MOES ZSS-LP-HP02-MS

MOES Human Presence Sensor Instruction Manual

Model: ZSS-LP-HP02-MS | Brand: MOES

Product Overview

The MOES Human Presence Sensor is an advanced 24G mmWave radar motion detector designed to accurately detect human presence, including subtle movements and static states. It integrates a built-in light sensor, allowing for intelligent automation based on both presence and ambient illumination. This device requires a MOES Zigbee Hub for full functionality and supports integration with the Tuya Smart Life application for comprehensive smart home control.



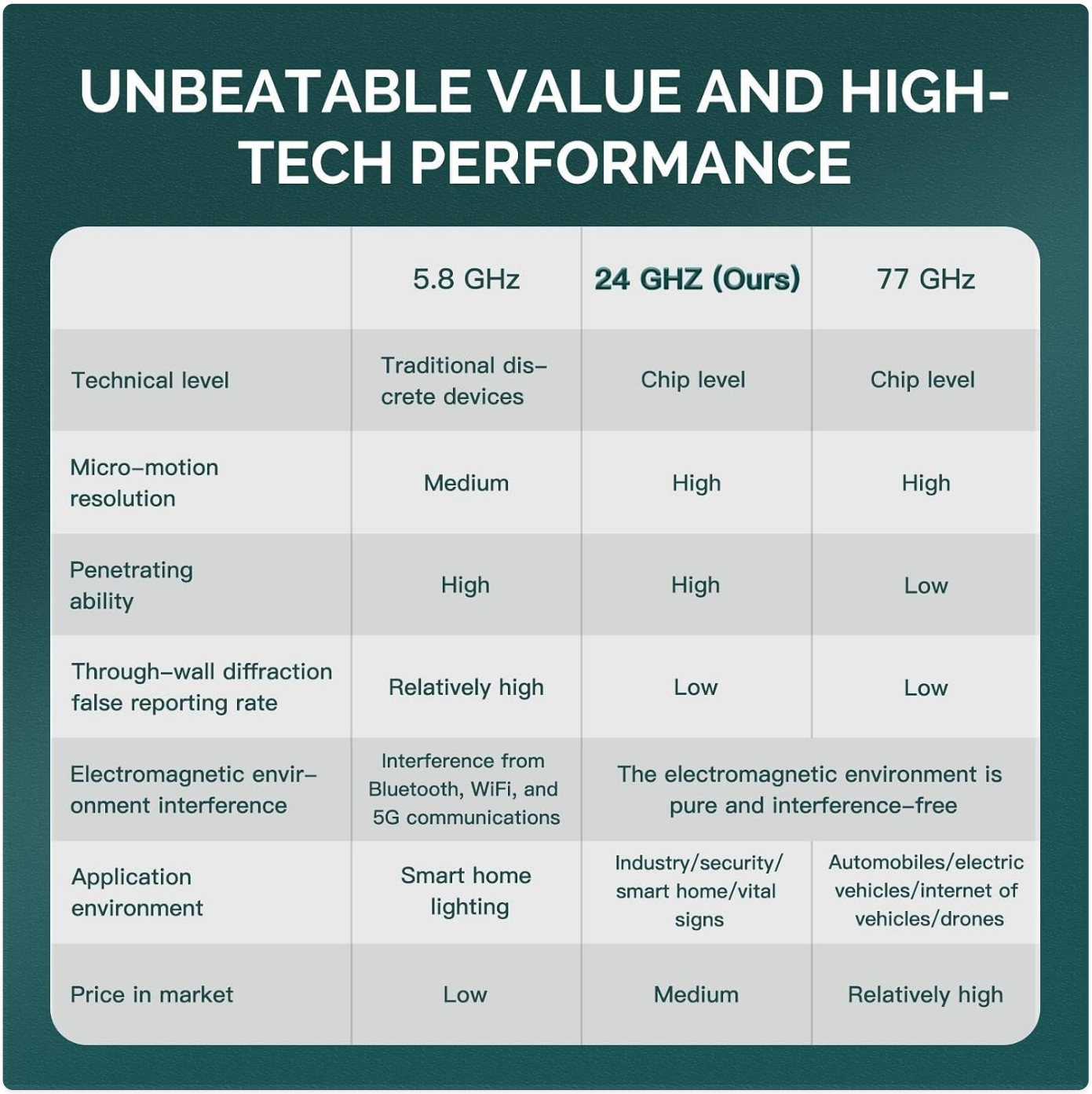
Image: MOES Human Presence Sensor and its retail packaging, highlighting its compact design and Zigbee 3.0 compatibility.



