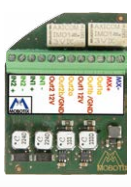
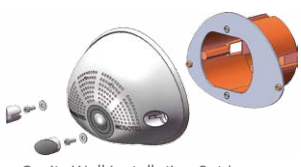
MOBOTIX i25
MX-i25



MX-Bus-IO-Module
for MxBus modules and signal inputs/outputs (accessory)



Cavity Wall Installation Set (accessory) MX-OPT-UP1

Compact Hemispheric Camera for Indoor Applications

MOBOTIX 5MP camera for unobtrusive indoor applications, available as Day or Night version with L12 (Hemispheric) or L23 (92°) lens
More information available under `www.mobotix.com` **> Products > Hemispheric i25**

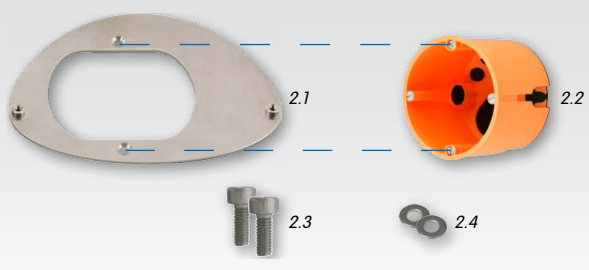
- Recording on internal microSD card (SDXC)
- Signal inputs/outputs and MxBus via optional MX-Bus-IO-Module
- Integrated microphone, speaker via optional accessory (e.g., ExtIO)
- Sensors for temperature, illumination, shock detection integrated

32.086-005_EN_07/2015

i25 Standard Delivery

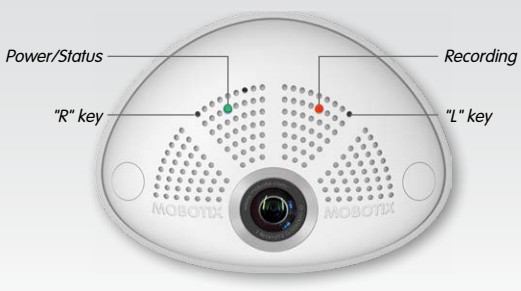
Item	Count	Part Name
1.1	1	Housing (installed)
1.2	1	Back cover (installed)
1.3	1	Main board with lens L12 or L23 (installed)
1.4	2	Bayonet catch, blue (installed)
1.5	1	USB plug, blue (installed)
1.6	1	Ethernet plug, blue (installed)
1.7	1	Ethernet patch cable, 50 cm/19.7 in, black
1.8	1	Wall sealing
1.9	2	Screw plug, white
1.10	2	Washer Ø 4.3 mm, stainless steel
1.11	2	Wood screw 4x40 mm, stainless steel
1.12	2	Screw anchor S6
1.13	1	MicroSD card pre-installed (SDHC installed, SDXC supported)
1.14	1	Allen wrench 2.5 mm

Standard Delivery i25 Cavity Wall Installation Set (Accessory)



Item	Count	Part Name
2.1	1	Mounting plate, stainless steel
2.2	1	Cavity wall socket
2.3	2	Allen screw M4x8 mm, stainless steel
2.4	2	Washer Ø 4.3 mm, stainless steel

Connection and Initial Operation of the i25



For information on **connecting** the i25, please see the *Q25M Camera Manual (5MP), Section 2.9, «Network and Power Connection, Additional Cables»*.

Regarding the **initial operation** of the i25, please see the *Q25M Camera Manual (5MP), Chapter 3, «Initial Operation»* and follow the instructions for wall mounting.

Use a suitable device for operating the camera keys (e.g., an opened paper clip).

Inserting/Exchanging the SD Card

All camera models can use the integrated microSD card (SDXC) to record video data. In order to exchange the microSD card, please proceed as outlined in the following instruction. For information on reliable SD cards, please see the MOBOTIX website **`www.mobotix.com` > Support > MX Media Library > Planning** in the document *MicroSD Card Whitelist for MOBOTIX Cameras*. If the camera has already been installed, follow the instructions in section *«Uninstalling the Camera»*.

Caution: In order to avoid damage from electrostatic discharge, you should touch a grounded device before opening the housing of the camera (e.g., the blank metal at the back of a computer). This will remove any static electricity that may have built up.

