Specific FAQs for Sense by MACO sensors

The status LED on the sensor does not light up after inserting the battery (for the first time):
› Check the battery polarity.
› Check the battery voltage.
› Check whether there is still a film or warning label stuck to the battery (e.g. Child Secure Duracell).

The status LED on the sensor lights up briefly only once after the battery is inserted (for the first time), but does not flash:
› Check if the sensor has already been paired with a smart home system. If this is the case, you can generate a new set-up code via the corresponding smart home system. To unpair the device, you can perform a soft reset, if necessary, or reset the sensor to factory settings using a hard reset.

The sensor cannot be paired with the smart home system:
› Check that the sensor is in operation or in pairing mode – this can be identified by the flashing status LED. Please note that pairing mode is only active for 15 minutes. To restart pairing mode after 15 minutes, a soft reset must be performed. Alternatively, you can remove the battery and reinsert it.
› Check whether the sensor has already been paired with another smart home system. If this is the case, you can generate a new set-up code via the other smart home system. To unpair the device, you can perform a soft reset, if necessary, or reset the sensor to factory settings using a hard reset.
› Check whether the sensor was already connected to the same smart home system and, if necessary, delete it from the smart home system before reconnecting.
› Check that your smartphone is connected to the same Wi-Fi network as your Border router.
› Check whether your Matter-compatible smart home hub also supports Thread or can function as a Thread Border router. If in doubt, contact your hub manufacturer's support department. A list of compatible Thread Border routers is available from hub manufacturers or, for example, here.
› Place the sensor closer to the Border router to check the signal strength and rule out possible wireless interference. Thread devices should be located within 5–20 metres of at least one router-enabled device (e.g. smart plug). If necessary, place a repeater nearby.
› Restart the Border router or smartphone.

The sensor is paired with the smart home system, but is displayed as 'unavailable' in the smart home system:
› Check the battery voltage.
› Place the sensor closer to the Border router to check the signal strength and rule out possible wireless interference.
› Place additional, permanently powered 'Matter over Thread' devices to strengthen the Thread network and utilise the mesh functionality.

› Restart the Border router or smartphone. Please note that it can take up to 10 minutes for the sensor status to update in a smart home system. If in doubt, wait until this time has passed.
› Restart the sensor by removing the batteries and reinserting them. Please note that it can take up to 10 minutes for the sensor status to update in a smart home system. If in doubt, wait until this time has passed.
› Repeat the commissioning process by deleting the pairing with the smart home system and reconnecting it to the smart home system.

The sensor reports an incorrect status during operation:
› Place the sensor closer to the Border router to check the signal strength and rule out possible wireless interference.
› Instabilities in the Thread network can sometimes cause delays in the transmission of a changed status. If necessary, wait a few minutes and then check again to see if the status has changed or corresponds to the actual status.
› Check the correct installation position of the sensor using the installation instructions if the status is still not displayed correctly after more than 10 minutes.
› Repeat the adjustment process if the status is still not displayed correctly after checking the installation position, or after more than 10 minutes.

The sensor reports an incorrect status after a battery change:
› After replacing the battery, it can take up to 10 minutes to update the status of a sensor in a smart home system. If in doubt, wait until this time has passed.
› Check the correct installation position of the sensor using the installation instructions if the status is still not displayed correctly after more than 10 minutes.
› Repeat the adjustment process if the status is still not displayed correctly after checking the installation position, or after more than 10 minutes.

The sensor cannot be adjusted:
› Sense by MACO | Window Pro T&T / Sense by MACO | Casement / Sense by MACO | Universal: check whether the magnet is in the correct position according to the installation instructions and repeat the adjustment process.
› Sense by MACO | Door: check that the locking bolt is correctly positioned in relation to the sensor. If necessary, insert the sensor into the strike plate rotated by 180°.

How long is the battery life?
› Depending on the sensor variant, the theoretical battery life is approximately 1.5–2 years. The actual battery life depends on many factors, such as the quality and capacity of the batteries selected, the number of operations, or the smart home system selected. Parallel operation in multiple smart home systems can significantly reduce the actual battery life.

What is the range of Sense by MACO products?

› Sense by MACO sensors typically achieve a range of approximately 5–20 m indoors. These values depend on the structure of the building, among other things, the structure and thickness of walls, ceilings, and so on, play a major role. Due to the concealed installation of Sense by MACO products, the design of the building components (windows, sliding doors, or front doors) also plays an important role. To increase the range, you can add additional, permanently powered 'Matter over Thread' devices to your system to support the Thread network through mesh functionality. Additional Border routers can also strengthen the Thread network.