Image: The sensor illustrating its core capabilities: mmWave Radar Detection, Human Movement detection, and Human Static detection.

Key Features

- **24G mmWave Radar Technology:** Provides highly accurate detection of human presence, including micro-movements and static states, surpassing traditional PIR sensors.
- **Built-in Light Sensor:** Detects ambient illumination levels, enabling smart automation scenarios based on light conditions.
- **Smart Home Linkage:** Compatible with MOES Zigbee Hub and Tuya Smart Life app for creating automated scenes with other smart devices like dimmer plugs, switches, and alarms.
- **Flexible Installation:** Features a detachable/pasteable magnetic base supporting 45° folding and 360° rotation, allowing for versatile placement on various surfaces, including iron objects.
- **Wide Sensing Range:** Offers a broad detection area, up to 7 meters, suitable for various indoor environments.



	5.8 GHz	24 GHZ (Ours)	77 GHz
Technical level	Traditional dis–crete devices	Chip level	Chip level
Micro–motion resolution	Medium	High	High
Penetrating ability	High	High	Low
Through–wall diffraction false reporting rate	Relatively high	Low	Low
Electromagnetic envir–onment interference	Interference from Bluetooth, WiFi, and 5G communications	The electromagnetic environment is pure and interference–free	
Application environment	Smart home lighting	Industry/security/ smart home/vital signs	Automobiles/electric vehicles/internet of vehicles/drones
Price in market	Low	Medium	Relatively high

Image: A comparison table detailing the technical advantages of 24 GHz mmWave radar technology used in the sensor, including micro-motion resolution and electromagnetic environment.

Package Contents

Upon opening the package, please verify that all components are present and in good condition:

- MOES Human Presence Sensor (ZSS-LP-HP02-MS)
- USB Power Cable
- Magnetic Mounting Base
- Adhesive Pad
- User Manual (this document)

Setup Guide

1. Requirements

- A MOES Zigbee Gateway (Hub) is required and sold separately. Compatible models include B091BRGMTZ, B0C3LPSXBM, and B0C7KX6HLW.
- A 2.4GHz Wi-Fi network connection (5G networks are not supported).
- The Tuya Smart Life application installed on your smartphone or tablet.

2. Physical Installation

The sensor offers versatile mounting options:

- **Magnetic Mounting:** The sensor can be directly attached to iron objects such as refrigerators or iron door frames using its magnetic base.
- **Adhesive Mounting:** For non-magnetic surfaces, use the provided adhesive pad to secure the magnetic base to a clean, dry surface.

The detachable magnetic base allows for 45° folding and 360° rotation, enabling precise angle adjustment after installation to optimize detection coverage.



Image: Illustration of the flexible mounting options, including magnetic attachment to a refrigerator and adhesive mounting under a cabinet, demonstrating the sensor's adjustable base.

3. Power Connection

Connect the sensor to a power source using the provided USB cable. Ensure the power source is stable and provides the necessary voltage (5V=1A).

4. Device Pairing (Tuya Smart Life App)

1. Ensure your MOES Zigbee Hub is powered on and connected to your 2.4GHz Wi-Fi network.
2. Open the Tuya Smart Life app on your smartphone.
3. Follow the in-app instructions to add a new device. Select your MOES Zigbee Hub and then search for the Human Presence Sensor.
4. The app will guide you through the pairing process. Once successfully paired, the sensor will appear in your device list.

