meross MS600 Presence Sensor User Manual

Contents

meross MS600 Presence Sensor

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Product Description

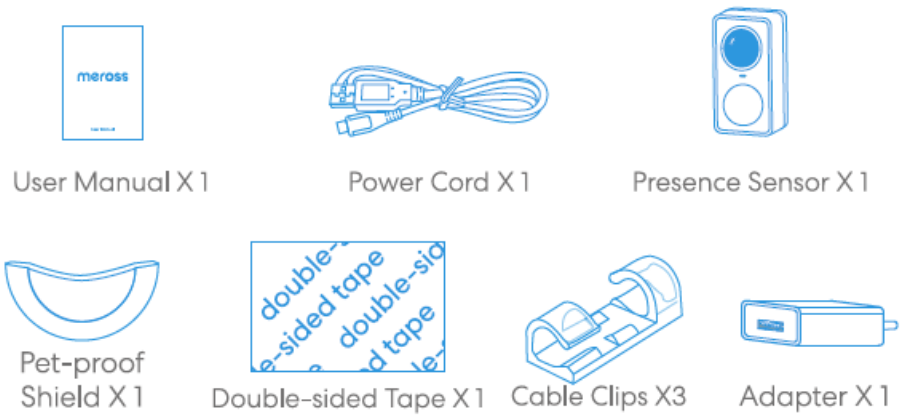
- The Meross advanced Presence Sensor combines millimeter-wave Doppler radar technology with infrared motion sensors, creating a dual-detection sensor capable of recognizing biological movements, subtle motions, and presence status. Additionally, the product is equipped with a light sensor that can detect changes in ambient brightness in real time. Once a change in biological movement or ambient brightness is detected. the sensor will promptly transmit the information to the Meross system or Matter platform.
- The Meross Presence Sensor seamlessly integrates into a whole-house smart system, working in tandem with other smart devices to achieve various scene-linked applications. For instance, when someone enters a room, the sensor can trigger the automatic activation of lights: whereas during periods of inactivity, the smart system will intelligently turn off the lights, offering you a more convenient and intelligent living experience.

Safety Information

1. Make sure this device is fully plugged in and kept out of reach of children for safety concerns.
2. Do not place near heat sources or heat-producing devices.
3. Do not expose this product to mechanical shocks such as crushing, bending, puncturing, or shredding. Avoid dropping or placing heavy objects on this product.

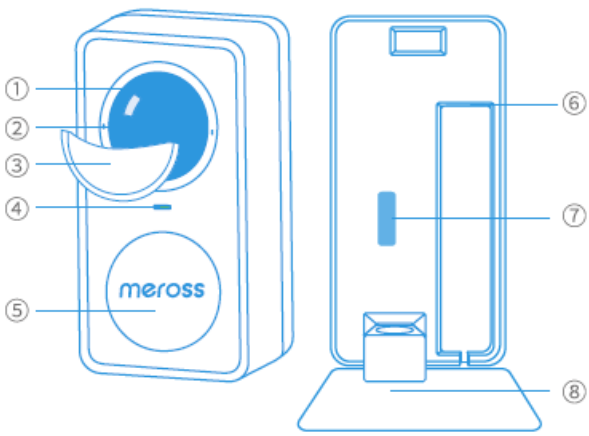
4. Do not use this product if visible defects are observed or if it has been damaged or modified. Contact our support for assistance.
5. Do not attempt to disassemble, open, microwave, incinerate, paint, or insert foreign objects into this product.
6. Attempting to open or service the unit voids all warranties, express or implied. If you experience problems with the device, discontinue use. unplug the device and contact our support for assistance.
7. No restrictions exist in the use of radio frequencies or frequency bands in all EU member states, EFTA countries, Northern Ireland, and Great Britain. Operating Frequency/max output power 2400-2483.5 MHz /20dBm.

