

Microwave Radar Human Presence Sensor (24GHz)

Model: HPS1-RF

Features

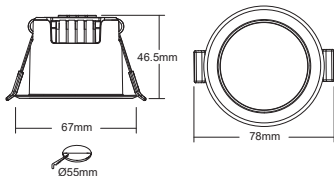
- Microwave radar humanity presence sensor combined radar technology with smart calculation and non-contact detecting device.
- High sensitive ability to detect tiny actions like breathing or chest expansion, reacting static humanity presence.
- Built-in relay and connect with light directly, AC100-240V output
- Working with smart lighting, turn on light while detecting humanity and turn off light while nobody is detected.
- It can work individually or create networking for multi devices depends on different applications.
- The rest devices will be triggered if any single one is detected and ensure that the full range can be detected without any blind area.
- The detecting distance from 3m to 8m, it can be set up via DIP switch



Product Parameters

Product Name:	Microwave Radar Human Presence Sensor (24GHz)	IP Rating:	IP20
Model:	HPS1-RF	Working Temperature:	-10~40°C
Input/ Output Voltage:	AC100-240V 50/60Hz	EMC Standards (EMC):	ETSI EN 301 489-1 V2.3 ETSI EN 301 489-3 V2.3.2
Output Current:	Max 10A	Safety standards (LVD):	EN 61347-2-11: 2001+A1: 2019 EN 61347-1: 2015+A1:2021 EN 62493:2015+A1:2022
Microwave Frequency:	24GHz	Radio equipment (RED):	ETSI EN 300 400 V2.2.1
Derection Distance:	3~8m	Certification:	CE, EMC, LVD, RED
Protocol:	2.4GHz RF		
Control Distance:	30m		

Size



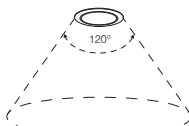
Detecting Angle and distance



detected even human body without any actions



Moving detection radius: 5-8m
Available detection radius: 4-5m

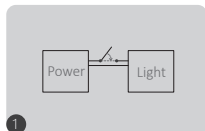


Detection Angle: 120°

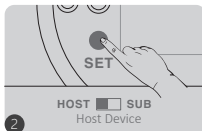
360° seamless sensing, 0.3m/s detection
— Even breath rhythms trigger light

Link: Pairing sensor with light

Only pair master sensor with lights, no need to pair subordinate sensor with lights.



Turn off light 10 seconds and turn on again



Short press 'SET' 3 times on master sensor

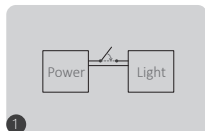


link is done once light Flashes 3 times slowly

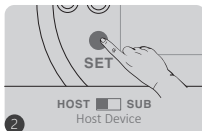


Link is failed if light doesn't flash, please repeat above steps.
(Attention: can not link again if remote already finished linking)

Unlink: Cleaning code for sensor and light



Turn off light 10 seconds and turn on again



Short press 'SET' 5 times on master sensor



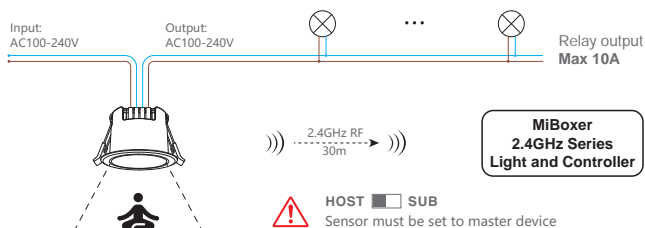
Lights blink 10 times quickly means unlinking is done successfully.



Unlinking failed if light is not blinking quickly, Please follow above steps again.
(Attention: Light haven't linked that don't need to unlink)

Offline Application Connection Diagram

Usually used for narrow area

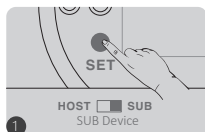


Networking application connection Diagram

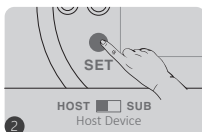


Only need one master sensor in one area **HOST** ☒ **SUB** The rest are subordinate sensors **HOST** ☐ **SUB**

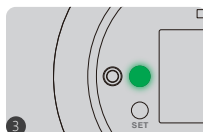
Sensor Networking



Short press "SET" one time on subordinate sensor to enter into pairing mode



Short press "SET" three times on master sensor

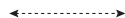


Configuration completed once the green indicator on subordinate sensor flashes three times slowly



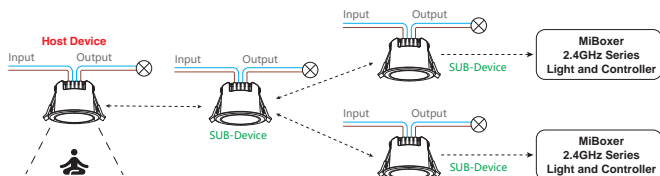
The configuration is failed if indicator on subordinate sensor not flash, please repeat above steps.
(Sensor networking completed and can not repeat configuration)

Application schematic diagram



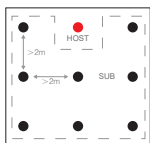
2.4G wireless signal transmitting distance is 30m

Input: AC100~240V, Output: AC100~240V

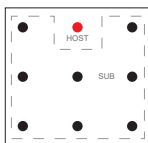


Wide Application

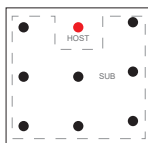
Completing configuration in every area and master sensor can be installed in any place



1-Zone



2-Zone



N-Zone

Attention: the distance between two sensors must be over 2m

Attention

1. Making sure power is off when installing products , keep safety
2. Please check if the input voltage is consistent with the device
3. Non-professional users are not allowed to disassemble the device directly, otherwise the device may be damaged.
4. Do not use the device near large metal areas or areas with strong electromagnetic waves, otherwise the control distance will be seriously affected.
5. Please do not use them in humid or high-temperature environments for a long time.



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