: the adhesive creates a strong bond to the surface and can t be removed and reapplied once placed.
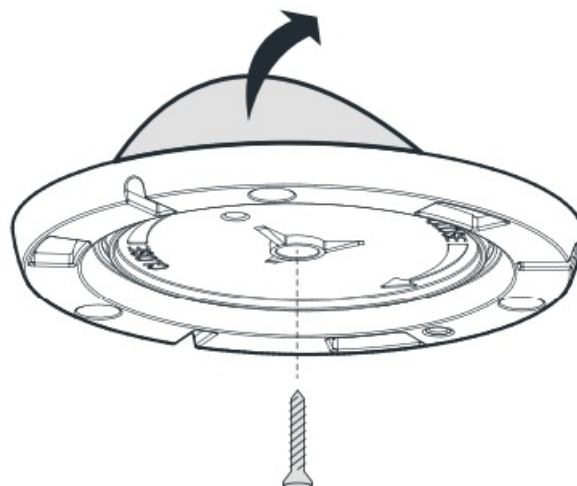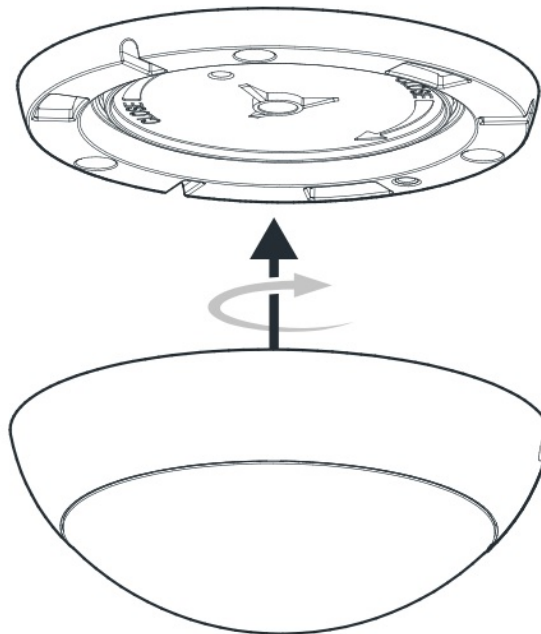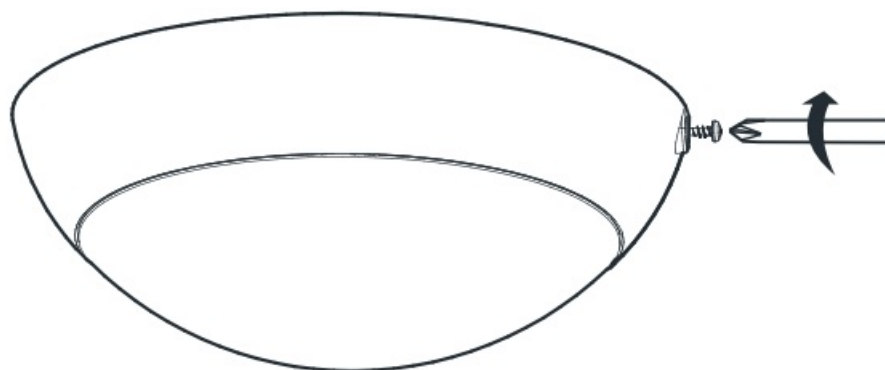

   - **Option 2 (recommended)**

     Attach the mounting plate to the ceiling using the included screws. If necessary, use the wall anchors.
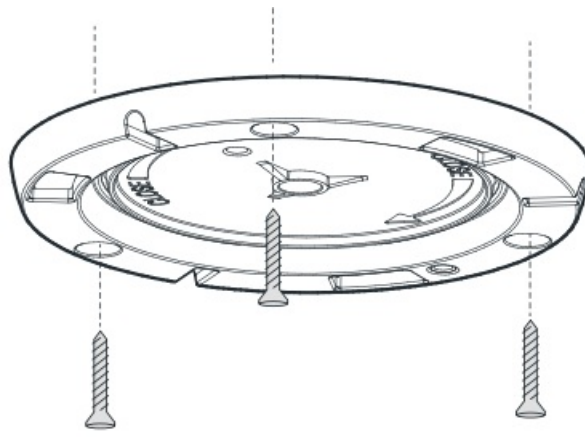
7. Lock the sensor in place by turning it clockwise.

8. Fasten the included safety screw to lock the sensor in place.

Sensor configuration via Studio or API
The sensor has two settings that can be adjusted using Studio or the API: Sensitivity and Activity Timer.

Sensitivity Setting

High Sensitivity (default)   Dropdown option in Studio

- Determines how close a person have to be to the sensor, as well as the how long the person has to stay within a zone before a detection event is triggered. In the highest sensitivity mode, the sensor will trigger if people quickly grace the edge of the detection zone.
- By default sensors ship with the highest sensitivity.

Activity Timer

- How long a zone is considered occupied after the most recent "People detected" event. The longer the Activity Timer is, the longer the battery will last.
- See datasheet for detailed description.

Support

- If any problem should occur during installation, or if you have any questions, please reach out to us.
- We thank you for choosing sensors from Disruptive Technologies.

ABOUT COMPANY

- **d21s.com/support**
- **support@disruptive-technologies.com**
- EU +44 808 164 1905
- (08:00–16:00 CET/CEST)
- US +1 (855) 714-3344
- (8 am – 5 pm EST)

Documents / Resources

ARAS Security Wireless Motion Sensor [pdf] Installation Guide
Wireless Motion Sensor, Wireless, Motion Sensor