Operating Instructions

Human Presence Detection

The sensor utilizes 24G mmWave radar technology to detect human presence within its sensing range. It can differentiate between various states:

- **Human Movement:** Detects active motion within the area.
- **Micro-movement:** Identifies subtle movements, such as breathing, ensuring detection even when a person is relatively still.
- **Static Presence:** Maintains detection of a person who is completely stationary within the detection zone.

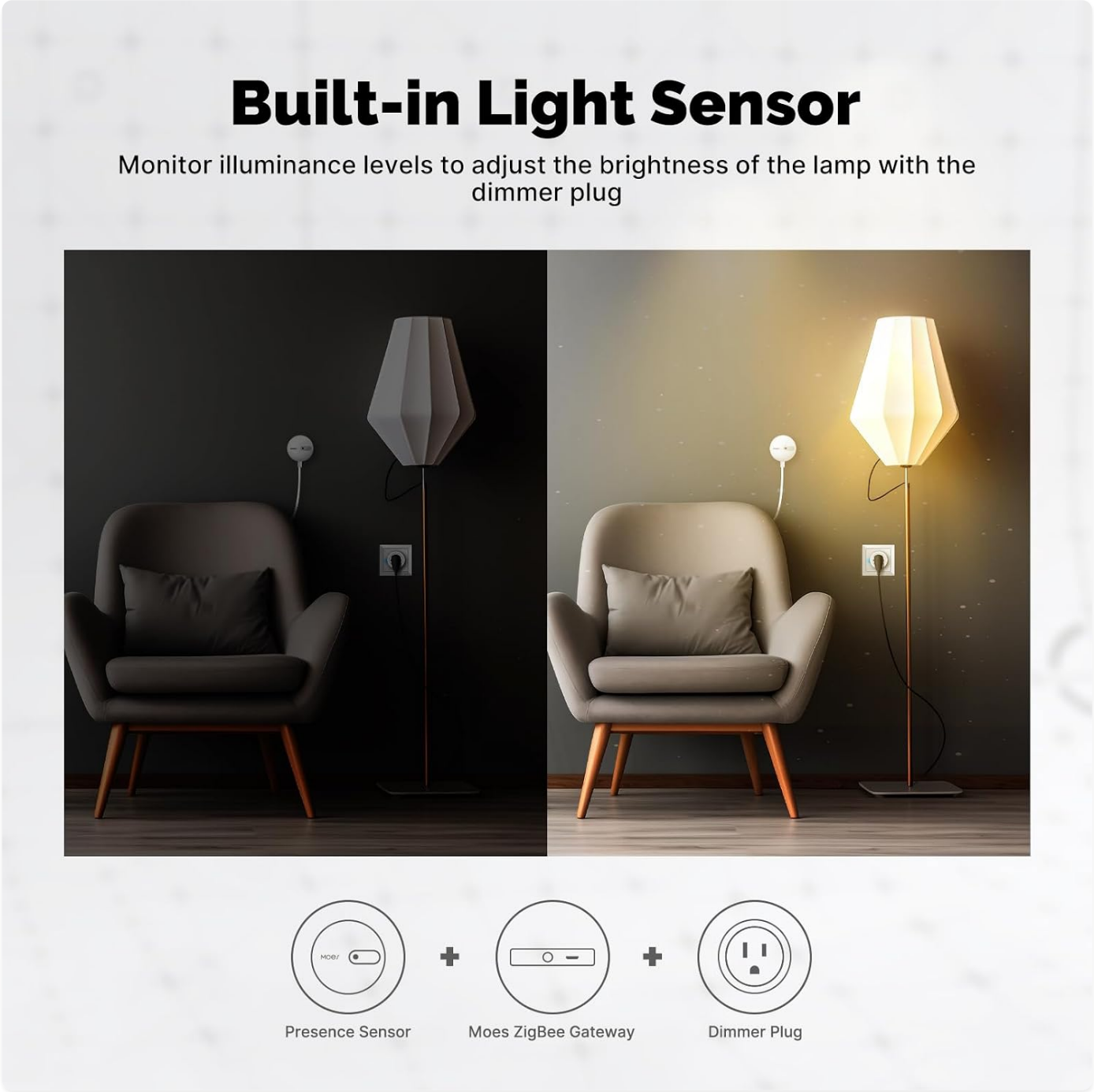


Image: A visual representation of the sensor's broad sensing range, indicating detection distances for different angles (e.g., 3m at 180°, 5m at 140°, 6m at 60°).