1. Remove the cables on the back

Release the blue bayonet catch, then remove the patch cable.

If a USB cable is attached, remove this cable in the same way.

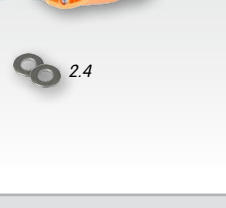
Lay aside the wall sealing of the camera.

2. Remove the back cover

Insert a suitable device into the hole at the top of the back cover as shown until you feel resistance.

In order to release the back cover, ***cautiously*** press upward as indicated by the blue arrow. If you are using a flat-head screwdriver, simply turn the screwdriver.

Gently pull the back cover a bit backward (1), then lift the back cover upward to remove it (2).



3. Remove the main board

Release the main board by ***gently*** pressing the snap-fit hook beneath the main board as indicated by the arrow.

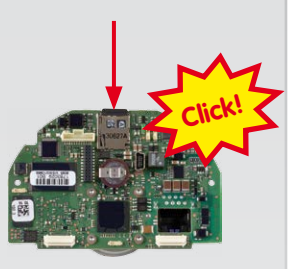
Push the main board out of the housing by gently applying pressure onto the lens holder (push upward, since the main board is tilted downward 15 degrees).

Take care that the lens holder does not catch in the tunnel or the snap-fit hook.

4. Remove/insert SD card

If a microSD card has been installed, gently press with your finger as indicated by the arrow until you hear a ***click***. Then release the SD card. The card is protruding slightly and can be easily removed.

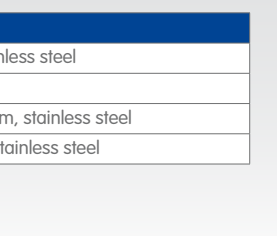
Insert the new microSD card and gently press with your finger as indicated by the arrow until you hear the ***click***.



5. Insert the main board

Insert the lens into the tunnel of the housing as shown.

Put your thumbs onto the two lower screws of the main board (red circles) and cautiously press on the screws until the main board clicks into place.



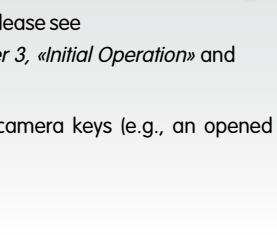
6. Insert the back cover

Insert the back cover at the bottom (1), then push shut at the top (2) and press until it clicks into place.

7. Re-connect the cables

Press the wall sealing onto the back of the i25 and make sure that it lies flat all around the rim. Note that the labels of the sealing are pointing toward the back of the camera.

Insert the Ethernet cable and – if installed – the USB cable into the corresponding sockets and secure the connectors using the blue bayonet catches.

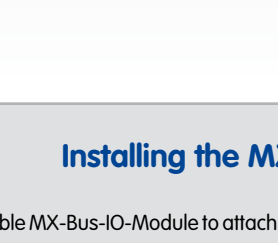


Installing the MX-Bus-IO-Module

For the i25, you can use the optionally available MX-Bus-IO-Module to attach MxBus devices (e.g., an MX-GPS-Box), to attach external sensors using the signal inputs and to switch other devices via the signal outputs.

1. Insert the MX-Bus-IO-Module

On the back of the camera, remove the sticker that protects the receptacle and the camera's interior from collecting dirt (see red arrow in figure to the right).



Carefully push the module board onto the receptacle. Secure the module board using the two supplied Phillips screws (red arrows in figure).

When attaching the connection wires to the MX-Bus-IO-Module, make sure the wires are guided to the module without tension (you could apply a cable tie and tie the wires to the network cable, for example).

2. Attach the connection cables

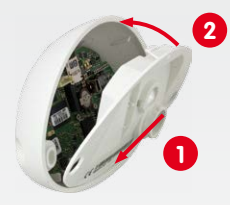
Attach the connection wires as shown in the terminal connector overview.

