

## Presence Multi-Sensor FP300 **EN**

### Product Introduction

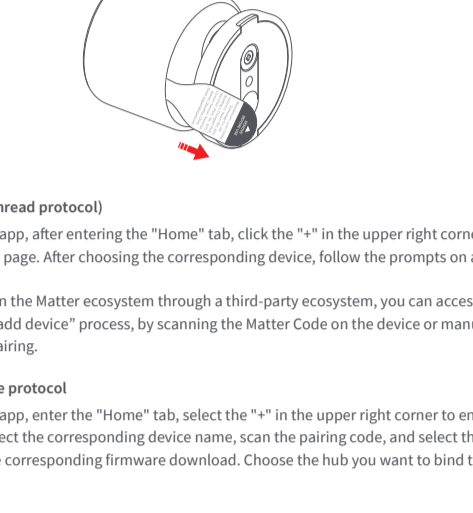
The Presence Multi-Sensor FP300 is a battery-powered human presence sensor that combines millimeter-wave radar, infrared detection, and Aqara's AI algorithms to accurately detect occupancy—even when occupants remain still, overcoming the limitations of traditional PIR sensors. With spatial self-learning and adaptive sensitivity, it intelligently adjusts to its environment while also monitoring temperature, humidity, and ambient light. Supporting both Thread and Zigbee protocols, it seamlessly integrates with the Aqara Home ecosystem or any Matter-compatible platform for versatile smart home control.

Note:

\*When joining the Matter ecosystem, a Thread Border Router and a Matter Controller for the Matter ecosystem are required.

\*When added to the Aqara ecosystem, this device requires the Aqara Home app and an Aqara hub supporting Zigbee or Matter protocol for operation.

\* Some specific features are only available in the Aqara Home app.

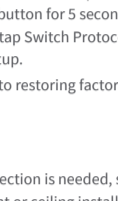


### Device access

#### Preparation

1. Download Aqara Home app

Please scan the following QR code, download the latest version of the Aqara Home app

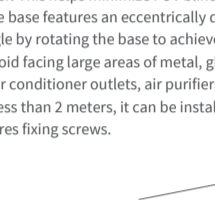


2. Connect the device

Remove the insulation tab, power on the device, then enter the network pairing mode, the LED indicator will light start flashing blue slowly.

If the network pairing times out, press and hold the reset button for 5 seconds until the LED indicator starts flashing, then release it to enter the device pairing mode.

\*To ensure the device's airtightness, the gaps are designed to be narrow. When removing the insulating tab, please pull it out firmly. If difficulty occurs, you may open the battery cover for extraction.



#### Connect via Matter (Thread protocol)

Open the Aqara Home app, after entering the "Home" tab, click the "+" in the upper right corner to enter the "Add Device" page. After choosing the corresponding device, follow the prompts on app to complete the pairing.

Note: If you need to join the Matter ecosystem through a third-party ecosystem, you can access it in the third-party app's "add device" process, by scanning the Matter Code on the device or manual to complete the device pairing.

#### Connect via the Zigbee protocol

Open the Aqara Home app, enter the "Home" tab, select the "+" in the upper right corner to enter the "Add Device" page, select the corresponding device name, scan the pairing code, and select the Zigbee protocol for the corresponding firmware download. Choose the hub you want to bind the device to.

#### Firmware Upgrade

To ensure the best experience, please add the device in the Aqara Home app first, then update the device firmware in the settings page to the latest version before using it.

#### Protocol Switching

If you want to switch protocols, you can do so in the Aqara Home app. First, remove the device from the app, then long press the device reset button for 5 seconds to reset the device and enter pairing mode, during the device pairing process, tap Switch Protocol and select the desired protocol, follow the app's instructions to complete the setup.

Notice: switching protocols is equivalent to restoring factory settings, which will clear all device settings and data.

