Ceiling Mount For Optical MOBOTIX Sensor Modules

- For surveillance of long and narrow spaces (e.g., bus, train, hallway, etc.)
- Two optical sensor modules are integrated in the mount (S14D or S15D)
- Concealed cabling, weatherproof from -30 to +60 °C (IP65)
- Suitable for ceiling installation, with a 25° tilt of the lenses

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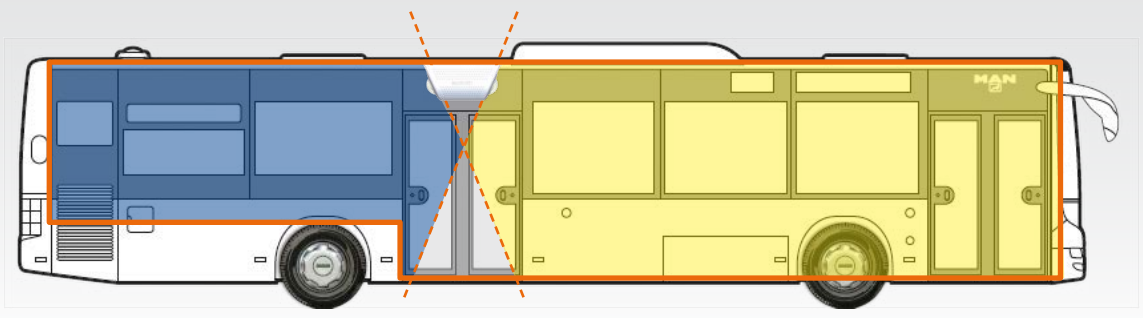
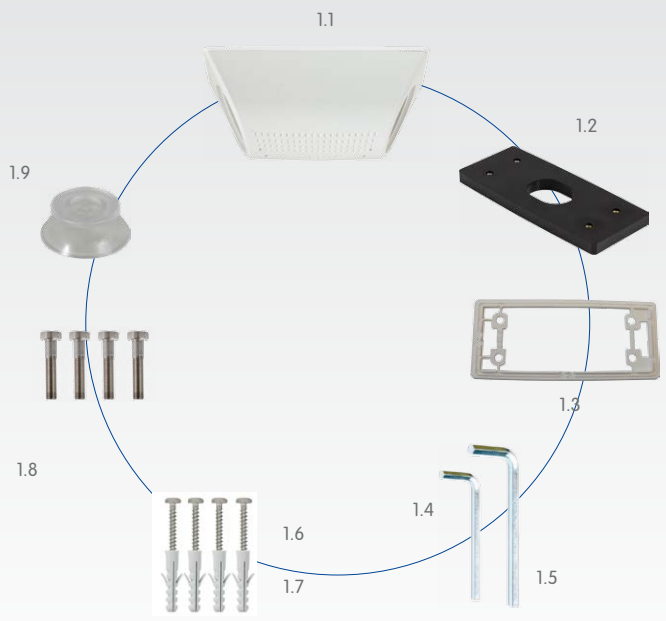
For the **S14D/S15D FlexMount cameras**, two sensor modules with integrated lens, image sensor, LEDs and microphone are connected (via connector plugs) to the camera housing, which is installed hidden behind a wall or ceiling panel.

Installing two sensor modules that are pointing in opposite directions in long and narrow spaces (e.g., buses, air planes or trains) delivers double hemispheric images of up to 6 megapixels that, in terms of sharpness of detail, significantly outperforms a single hemispheric camera with just one lens. For these kinds of installations, MOBOTIX offers the **SurroundMount**. The 25° tilt of the two sensor modules on the SurroundMount allows the area directly underneath them to be captured without blind spots.

The SurroundMount can only be used with the following sensor modules of the S14D and S15D (day or night): L11/L12, L22/L25 and L43/L51.



Delivered Parts



Item	Number	Part Name
1.1	1	Housing
1.2	1	Backing plate
1.3	1	Seal
1.4	1	Allen wrench 1.5 mm
1.5	1	Allen wrench 3 mm
1.6	4	Stainless steel wood screws 4x40
1.7	4	Dowels 6 mm
1.8	4	Stainless steel Allen screws M4x30
1.9	1	Removal tool

Installation

Before installing the sensor modules, make sure that the sensor cables will reach the intended mounting position without placing a strain on the cables. Separate the sensor modules from the sensor cables before installing the modules. Further information on the individual camera connectors can be found in Section 2.2.1, "Overview Of Cable Connections" of the S14/S15 camera manuals. Install the base module as described in Section 2.3.1.

1. Prepare opening

Prepare an opening at the desired mounting position of the SurroundMount that is large enough (diameter about 30 to 40 mm) to allow the sensor cables to pass through so that you can connect them.