Terminal Connectors

MX- MX+ Out1 A Out1 B /GND Out1 12V Out2 A Out2 B/GND Out2 12V IN1 - IN1 + IN2 - IN2 +	MxBus connections	MxBus	
	Output 1 A	Relay pot.-free	–
	Output 1 B/GND		Output 1 12 V self-powered
	Output 1 12 V	–	
	Output 2 A	Relay pot.-free	–
	Output 2 B/GND		Output 2 12 V self-powered
	Output 2 12 V	–	
	Input 1 –	Inputs	
	Input 1 +		
	Input 2 –		
	Input 2 +		

Outputs

Installation Without Cavity Wall Installation Set



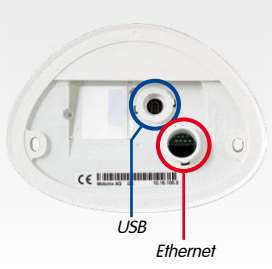
Use the drilling template on the back for this step. Mark the holes for dowels or screws (blue) and the cut-out for the cables (red). If required, drill the holes for the dowels, push them in and cut the cut-out for the cables. Guide the Ethernet cable and any other cables that are to be connected through the cut-out.

1. Press wall sealing on i25

Press the wall sealing on the back of the i25 and make sure that it lies flat all around the rim. Note that the labels of the sealing are pointing toward the back of the camera.

2. Connect the cables

Insert the cables into the appropriate connectors and fasten them using the blue bayonet catches.



3. Install the i25

Press the camera and the wall sealing against the wall and align the holes with the holes for the dowels or screws. Insert the screws with washers and tighten them using a torque of 0.4 Nm.

4. Apply screw plugs

Push in the screw plugs to close off the holes with the screws. When doing so, make sure that the notches in the plugs follow the guides.

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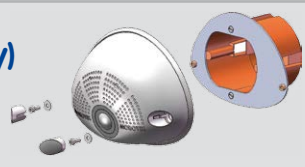
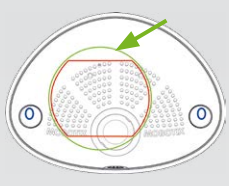
Installation With Cavity Wall Installation Set (Accessory)



With this type of installation, the mounting plate of the Cavity Wall Installation Set is screwed onto a cavity wall socket. The i25 itself is screwed onto the mounting plate using Allen screws. There is no drilling for dowels or screws required.

1. Cut out the hole for the cavity wall socket

Mark the hole for the cavity wall socket (green circle on drilling template) and cut out the hole.



2. Insert the cavity wall socket

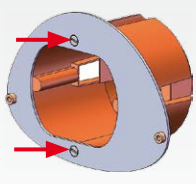
Insert the cavity wall socket and tighten the two screws (red arrows) in order to fasten the socket in the wall.

3. Remove the screws

Remove the two screws in the cavity wall socket (red arrows), which are otherwise used for fastening switches etc.

4. Attach the mounting plate

Use the two screws you just removed to fasten the mounting plate onto the cavity wall socket.



5. Press wall sealing on i25

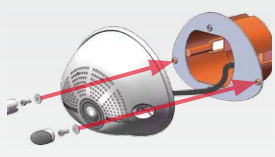
Press the wall sealing onto the back of the i25 and make sure that it lies flat all around the rim. Note that the labels of the sealing are pointing toward the back of the camera.

6. Connect the cables

Guide the cables of the camera from behind through the cavity wall socket. Insert the Ethernet cable and – if installed – the USB cable into the corresponding sockets. Secure the connectors using the blue bayonet catches.

7. Install the i25

Push the remaining cable into the cavity wall socket, then press the camera and the wall sealing onto the mounting plate. Use the two Allen screws with the washers to fasten the i25 onto the mounting plate (0.4 Nm).



8. Apply screw plugs

Push in the screw plugs to close off the holes with the screws. When doing so, make sure that the notches in the plugs follow the guides.

Uninstalling the Camera

1. Remove the screw plugs

Remove the two white screw plugs using a small flat-head screw driver, for example.

2. Remove the retaining screws

Remove the retaining screws using a suitable Allen wrench or screwdriver and take off the entire camera.

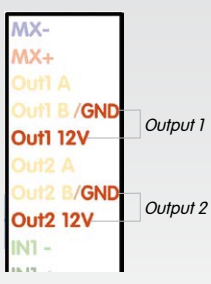
Initial Operation of the i25

The initial operation starts with connecting the power supply (see section *«Network and Power Connection, Additional Cables»* in the *Q25M Camera Manual (5MP)*). The first access follows the procedure described in the same manual in the section «Initial Operation of the Camera». All other tasks require access to the camera's user interface in the browser. Enter the camera's IP address into the address bar of the browser.