Brightness Detection

The integrated light sensor measures the ambient illumination level. This data can be used to trigger automated actions, such as adjusting lighting brightness. For example, you can configure a scene to turn on lights or increase their brightness when the room's illumination falls below a certain threshold.

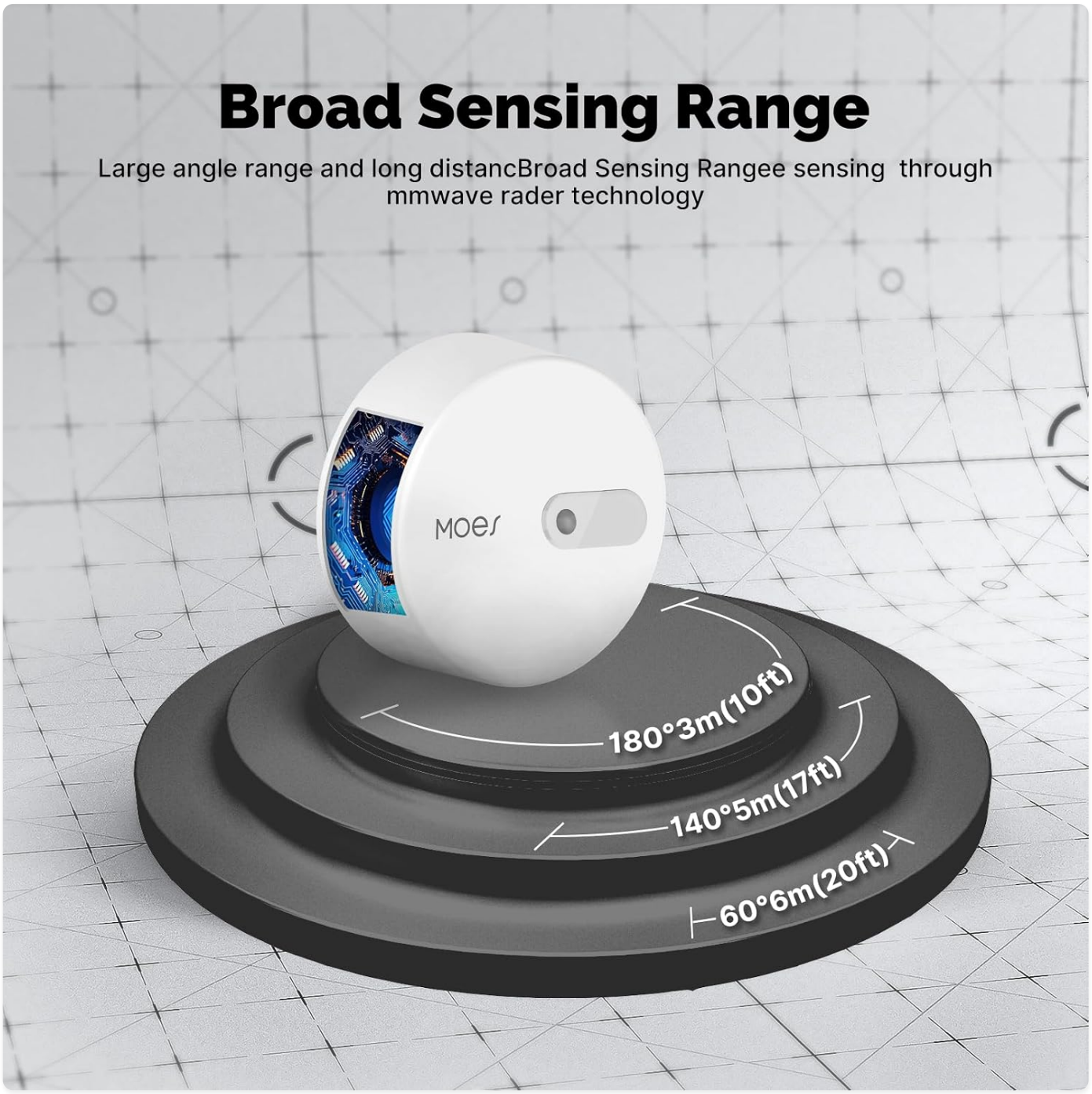


Image: A visual demonstration of the built-in light sensor's capability, showing a room with low light and the same room with increased light after the sensor triggers a dimmer plug.

