1. MxDisplay With RFID & WiFi

"It's a smartphone on the wall"

That's the first impression of the new wall-mounted display from MOBOTIX. It can be integrated fully flush-mounted into the wall, comes in a stylish design and users can operate it **using gestures**, just like a modern smartphone.

With just a few taps, the user can look at an overview of the cameras in the house, access the latest video messages on the door intercom systems or set up a new access transponder for a visitor.

The MxDisplay is extremely easy to operate and serves as a **fixed viewing station for the video door station**. Regardless of what menu the user is in, tapping the **key icon** immediately shows the live image of the door intercom. Tapping and holding allows the user to open the door. Additional security can be provided via a PIN or transponder, if necessary.

Integrated WiFi enables wireless operation of the MxDisplay, which means that it can be used as a **base station for other MxDisplay units** in the building.

Smartphones and computers can log into the display via the network or the integrated WiFi and use all of the functions in the same way. If the doorbell rings, this is forwarded to the smartphone or workstation.

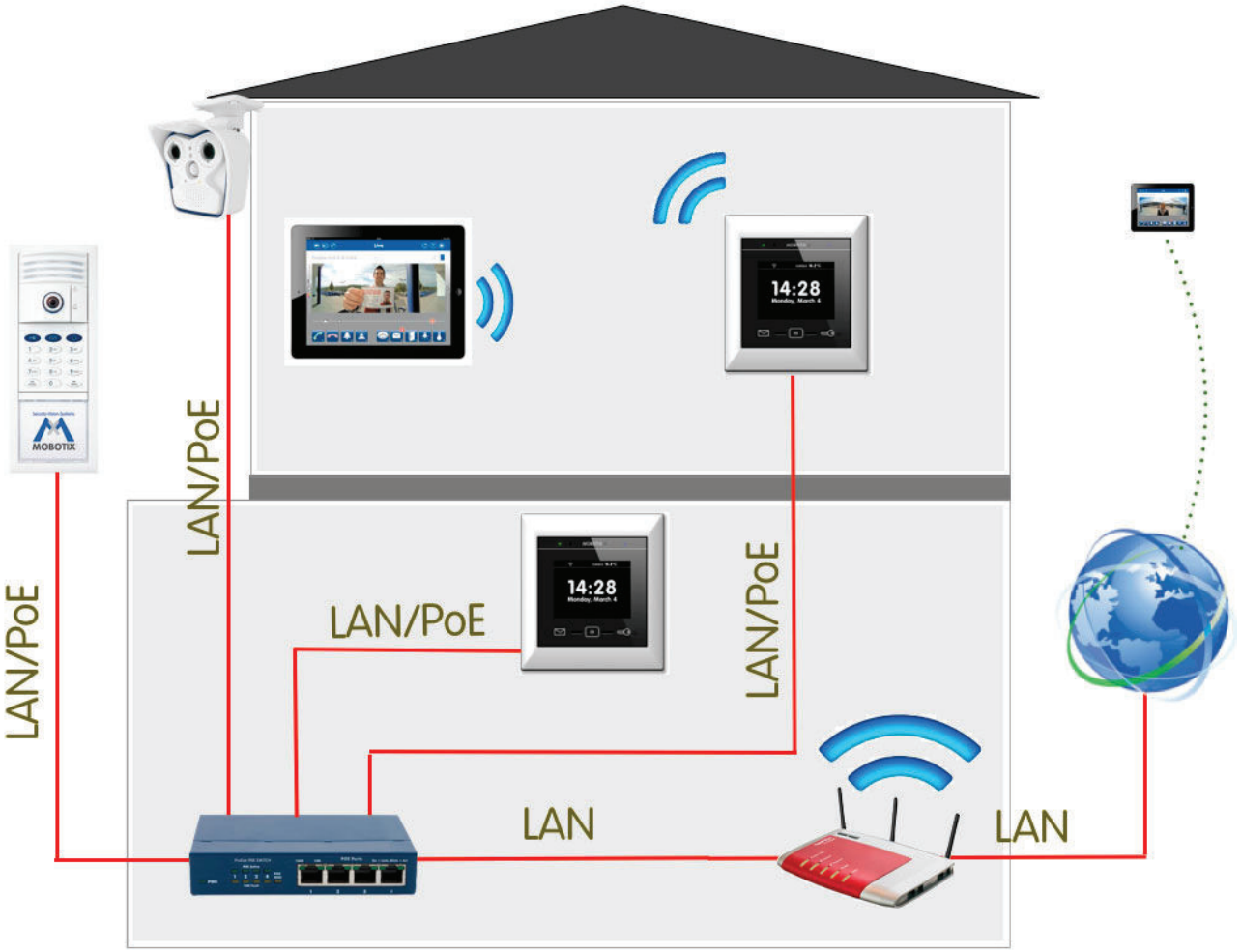
The **WiFi access point feature** also allows the MxDisplay to provide these smartphones and computers with **Internet access**, it is hence not necessary to have an additional WiFi system in the building.