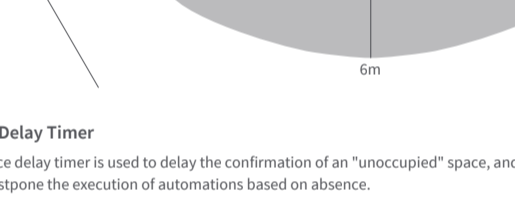
#### Equipment Installation

The device can be installed anywhere detection is needed, supporting multiple installation methods such as wall mounting, desktop placement or ceiling installation. Users can choose an appropriate location based on the desired detection area and adjust the installation angle and device tilt to fine-tune coverage. The device supports installation via adhesive, magnetic mounting, expansion screws, etc. (screws must be used if installed at a height over 2 meters).

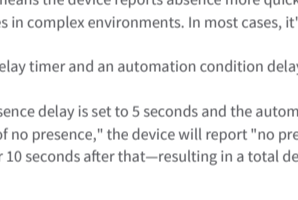
#### Installation Recommendations

1. Install the device on a wall, corner, or ceiling using adhesive or magnetic mounting based on your actual detection needs. Make sure the front of the device faces the area you want to monitor, and adjust the angle accordingly.
2. If you need to cover a larger detection range, it is recommended to install the device at a height of about 2 meters, with the device slightly tilted downward to cover the required area of monitoring.
3. For side installation on a wall or in a corner, a recommended height is 1.4–1.8 meters, to ensure detection coverage in both standing and seated positions. If installing at a different height, you can adjust the bracket's tilt angle as needed to cover the main activity area.
4. To avoid detection blind spots, it's recommended to install the device in a corner with the front facing the centerline of the corner. This helps minimize FOV blind zones on both sides of the radar during long-range detection. The base features an eccentrically designed universal joint, allowing adjustment of the mounting angle by rotating the base to achieve greater tilt range for the device.
5. When installing, please try to avoid facing large areas of metal, glass and other strongly reflective surfaces or installing it next to air conditioner outlets, air purifiers, and fans.
6. When the installation height is less than 2 meters, it can be installed with adhesive and magnetic mounting. Above 2 meters requires fixing screws.

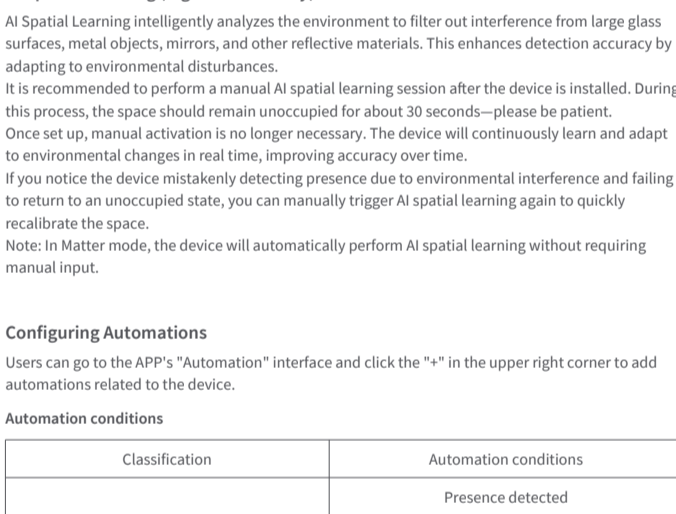
#### A. Adhesive installation



#### B. Magnetic installation



#### C. Screw installation



\*A screwdriver is not included; the provided screw installation kit is optional.

#### Setting the Radar Detection Range ( Zigbee Mode Only)

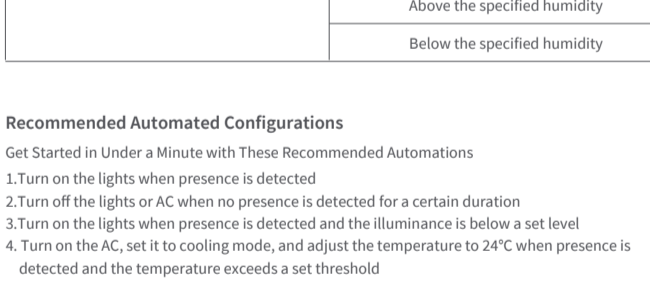
The device has a maximum detection range of 6 meters and a detection angle of 120° (measured under ideal laboratory conditions; actual range may vary slightly depending on the environment, installation height, and angle. At wider angles, radar energy decreases, which may reduce the maximum detection distance).