1. Configuring and Using the MX-Bus-IO-Module

The camera will automatically detect an installed MX-Bus-IO-Module (see **Camera Status**, **System** section in browser).

The signal inputs can be used right away in the ***signal input profiles*** in the **Setup Menu > Event Overview**. Likewise, the signal outputs can be used in the ***signal output profiles*** in **Admin Menu > Hardware Configuration > Signal Out Profiles**.



In addition, the signal inputs/outputs have been entered automatically in the **Admin Menu > Assign Wires** dialog and can be used to control doors and lights.

To use one or both signal outputs not as potential-free outputs (for relays), but as ***self-powered 12 V outputs***, open the **Admin Menu > Hardware Configuration > Manage Hardware Expansions** dialog. In the **MxBus/IO Board** section, click on **Connect** for each output you want to use as self-powered output.

2. Save the configuration

In the live image of the browser, select the **Manage Settings** quick control and set **Store Entire Configuration** as value. The camera stores the configuration in the permanent camera memory so that the settings will be applied at the next camera reboot.

Important Notes

Safety Warnings

- This product must not be used in locations exposed to the dangers of explosion.
- Make sure that you install this product as outlined in the installation instructions above.
- When installing this product, make sure that you are only using genuine MOBOTIX parts and MOBOTIX connection cables.
- Only install this product on suitable, solid materials that provide for a sturdy installation of the fixing elements used.
- Electrical systems and equipment may only be installed, modified and maintained by a qualified electrician or under the direction and supervision of a qualified electrician in accordance with the applicable electrical guidelines. Make sure to properly set up all electrical connections.
- When attaching modules to the USB connector, the ***power consumption of all attached modules must not exceed 1 W***.
- Due to the high performance of the i25, the area of the image sensor ***can get quite hot***, especially when the ambient temperature is also high. This does not affect the proper functioning of the camera in any way. This camera must not be installed within the reach of persons.
- Make sure the power supply to the camera is disconnected before opening the camera housing (e.g., when exchanging the SD card).
- MOBOTIX products include all of the necessary configuration options for operation in Ethernet networks in compliance with data protection laws. The operator is responsible for the data protection concept across the entire system. The basic settings required to prevent misuse can be configured in the software and are password-protected. This prevents unauthorized parties from accessing these settings.
- Make sure that the operating temperature of 0 to +40 °C/+32 to +104 °F is not exceeded.

Legal Notes

You must comply with all data protection regulations for video and sound monitoring when using MOBOTIX products. Depending on national laws and the installation location of the i25, the recording of video and sound data may be subject to special documentation or it may be prohibited. All users of MOBOTIX products are therefore required to familiarize themselves with all valid regulations and comply with these laws. MOBOTIX AG is not liable for any illegal use of its products.