Package Content



Overview

- Infrared Motion Sensor Lens–(1)
- Pet-proof Shield Installation Point–(2)
- Pet-proof Shield (we suggest only installing if pets are present or if there's interference from the robot vacuum)–(3)
- Light Sensor (ensure it's not blocked)–(4)
- Millimeter-wove Rodar Emission Area–(5)
- Type-C Power Interface-(6)
- Button–(7)
- Adjustable Bracket–(8)



Note:

1. The illustrations of the product, accessories, and user interface in the manual are schematic and for reference only. Due to ongoing updates and upgrades of the product, there may be slight differences between the actual product and the illustrations. Please refer to the actual product for accuracy.
2. The illuminance is influenced by various factors such as the nature and position of the light source, and environmental conditions. lighting design, and measurement methods. Therefore, the illuminance values provided by this product are for reference only. While the sensor boasts high accuracy, real-world environmental factors can affect its performance. Therefore, it is recommended to monitor for some time after selecting the correct device installation location, and then adjust the settings based on the monitoring results to achieve a better user experience.

Installation Instructions

1. Download the Meross app.
2. Follow the instructions in the Meross app to complete the setup.

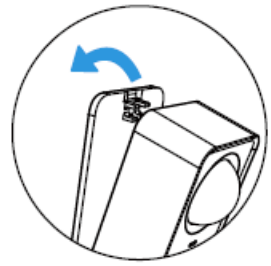
NOTE:

1. The Matter device requires Bluetooth to set up. Please make sure the Meross app is granted to access the required system permissions, and the Bluetooth of your smartphone has been enabled.
2. If this is not the first time you've added this smart device, you'll have to reset it before going any further.
3. Find more at **https://www.meross.com/support**.

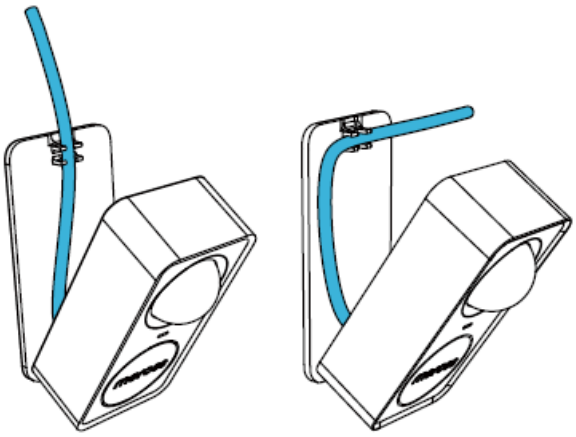
Device Installation

For installation, third-party platform usage, and scene configuration, scan the OR code to access video tutorials.

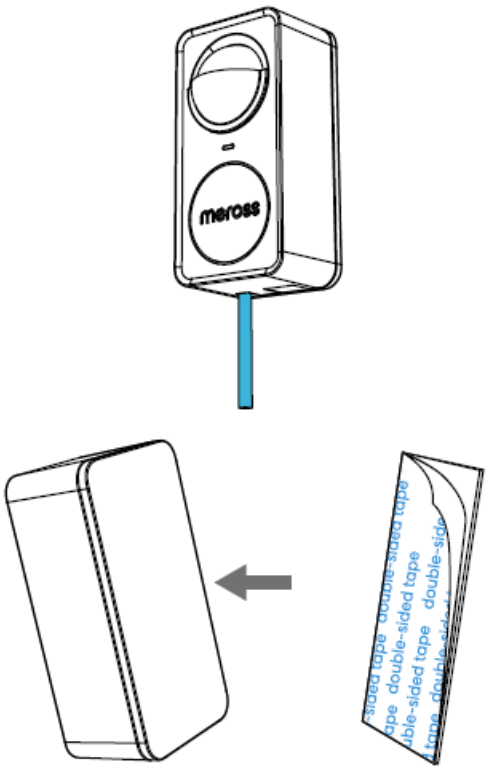
1. Unfold the bracket on the back and rotate it 90 degrees to the left.
2. Insert the Type-C power cable.



3. If wall installation is required, insert the power cord into the bottom lead hole and secure the bracket in place.
4. If angle adjustment is needed, secure the power cable in the slot at the rear end of the stand, guiding the charging cable in the desired direction.