Smart Home Linkage

The MOES Human Presence Sensor can be integrated into various smart home scenarios through the Tuya Smart Life app. By configuring 'IF' conditions (e.g., presence detected, light level below X) and 'THEN' operations (e.g., turn on lights, activate siren, open curtains), you can automate your home environment. This allows for customized automation in areas such as living rooms, bedrooms, hallways, and bathrooms.

Maintenance

To ensure optimal performance and longevity of your MOES Human Presence Sensor, follow these maintenance

guidelines:

- **Cleaning:** Gently wipe the sensor's surface with a soft, dry cloth. Avoid using abrasive cleaners, solvents, or excessive moisture, as these can damage the device.
- **Environmental Conditions:** Operate the sensor within its specified temperature and humidity ranges (refer to Specifications section). Avoid exposing it to direct sunlight, extreme temperatures, or high humidity.
- **Firmware Updates:** Periodically check the Tuya Smart Life app for any available firmware updates for the sensor or your Zigbee Hub. Keeping firmware updated can improve performance and add new features.

Troubleshooting

Common Issues and Solutions

Issue	Possible Cause	Solution
Sensor not detecting presence.	Incorrect placement, obstruction, power issue, or hub disconnection.	Ensure the sensor is powered on. Verify it is within range of the Zigbee Hub. Check for any physical obstructions. Adjust the sensor's angle or position to optimize coverage.
Light sensor not responding or inaccurate.	Sensor obstructed, app settings incorrect, or extreme lighting conditions.	Ensure the light sensor window is clean and unobstructed. Check the light sensor settings within the Tuya Smart Life app. Avoid placing the sensor in areas with highly fluctuating or extreme light.
Frequent disconnections from the Zigbee Hub.	Weak Zigbee signal, Wi-Fi interference, or hub instability.	Relocate the sensor closer to the MOES Zigbee Hub. Ensure your 2.4GHz Wi-Fi network is stable. If issues persist, try restarting your Zigbee Hub.
Cannot pair sensor with app.	Incorrect pairing procedure, hub not in pairing mode, or 5GHz Wi-Fi.	Ensure your phone is connected to a 2.4GHz Wi-Fi network. Put the MOES Zigbee Hub into pairing mode as per its instructions. Follow the app's pairing steps carefully.

Specifications

Parameter	Value
Model	ZSS-LP-HP02-MS
Power Source	USB Cable (5V=1A)
Power Consumption	0.5W
Communication Protocol	Zigbee
Radar Frequency	24GHz - 24.25GHz
Light Sensitivity Range	0 - 10000 lux
Maximum Range	7 Meters

Parameter	Value
Mounting Type	Wall Mount (Magnetic/Adhesive)
Operating Temperature	-10°C ~ 40°C (14°F ~ 104°F)
Operating Humidity	0% ~ 95% RH, Non-condensing
Item Weight	4.2 ounces
Dimensions (Approx.)	4.96 x 3.31 x 1.26 inches
Material	Plastic

Warranty and Support

MOES products are designed for reliability and performance. While specific warranty terms may vary by region and retailer, MOES typically offers a limited warranty covering manufacturing defects for a period from the date of purchase. Please retain your proof of purchase for any warranty claims.

For technical support, troubleshooting assistance, or warranty inquiries, please contact MOES customer service through their official channels or visit the MOES brand store on Amazon:

Visit the MOES Store on Amazon

Please note that the product does not support SmartThings, HomeKit, or IFTTT directly.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question