Users can customize the detection range in the settings page, with precision adjustments in 0.25-meter intervals. The detection range can be set as non-continuous, allowing users to exclude specific mid-range areas from detection.

When setting the detection range, the interface displays a human icon indicating the "current position," which refers to the straight-line distance between the device and the point with the strongest human presence signal. This is not a precise horizontal distance and may differ from the perceived distance; it is intended only as a reference for setting range boundaries. If the person moves beyond 6 meters, the "current position" will display as "unknown."

To ensure accurate range settings, users are advised to approach the device slowly from far to near, stop at the desired boundary, and wait for the displayed distance to stabilize before setting it. After setup, fine-tune the range by comparing with the main screen's presence detection.

Detection range settings apply only when the radar is active. If the detection mode is set to infrared-only, the radar detection range cannot be adjusted.



#### Absence Delay Timer

The absence delay timer is used to delay the confirmation of an "unoccupied" space, and can also be used to postpone the execution of automations based on absence.

Setting a delay helps minimize false triggers caused by environmental interference, improving accuracy. A shorter delay means the device reports absence more quickly, but may be more susceptible to disturbances in complex environments. In most cases, it's recommended to use the default value.

Note: If both an absence delay timer and an automation condition delay are set, the total delay time is the sum of both.

For example: If the no-presence delay is set to 5 seconds and the automation is configured to "turn off the light after 10 seconds of no presence," the device will report "no presence" within 5 seconds, and the automation will trigger 10 seconds after that—resulting in a total delay of 15 seconds.

#### AI Spatial Learning (Zigbee Mode Only)

AI Spatial Learning intelligently analyzes the environment to filter out interference from large glass surfaces, metal objects, mirrors, and other reflective materials. This enhances detection accuracy by adapting to environmental disturbances.

It is recommended to perform a manual AI spatial learning session after the device is installed. During this process, the space should remain unoccupied for about 30 seconds—please be patient.

Once set up, manual activation is no longer necessary. The device will continuously learn and adapt to environmental changes in real time, improving accuracy over time.

If you notice the device mistakenly detecting presence due to environmental interference and failing to return to an unoccupied state, you can manually trigger AI spatial learning again to quickly recalibrate the space.

Note: In Matter mode, the device will automatically perform FOV blind zoning without requiring manual input.

#### Configuring Automations

Users can go to the APP's "Automation" interface and click the "+" in the upper right corner to add automations related to the device.

#### Automation conditions

Classification	Automation conditions
Presence-Related Automations	Presence detected
	No presence detected
	Presence detected for a certain duration.
	No presence detected for a certain duration.
	Infrared motion detected (Not available in radar-only mode)
	No Infrared Motion Detected for a Certain Duration (Not available in radar-only mode)
Lighting related automations	Illumination rises to
	Illumination drops to
	Above the specified light level
	Below the specified light level
Temperature related automations	The temperature rises to
	The temperature drops to
	Above the specified temperature
	Below the specified temperature
Humidity related automations	Humidity rises to
	Humidity drops to
	Above the specified humidity
	Below the specified humidity