5. Choose a side-mounting height between 1.2-1.Bm above the ground. Adjust the angle so that the sensor directly faces the chest area where a person typically sits or remains stationary for extended periods. Note: The core function of the presence sensor detects breathing movements and may not be as sensitive to the back, potentially leading to false triggers or missed detections.
6. Peel off the protective film from one side of the adhesive tape and stick it to the clean back of the stand.
7. Peel off the protective film from the adhesive on the opposite side. Affix the sensor’s base securely to the desired location, applying even pressure for 60 seconds to ensure a strong bond. When selecting an appropriate position on the wall, ensure that the installation surface is smooth, clean, and dry. Avoid surfaces with paint or other coatings that might cause the unit to detach over time.



Note:

1. If accuracy issues persist despite confirming no interference, download the Meross app and follow the guided setup process for adding. The Meross platform features an advanced “Space Learning” function, enabling optimal space customization based on real-world testing conditions.
2. Within the detection range, the sensor may mistakenly interpret swaying greenery, moving metal, fluttering curtains, clothing, running air conditioners, fans, and other interfering factors as the presence of a person. When installed in locations with vibrations or shaking, it may also lead to false detections. It is recommended to use the sensor cautiously in such areas.
3. If there is interference in the upper or lower part of the specified space, such as hanging fans or robot vacuum, it is recommended to install a pet-proof shield before activating the Biological Detection Only mode.
4. Avoid placing items such as green plants, metal, or thick glass between the human body and the sensor, as they may obstruct the radar frequency band.
5. To accurately identify targets lying down but not within the detection range, position and angle adjustments are necessary. For detecting the presence of a person in a lying position, it is recommended to install the radar on the wall at the bedside or head of the bed at a downward slant. Installation on the wall at the foot of the bed is not recommended.

Space Learning

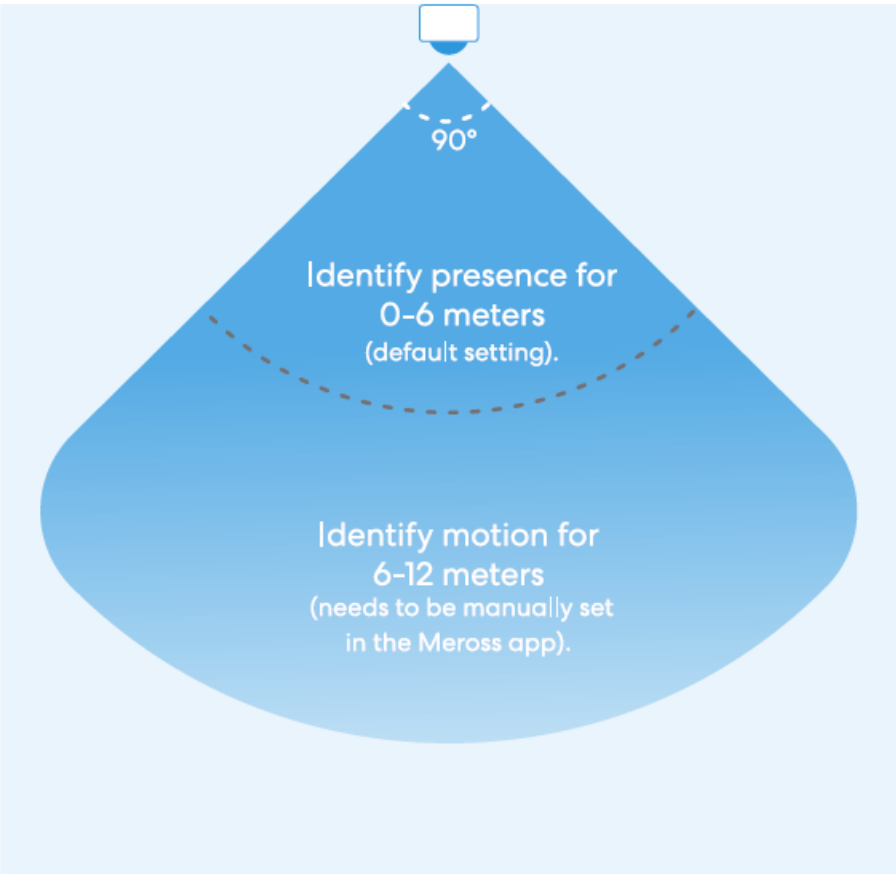
- Space Learning enhances accuracy by automatically detecting environmental interferences, and adjusting trigger baselines to reduce disruptions caused by reflections. Before initiating Space Learning, position the sensor to directly face the target area. Ensure there are no air conditioners, fans, people, or pets in the detection area.
- After enabling Space Learning in the Meross app (or double-tapping the device1s rear button), leave the monitored area within 20 seconds. The indicator light will remain amber for 2 minutes during Space Learning

and will turn off once the process is complete.

