

Presence Multi-Sensor FP300

User Manual

Product Introduction

Presence Multi-Sensor P300 is a sensor that accurately detects the presence of human bodies in space. It combines millimeter-wave radar technology and advanced AI algorithms, and has special features such as spatial background learning, interference source recognition, and sensitivity adaptation.

Millimeter-wave radar technology solves the problem that previous PIR human body sensors cannot accurately identify static human bodies. During use, the device will continuously learn the spatial status through AI algorithms, intelligently identify interference sources, and continuously improve the accuracy of detection results, achieving an effect of increasing accuracy with use.

The presence detection of FP300 supports three modes: infrared + radar, pure radar, and pure infrared. At the same time, FP300 also has temperature, humidity, and light detection functions. It is a five-in-one space sensor that integrates multiple functions.

FP300 is extremely easy to configure. It can be used by simply adding it. There is no complicated parameter configuration, allowing you to enjoy the fun brought by technology more easily.

Note:

*When joining the Matter ecosystem, this device must be used with a hub/gateway that supports the Matter protocol.

*When joining the Aqara ecosystem, The device must be compatible with Aqara Home App and Aqara Zigbee Gateway Usage, some specific features are only available in Aqara HomeMedium support.

*Hereinafter referred to as APP or gateway, PRESENCE MULTI-SENSORFP300, hereafter referred to as device.

Quick Setup

Join Aqara Home

1. Download the latest version of Aqara Home App



2. Power on the device, press and hold the reset button for 5 seconds until the LED indicator starts flashing, then release it, and the device will enter the network pairing mode;
3. Open the Aqara Home app, enter the "Home" page, and click the "+" in the upper right corner to enter the "Add Device" page. Click or enter the corresponding device name. Select the gateway to which the device needs to connect and complete the addition;
5. To ensure the best user experience, please update the device firmware to the latest version in the APP after adding the device before starting to use it.

Join Matter

1. Power on the device, press and hold the reset button for 5 seconds until the LED indicator starts flashing, then release it, and the device will enter the network pairing mode;
2. Scan the Matter Code on the device or manual through an app that supports the Matter ecosystem to join the Matter ecosystem.

Note:

* If you lose the Matter Code of the device, you can get the Matter sharing code on the Aqara Home App settings page after joining Aqara Home.

Installation and Network Access

Equipment Installation

The device can be installed anywhere that needs to be detected, supporting multiple installation scenarios such as wall installation, desktop placement or ceiling installation. Users can choose the appropriate installation location according to the required detection range, and adjust the detection range by adjusting the installation angle and the device tilt angle. The device supports fixing by

pasting, magnetic suction, expansion screws, etc. (When the height exceeds 2 meters need Using Screws fixed equipment) .

Installation Recommendation Ations

1. Install the device on the wall, corner, ceiling, etc. by sticking or magnetic suction according to the actual detection range requirements. Please face the front of the device towards the area to be detected and adjust the angle.
2. If you need to cover a larger detection range, it is recommended to install it at a height of about 2 meters, with the device slightly tilted downward to cover the main activity area of people.
3. If the side-mounted device is installed on a wall or corner, the recommended installation height is 1.4-1.8m. At this height, the standing and sitting status of the human body can be better detected. If it needs to be installed at other heights, the inclination angle of the bracket can be adjusted as needed to cover the main activity area of the person.
4. If you need to avoid the device detection blind spot, it is recommended to install it in the corner, with the device facing the center line of the corner, which can effectively avoid the FOV blind spot on both sides of the radar during long-distance detection.
5. When installing, please try to avoid facing large areas of metal, glass and other strongly reflective surfaces and install it next to air conditioner outlets, air purifiers, and fans.
6. When the installation height is less than 2 meters, it can be fixed by adhesive and magnetic suction. need Using Screws fixed.

Detection Range Setting

The device's maximum detection distance is 6m and the detection angle is 120 degrees (The theoretical distance under ideal laboratory conditions. The detection range may vary slightly depending on the actual space environment, installation height and angle.). You can set the required detection range on the settings page, support setting the detection range with an area accuracy of 0.25 meters, and exclude areas that do not need to be detected.

Note: When the detection mode is pure infrared mode, the radar detection range cannot be set.

Delay in determination of absence state

The absence judgment delay is used to delay the triggering of absence judgment and postpone the execution of automated actions.

Setting a certain delay for absence judgment can ensure that the interference of energy changes in the environment is eliminated to the greatest extent, avoid accidental triggering by absence persons, and improve accuracy. The smaller the delay is set, the faster the absence state is triggered, but it may be affected by environmental interference in complex environments.

The default value is suggested.

AI Spatial Learning

AI spatial background learning can intelligently learn the environmental background, eliminate the interference of large areas of glass, metal, mirrors, etc. on the detection results, intelligently adapt to environmental interference sources, and improve the accuracy of detection results.

It is recommended that users actively conduct AI space background learning after the device is installed. AI space background learning requires that the space be absence and takes about 30 seconds. Please wait patiently.

During use, the device will continue to learn the spatial background through AI to adapt to the real-time changing spatial environment, making the device more accurate with use.