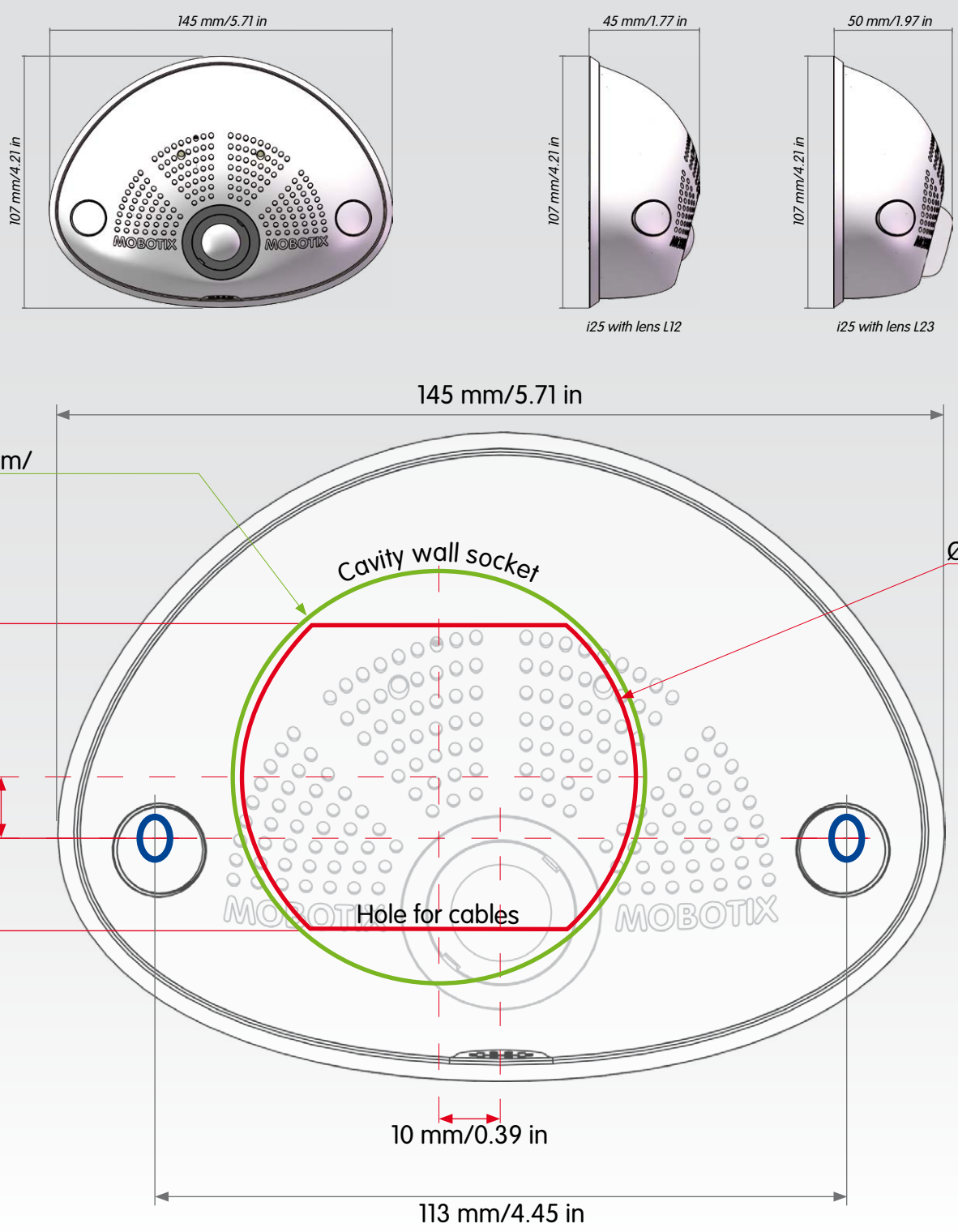
Technical Specifications

Since the i25 is identical to the Q25M for the most part, the technical data listed in the *Q25M Camera Manual (5MP)* in Section *«Technical Data»* also applies to this product. You can find the *Q25M Camera Manual (5MP)* as a PDF file on **www.mobotix.com > Support > Manuals**.

i25 (Differences Compared to Q25M)	
Lens Options	L12 (180° horizontal field of view) L23 (92° horizontal field of view)
Audio features	Integrated microphone, speaker via optional accessory (e.g., ExtIO)
Interfaces	Ethernet 10/100, IPv4/IPv6, MiniUSB; MxBus and inputs/outputs using optional accessory
Power Consumption	Typ. 4 W
Operating Conditions	IP30 (DIN EN 60529) 0 to +40 °C/+32 to +104 °F (DIN EN 50155)
Dimensions	Width 145 mm, height 107 mm, depth 45 mm/1.77 in with L12, 50 mm/1.97 in with L23
Materials	Housing: PBT GF30
Weight	approx. 222 g/0.49 lb (incl. 50 cm Ethernet patch cable)

MX-Bus-IO-Module	
Inputs	2 galvanically separated inputs (AC/DC, 0 to 48 V)
Outputs	**Variant 1 (default):** 2 potential-free outputs (max. load per pin: max. 30 W or max. 1 A or max. 48 V AC/DC) **Variant 2 (set in browser):** 2 powered outputs 12 V DC; max. 50 mA per output
Add. Interfaces	MxBus connections for MOBOTIX peripheral devices
Operating Conditions	Same as camera
Cross-sectional area of wires at the terminals	0.14 mm² – 0.5 mm² (AWG 21 – 26)
Power Consumption	Typ. 0.5 W, max. 1.5 W

Dimensions/Drilling Template



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