- With Space Learning completed, the sensor makes more precise detections. providing a user experience that better fits the current environment.

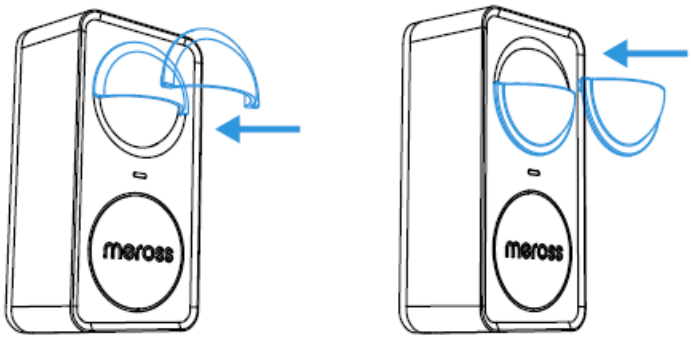
Detection Range and Identification Mode Instructions

- **Biological Detection Only mode (default on, default distance 6m):**
  The motion sensor and millimeter-wave sensor work together to determine that only when there is biological movement, the execution of the human scene will be triggered. This significantly reduces false alarms caused by plant swaying or robot vacuum.
- **Security mode (needs to be manually enabled in the app settings, default distance 12m):**
  Either the motion sensor or the millimeter-wave sensor triggering will report human presence. It can be triggered by any situation in the space, but the likelihood of false alarms will significantly increase.



Pet-proof Settings

- The pet-proof shield can effectively adjust the detection range of the motion sensor. For example, after installing the pet-proof shield on the left side as shown below (it is recommended to install it at a height of 1.2m) and enabling Biological Detection Only mode. This will allow detection of movements only above the height of the sensor's range, significantly reducing false triggers caused by pet movements and robotic vacuum cleaners below this height.
- The pet-proof shield will block half of the motion sensor's recognition range. You can adjust it up and down based on the actual situation, and movements of living beings within the obstructed area will not be detected.
- After peeling off the double-sided adhesive from the pet-proof shield, stick it onto the lens as needed.



Scene Function Description and Recommended Linked Scenes

1. **Area Occupied**
   After detecting the presence of a person within the region, detection within the space continues. Activities such as reading a book or using a cell phone in the study within the Presence Sensor's range are more accurately detected.
2. **Area Occupied with Continuous Presence**
   The duration can be configured by the user. It is used for handling events of prolonged presence or warnings for staying in the range for an extended period, such as reminders for prolonged sitting in a seating area, activating the exhaust fan in the restroom after a specified time, or issuing alerts for extended stays in potentially dangerous areas. If the Presence Sensors in unoccupied space do not determine unoccupied, it is recommended that the space be checked for continuously operating sources of interference.
3. **Area Unoccupied**
   When no person is detected in the region for a continuous period, it is determined that the current area is unoccupied. This can trigger scenes like turning off lights or fans.
4. **Area Unoccupied with Continuous Absence**
   The duration is user-configurable. It is used for configuring automation after people leave the space, allowing users to set Scene, such as automatically turning off air conditioning in an office area after a certain time of absence to save energy.
5. **Sensitivity Recommendations**
   If there are no interferences in the detection area. such as fans or pets, consider enabling "Security" mode to exclusively use radar for detecting presence and absence, which reduces detection delay and increases sensitivity.
   The detection range can be adjusted between land and 12 meters in Device Settings> Detection range calibration, allowing you to customize it according to your specific needs. Note that movements outside your set detection range will not be detected.