2. Lead the sensor cables through the opening

Lead the sensor cables through the opening in the ceiling and allow them to protrude through (the longer they extend, the easier the installation).

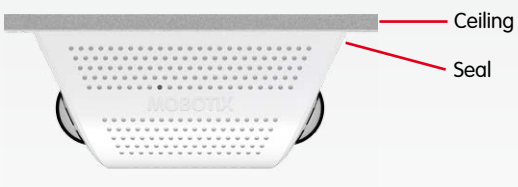
3. Attach the hinged ferrites

Attach one hinged ferrite to each sensor cable (maximal distance to the connector 10 cm).

4. Select mounting type

Select the appropriate mounting type. Depending on the material and the thickness of the mounting surface, you can mount the SurroundMount

- **directly** to the ceiling using the four **stainless steel wood screws** (item 1.6) with or without the **dowels** (item 1.7).
- to the ceiling (max. thickness 12 mm) using the **backing plate** (item 1.2) and the four **stainless steel Allen screws** (item 1.8). To do this, you have to push the screws through the ceiling and tighten them to the backing plate positioned to the back of the ceiling.



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5. Set dowels or prepare screw holes

Depending on the desired mounting type, you either set the dowels or prepare screw holes (for the backing plate). In the second case, you can either use the drilling template provided at the end of this document or use the backing plate with its four threaded bushings as a drilling template.

6. Mount the housing

Place the **seal** (item 1.3) on the **SurroundMount housing** (item 1.1). Attach the housing with or without **dowels** (item 1.7) to the ceiling using the **stainless steel wood screws** (item 1.6). When using the **backing plate** (behind ceiling boards or roof linings) use the **stainless steel Allen screws** (item 1.8). You will need a **crosstip screwdriver** for the wood screws; for the Allen screws you will need the **3 mm Allen wrench** provided in the package. Because space is limited in the housing, **cross the sensor cables** and leave the **hinged ferrites outside** the housing.

7. Connect sensor cables

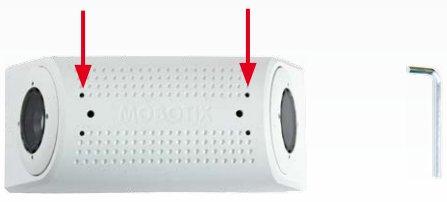
Connect a sensor cable to each sensor module (one cable through each opening of the housing). Insert the sensor cable in the socket of the module, attach the bayonet catch and turn it to the right until it clicks into place.

8. Attach sensor modules

Make sure that the MOBOTIX lettering on the front of the sensor module is pointing to the "9-o'clock position" as shown in the figure. Turn the sensor module with the black module wrench (provided with the S15D) to the right until it reaches the stop.

9. Secure sensor modules

Tighten the four set screws on the underside of the housing to secure each of the sensor modules. To do this, use the provided 1.5 mm Allen wrench. **Warning: Do not overtighten the screws (plastic housing!).**



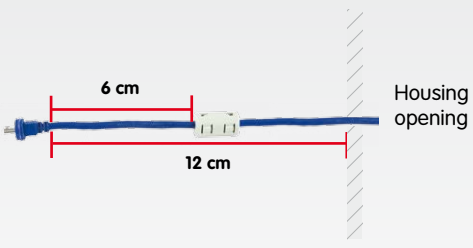
Additional Mounting Option

Surface mounting of the sensor cables

Instead of concealed cable routing, the two sensor cables can also be laid openly to the SurroundMount (both either on the long side or on the short side of the housing). For that you need to pry open two of the four cable openings (see right image) on the wall of the housing (this can be done, e.g., with small pliers). Recommended mounting steps for a cable routing on the long side of the housing:

1. Prepare screw holes (see drilling template on the backside)

When selecting the mounting positions for the SurroundMount and the camera housing, ensure that the sensor cables are long enough so that they can be stored easily together with the hinged ferrites in the SurroundMount housing. For that we recommend to maintain a distance of **12 cm** between the opening of the housing and the bend relief of the plug.

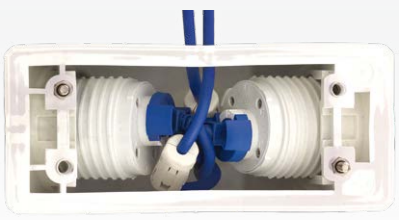


2. Lead the sensor cables into the housing and attach the hinged ferrites

Attach one hinged ferrite to each sensor cable. We recommend to maintain a distance of **6 cm** between the ferrite and the bend relief of the plug.