#### Recommended Automated Configurations

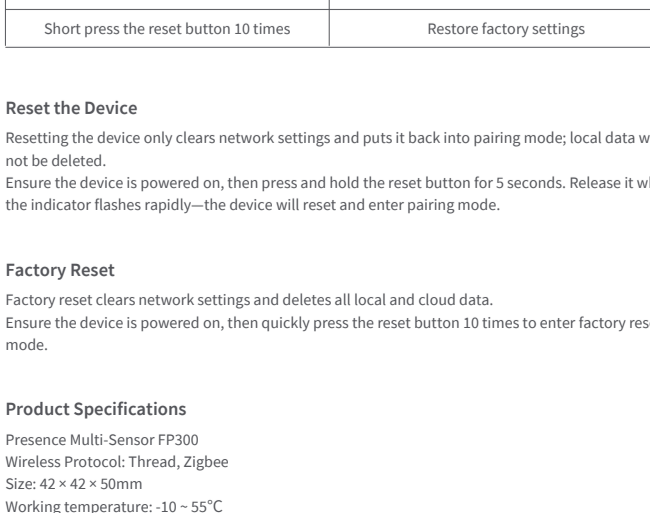
Get Started in Under a Minute with These Recommended Automations

1. Turn on the lights when presence is detected
2. Turn off the lights or AC when no presence is detected for a certain duration
3. Turn on the lights when presence is detected and the illumination is below a set level
4. Turn on the AC, set it to cooling mode, and adjust the temperature to 24°C when presence is detected and the temperature exceeds a set threshold

#### More use tips.

1. For best results, install the device facing the front of the human body to better detect subtle movements like breathing.
2. The device has a detection range of up to 6 meters. Configure the range based on your actual needs to exclude unnecessary areas and improve accuracy.
3. Detection from presence to absence is very fast. To enhance user experience and avoid frequent light switching, it's recommended to set a "Absence Delay Timer" or use "No presence for a certain duration" as the trigger condition in automation, rather than just "No presence."
4. If the device mistakenly detects presence when no one is around, use the AI Spatial Background Learning feature to quickly recalibrate and restore the unoccupied state (Zigbee mode only).
5. The device continuously improves its accuracy through AI interference recognition and real-time background learning, but for best performance, avoid installing it near AC vents, air purifiers, or fans.
6. After installation, the device requires time to fully learn the spatial profile of the new environment. In cases of significant environmental interference, occasional false alerts may occur during initial use. Allow the device to continue autonomous learning in an unoccupied space to normalize performance. For complex environments where detection performance remains unsatisfactory, try adjusting the installation angle or position to mitigate major interference sources.

#### Battery Replacement



\*Screwdriver required (not included).

#### Indicator Light Description

Indicator status	Device Status
Blue light flashes once	A single press will make the device's blue indicator flash once quickly.
Blue light flashes 3 times	Appears when powered on, rebooted, or reset to factory settings—indicates normal power supply.
Blue light slowly flashes continuously	When the device is in pairing mode, you can add it to your network via the App. After 10 minutes of inactivity, the device will enter sleep mode. To reconnect, you will need to manually re-trigger pairing mode.
The blue light flashes quickly and continuously	During device reset, the blue light flashes rapidly until the button is released within 3 seconds. During pairing, the blue light continues flashing rapidly—indicating successful pairing.
Blue for 1 second	Indicates successful pairing

#### Reset Button Description

Button Action	Explanation
Press the reset button	Check the Zigbee hub connection and verify the gateway effective distance (Triggered only when bound to a Zigbee gateway)
Press and hold the reset button for more than 5 seconds	Reset device, and start the network pairing mode
Short press the reset button 10 times	Restore factory settings

#### Reset the Device

Resetting the device only clears network settings and puts it back into pairing mode; local data will not be deleted.

Ensure the device is powered on, then press and hold the reset button for 5 seconds. Release it when the indicator flashes rapidly—the device will reset and enter pairing mode.

#### Factory Reset

Factory reset clears network settings and deletes all local and cloud data.

Ensure the device is powered on, then quickly press the reset button 10 times to enter factory reset mode.

#### Product Specifications

Presence Multi-Sensor FP300

Wireless Protocol: Thread, Zigbee

Size: 42 × 42 × 50mm

Working temperature: -10 ~ 55°C

Operating humidity: 0 ~ 95% RH, non-condensing

Power supply mode: CR2450×2

KC2: RC-LUJ-PSS04

FCC ID: ZAKIT-PSS04

IC: 22635-PSS04