Buttons, Indicator Lights, Functional Instructions

Mode	Button Action	LED
Reset/Initialize	Press the button and power on, hold the button for 5 seconds	Amber, green light, cyclic flashing
Firmware Upgrade	None	Amber light stays on
Activate Network Setup/Matter	None	Amber, green light, cyclic flashing
Network Setup Successful	None	Green light stays on for 1 second then turns off
Pairing Failure/Disconnected	None	Green blinking
No Network	None	Red light stays on
Unoccupied to occupied state	None	Green flashes once
Space Learning	Double-click	Green light stays on

Product Specifications

- **Model:** MS600
- **Input:** 5V = 1A, Type-C
- **Radar Frequency:** 24GHz(ISM)
- **Light Sensor Range:** 0-8000lux
- **Detection Range:** Presence ≤6m, Motion ≤12m
- **Temperature Operating Range:** 14°F(-10°C)~113°F(45°C)
- **Humidity Operating Range:** 20-95% RH non-condensing
- **Dimensions(W x D x H):** 75.4 x 34.7 x 38.4mm or 2.97 x 1.37 x 1.51 in.
- **System Requirement:** Smartphone running iOS 16.1 or later or Android 8.1 or later, Supporting Bluetooth 4.2 or later. Existing 2.4GHz Wi-Fi network.

FAQs

The Presence Sensor Recognition Error:
Everyone has left the detection range, but the sensor still indicates the presence of someone.

To ensure accurate detection of an unoccupied state, a 15-second detection delay is necessary after no presence is detected. Movement, vibrations, or metal reflections in the room may affect the radar's precision. Place appliances like fans and air purifiers away from the detection area.

Which apps can control this Matter Smart Presence Sensor?
Any app or platform that supports the Matter protocol can control the device. The matter is created to enable interoperability among platforms. However, we recommend that you also control and manage with the Meross app for better guidance and richer functionality.

The Presence Sensor Recognition Failure:
There are people present within the detection range, but the sensor shows absence.

Please ensure that the sensor is positioned directly facing the human body. If the human body is out of the radar's effective field of view or if there is a thick covering (such as thick clothes or a thick blanket) or if the human body is facing backward the sensor, the radar may not be able to effectively detect the person's breathing status. Please try increasing the Absence Confirmation Time or adjusting the placement of the sensor. For testing purposes, please follow the procedure in the "Space Learning" section of the device's settings page in the Meross app to adjust it for optimal results.

Can the Presence Sensor recognize multiple individuals?
The Presence Sensor cannot identify multiple individuals moving and existing simultaneously. It can only recognize the state of the fastest-moving object currently present in the space.

Which applications can manage the Meross presence sensor?
Any application or platform that supports the Matter protocol can manage this device. Matter was created to achieve interoperability among platforms. We also recommend that you manage the sensor with the Meross app to get better guidance and richer functionality.

What should I do when the LED turns solid red?
You can troubleshoot the following:

- Check if your home Wi-Fi is working properly.
- Make sure that you have disabled access control in your router and that the smart plug is not blocked by the router's firmware.
- Factory reset your Meross smart Presence Sensor and try to add it again. Learn more at **https://www.meross.com/support/faqs**.

The sensor-controlled light or other devices are triggered with a delay.
Please check if the current network is fluctuating or try adjusting the installation position of the device.

Warranty

For detailed warranty information, please visit **https://www.meross.com/support/warranty**.

Declaration of Conformity

- Meross declares that this product bearing the CE marking complies with the following EU directives 2014/53/EU, 2014/30/EU, 2011/65/EU & (EU) 2015/863. Compliance with these Directives implies conformity to harmonized European standards that are noted in the EU Declaration of Conformity, which may be found at: **https://www.meross.com/sup-port/eudoc**.
- Meross hereby declares that the device complies with the essential requirements and other relevant provisions of the Radio Equipment Regulations 2017. The original UK Declaration of Conformity may be found at **https://www.meross.com/support/ukca**.

Disclaimer

1. The function of this smart device is tested under typical circumstances described in our specifications. Meross does NOT guarantee that the smart device shall perform the same as described under all circumstances.
2. By using third-party services including but not limited to Amazon Alexa, Google Assistant, Apple HomeKit, and SmartThings, customers acknowledge that Meross shall not be held liable in any way for the data and private

information collected by such parties. Meross's total liability is limited to what is expressly covered in its Privacy Policy.

3. Damages arising from ignorance of the SAFETY INFORMATION shall not be covered by Meross aftersales service, nor does Meross take any legal responsibility therefrom. Customers acknowledge their understanding of these articles clearly by reading this manual.