3. Attach housing

Insert the sensor cables into the mount and place the seal (item 1.3) on the housing. Make sure that the notches of the seal are positioned over the used cable openings. Attach the housing to the ceiling.



4. Connect sensor cables, attach sensor modules and secure them

Follow the steps 7 to 9 described in section „Installation". When inserting the sensor modules make sure that you push the sensor cables with the ferrites to the right and left to have enough space for the plugs with the bayonet catches (see right image).

Replacing Sensor Modules

The following optical sensor modules can be mounted in the SurroundMount housing:

- S14D: L11, L22, L43 (Day and Night each)
- S15D: L12, L25, L51 (Day and Night each)

To replace the sensor modules you need the removal tool, which is included with the delivered parts.

1. Loosen set screws

Loosen the four set screws on the underside of the housing using the 1.5 mm Allen wrench.

2. Loosen sensor module

Turn the sensor module with the black module wrench (provided with the S15D) to the left until it reaches the stop (MOBOTIX lettering in the "9-o'clock position"). Remove the black module wrench.

3. Remove sensor module

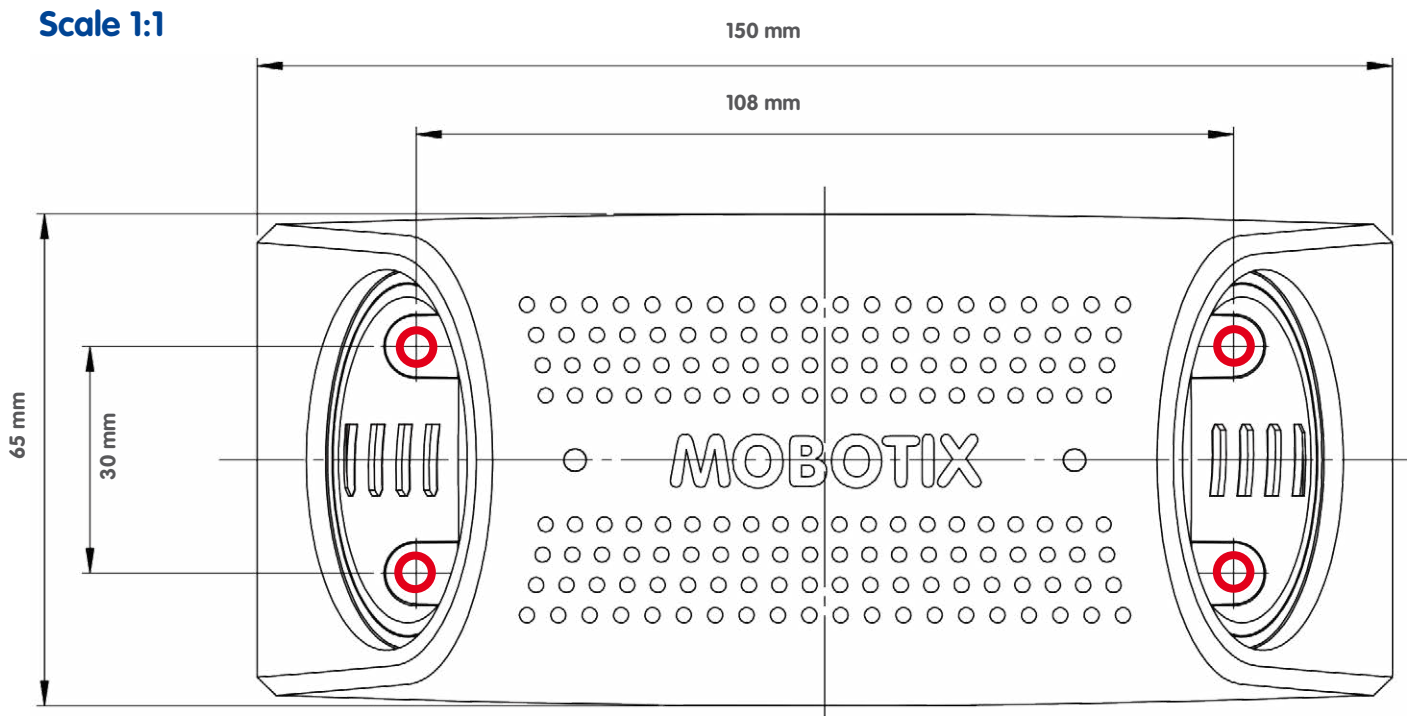
Place the removal tool (provided in the package) onto the sensor module. Remove the module and disconnect it from the sensor cable.

4. Replacing sensor module

After disconnecting the sensor module from the sensor cable, proceed as described in **Installation** (7. Connect sensor cables, 8. Attach sensor modules and 9. Secure sensor modules).

Drilling Template

Scale 1:1



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