General FAQs about contact sensors for windows and doors that support Matter over Thread

What is a Thread network?

› Thread is an IPv6-based mesh network protocol for smart home devices that offers low latency and high reliability.

What does 'Matter over Thread' mean?

› 'Matter over Thread' combines the manufacturer-independent Matter protocol for smart home interoperability with Thread as the transport. Devices exchange data directly in the local mesh.

What role does the Border router play?

› The Border router connects the local Thread mesh to the home network (Ethernet/Wi-Fi) and/or the internet, handles IPv6 routing, and enables remote control.

How does a contact sensor report its status?

› When the status changes (open/closed), the sensor sends updated status information to the Border router via Thread.

What range do Thread products have?

› Individual Thread devices typically achieve a range of approximately 5–20 metres indoors. These values depend on the structure of the building, among other things, the installation position, but also the structure and thickness of walls, ceilings, doors, and so on, play a major role. To increase the range, you can add additional, permanently powered 'Matter over Thread' devices to your system to support the Thread network through mesh functionality. Additional Border routers can also strengthen the Thread network.

Do I have to set up the sensor separately?

› Yes. You must integrate the sensor in the Matter-compatible controller using a QR code ('Commissioning') and then add it to the Thread network.

Can firmware updates be carried out?
›   Yes. Matter devices support OTA updates (over-the-air) via Thread, or directly via the Border router if the manufacturer offers this.

How many devices can a Thread network accommodate?
›   Theoretically, the Thread specification allows up to 250 devices per network.

What happens if the Border router loses power?
›   The local mesh remains in place, but no external communication can take place. Local automations (if distributed in the mesh) remain active, provided that the smart home system supports this.

Can I integrate the sensor into Apple Home, Google Home, etc.?
›   Yes. Matter-compatible Border routers (e.g. Apple HomePod mini, Google Nest Hub) enable integration into many smart home systems.

Further possible approaches to solving problems when teaching smart home systems

Why are there different commissioning workflows?
›   Different platforms (Apple Home, Google Home, Amazon Alexa, SmartThings) use slightly different steps and app interfaces when teaching new Matter devices. It is therefore essential to follow the manufacturer's instructions precisely.

Why does the smart home app not recognise my new Matter device?
›   App versions sometimes lag behind. Delete the app data or install the latest version and ensure that your Border router is correctly logged into your home network.

What do unclear error messages such as '0x85 Timeout' mean?
›   Many Matter error codes are only briefly explained in the manufacturer's instructions for smart home systems. Search the official developer kits or community forums for the specific meaning and possible workarounds.

How do I tidy up a confusing Thread network?
›   Use the Border router interface to delete old or removed devices from the routing table. Restarting the network (power cycling all devices and nodes in the network) may help.

What effects do different Matter versions have?
› Controllers and sensors must use compatible Matter releases. A version conflict can result in certain functions (e.g. door/window status) not being displayed at all or being displayed incorrectly. Sense by MACO wireless sensors are based on Matter 1.2.

How can I tell when my Border router is reaching its capacity limits?
› Consumer devices (e.g., HomePod mini) only allow a limited number of simultaneous pairing sessions. If new sensors are not registered, a simple restart of the router often helps.

Can Zigbee or BLE devices disrupt my Thread network?
› Rare, but possible: High-frequency Zigbee or BLE signals can interfere with the 2.4 GHz band and lead to sporadic errors during teach-in. Changing the channel of the Zigbee hub can help.

Why don't my new sensors immediately appear in Alexa/Google Assistant?
› Voice assistants often require a separate 'device scan' in their app interface. Check there manually for new devices after Matter pairing has been completed.

How do I avoid confusion caused by different device names?
› After teach-in, define clear names in the smartphone app (e.g. 'Living room window' instead of 'Entry Sensor 02') and adjust the icons if necessary, provided this is supported by the smartphone app.

Where can I find reliable documentation for Matter/Thread?
› Official manufacturer instructions for smart home systems are often incomplete. Community forums (e.g., GitHub Discussions, Reddit) and the Matter/Thread Developer Kit (docs.homebridge.io, developers.home.apple) usually provide more up-to-date information.