Compliance Information

FCC and ISED Canada Statement
This device complies with Part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE:
This equipment has been tested and found to comply with the limits for a Class B digital device, under Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used following the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

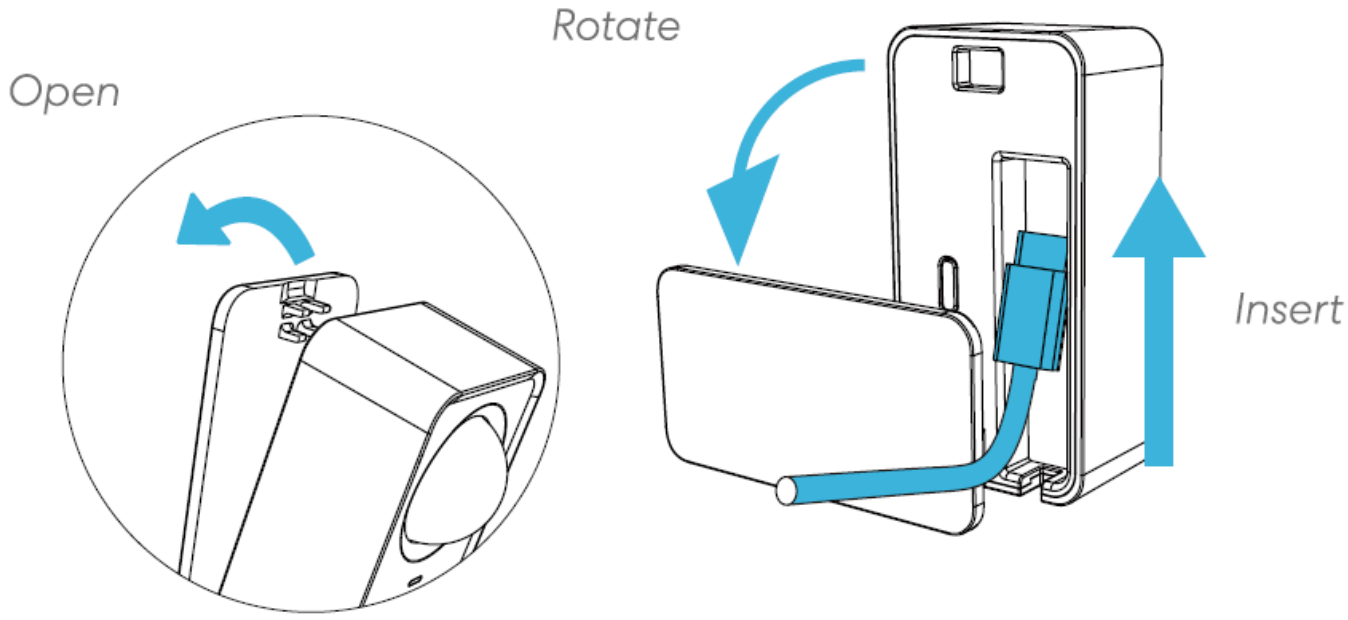
1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and the receiver.
3. Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.

FCC and IC Radiation Exposure Statement
This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body.

Quick Installation Guide

It is recommended to use the Meross app to complete the setup process. Meross's unique "Space Learning" and "Detection Range Calibration" enable the sensor to make more precise detections, providing a user experience that better fits the current environment.



SIMPLE DEVICE

- **Email:** support@meross.com
- **Website:** www.meross.com.

EC/REP

- CET PRODUCT SERVICE SP. Z O..(for authorities only) Ul. Dluga 33 102, 95-100 Zgierz Polen
- **Email:** info@cetproduct.com.

UK/AR

- CET PRODUCT SERVICE LTD. (for authorities only)
- Beacon House Stokenchurch Business Park, Ibstone Rd, Stokenchurch High Wycombe HP14 3FE UK
- For any product compliance questions, please contact security@meross.com.

MADE IN CHINA.

Documents / Resources

	meross MS600 Presence Sensor [pdf] User Manual MS600 Presence Sensor, MS600, Presence Sensor, Sensor

References

- User Manual

Manuals+, **Privacy Policy**

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