If, under special circumstances, the user finds that the device mistakenly identifies an empty space as a human being, they can immediately conduct an AI space background learning to quickly restore the space to an empty state.

Note: AI spatial context learning
In Matter mode, this happens automatically, without manual operation.

Automated Configuration

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

Supported automation conditions:

Occupied, unoccupied, occupied and for a certain period of time, unoccupied and occupied and for a certain period of time, moving state, stationary state, moving state and for a certain period of time, stationary state and for a certain period of time.

In infrared mode, it also supports: infrared with people moving, infrared without people moving, infrared without people moving and exceeds a certain period of time.

Supported automation actions:

Device restart, AI spatial background learning.

Automation conditions	Someone	The presence of a person is detected in the space
	unmanned	Space detected no one is present
	Someone and more than a certain time	The space is occupied and lasts for a certain period of time

	No one and more than a certain period of time	The space is empty for a certain period of time
	Static state	When there are people in the space and the targets are in a relatively static state (such as sitting or lying still, with small movement and displacement), it can be used as a sedentary reminder.
	Stay still for a certain period of time	There are people in the space, and the targets are in a relatively static state for a certain period of time.
	Mobile status	There are people in the space, and the targets are in a relatively active state (such as walking or exercising), which can be used to trigger active scenes such as turning on fresh air, lowering the air conditioning temperature, and other related automation)
	Moving state and exceeding a certain time	There are people in the space, and the targets are in a relatively active state for a certain period of time.
	Lighting related automation	
	Temperature-dependent automation	
	Humidity-related automation	

Automated Actions	AI spatial intelligent learning	It can intelligently learn environmental background, intelligently adapt to environmental interference sources, and improve the accuracy of detection results. It is recommended that users actively conduct an AI space background learning after the device is installed. If, in special circumstances, users find that the device misidentifies an empty space as a person, they can also conduct an AI space background learning immediately to quickly restore the space to an empty state.
	Device restart	The device will restart

Recommended Automated Configuration

By referring to the following automation recommendations, you can immediately use the device within one minute, complete the smart home linkage, and experience the charm of PRESENCE MULTI-SENSOR FP300.

1. When someone is around, turn on the light
2. When "no one is around for a certain period of time", turn off the lights or the air conditioner
3. When "moving for a certain period of time", "adjust the air conditioner to 25 degrees"
4. When you are "still for a certain period of time", you will be prompted to "push a message (sedentary reminder)"

More Usage Tips

1. It is recommended to install the device facing the front of the human body to make it easier to detect the micro-movement of human breathing.
2. The detection range of the device can reach 6 meters. It is recommended to configure the detection range according to actual needs, exclude unnecessary detection areas, and improve detection accuracy.
3. The time it takes for the equipment to detect when someone is there and when no one is there is very fast. In order to improve the user experience and avoid frequent switching of lights, it is recommended to select "no one and for more than a certain period of time" instead of "no one" in the automation conditions.
4. If the device mistakenly identifies an absence state as a human being, you can use the AI spatial background learning function to quickly return to the absence state.
5. The device has AI interference source identification and continuous spatial self-learning capabilities, and can become more accurate with use. However, in order to maximize detection accuracy, it is still recommended to avoid installing the device next to air-conditioning outlets, air purifiers, and fans.

Indicator Light Description

Indicator status	Device Status
Blue light flashes once	Click the device and the blue light will flash once
Blue light flashes 2 times	When the APP deletes a device, Delete a fabric at a time Blue Light Flashes twice quickly, the last fabric is deleted, the device enters the reset network mode, and the light enters Blue Light Respiratory status
Blue flash 3 Second-rate	After power on, power on again, and factory reset Appears, indicating that the power supply is

	normal
bluebreathe	Indicates that the device is in the broadcasting state. After more than 10 minutes, the broadcast ends, the light goes out, and the device enters deep sleep mode
The blue light flashes quickly and continuously	Reset the device. After the reset, the blue light flashes quickly until the button is released within 3 seconds. During the pairing phase, the blue light flashes quickly, indicating that the pairing is successful.
Blue for 1 second	Indicates that the addition was successful.

Reset button description

Button Action	Illustrate
Click the Reset button	Check the Zigbee gateway 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 the equipment, and start the network configuration mode
Short press the reset button 10 times	Restore factory settings

Device Reset

Device Reset will only reset the network and enter the reconnection state, without deleting local data. Confirm that the device is powered on, long press reset button 5s until the light flashes, the device will reset and enter the Bluetooth broadcast phase.

Factory Reset

Factory reset means resetting the network and deleting all local and cloud data. Make sure the device is powered on, press the device reset button. After 10 times, the device enters factory reset.

Product Specification

Presence Multi-Sensor FP300

Model: PS-S04

Wireless Protocols: Thread, Zigbee

Dimensions: □42 × 42 × 50 mm (1.65 × 1.65 × 1.97 in.)

Operating Temperature: 0 °C ~ 40 °C (32 °F ~ 104 °F)

Operating Humidity: 0 ~ 95% RH, no condensation

Powering Modes: CR2450*2 Batteries

KC 인증 번호 : R-C-LUt-PSS04

FCC ID: 2AKIT-PSS04

IC: 22635-PSS04

Manufacturer: Lumi United Technology Co., Ltd.

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