Keyless entry cards and transponders for the video door intercoms are created, changed and blocked directly on the MxDisplay. The transponders can be assigned names and permissions can be limited in time, restricted to days of the week and hours or protected with an additional PIN. All **entries and entry attempts** are stored and, if desired, documented by a **video recording**.

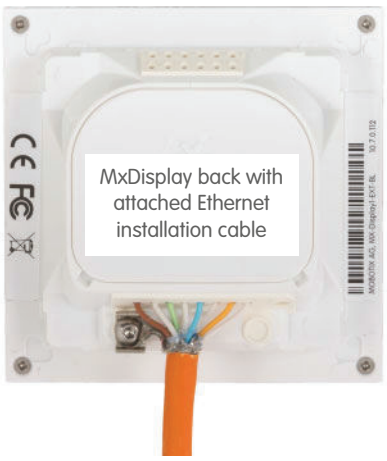
Opening doors or windows, triggering of camera sensors or other sensors can be used as an alarm in conjunction with displaying a live camera. There is also an integrated **automatic doorbell sound** when specific doors of the system are opened (e.g., the entry door of a store).

The **IP-based** MxDisplay is directly connected to a PoE switch and supplied with power via the network cable (PoE – Power over Ethernet). If the display is to be integrated into the network using WiFi or if the Ethernet cabling is not PoE-powered, the MxDisplay can be powered by an external power supply of 24 to 50 V DC. The **signal output** controls a 12/24 V relay that can switch loads with up to 1 A.

Connection Example: MxDisplay in Building



The diagram shows how **two MxDisplay units** attached to a PoE switch via Ethernet cabling are used as fixed viewing stations for door stations and house cameras in the first and second floors of a building. Since the concrete floor blocks wireless connections to the WiFi router on the first floor, the **MxDisplay installed on the second floor is also used as WiFi access point** for the wireless devices that are used on that floor (tablets, smartphones, etc.).



For **connecting the MxDisplay to the network**, it is recommended to use an Ethernet installation cable attached to a PoE switch. **As an alternative**, the network connection is established via the Ethernet installation cable without PoE power supply **or** by using an existing **WiFi** network (using MxDisplay as a WiFi client). When using one of these two alternatives (no PoE/WiFi), you need to attach an external power supply via two-wire cabling to the MxDisplay (24 to 50 V DC, not available through MOBOTIX).

Note that – due to the basic principles of WiFi networks – (short) disruptions of the wireless connection are possible. For this reason, wire-based installations are considered the most reliable type of network connection of an MxDisplay.

Product Announcement

Security-Vision-Systems MOBOTIX

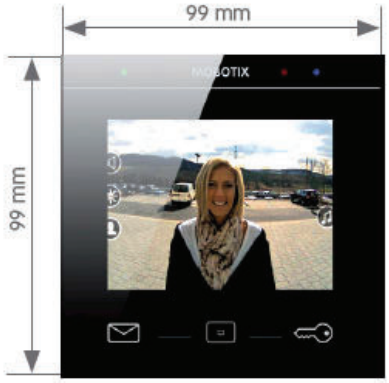
MxDisplay – Highlights
Touchscreen viewing station, microphone, speaker and integrated video management software for MOBOTIX door stations and cameras: Two-way communication with live image, operating electrical door openers, switching lights, starting an instant recording in the live image, etc.
Extensive RFID features: Training and managing of RFID cards/transponders or access PINs, creating of time-restricted access schemes using RFID transponders or PINs (e.g., PIN for craftsmen that is valid for 12 hours, cards for room service only valid on Mondays, etc.).
HD audio technology for optimized voice transmission from and to the MxDisplay.
On standby: Display of time and the selected temperature sensor (e.g., of an MX-GPS-Box attached to a camera); but also permanent display of a camera's live image possible (from a door station, for example).
Playback of mailbox and event recordings, of door stations and cameras, integrated event search and player feature
"Quiet before ringing": Temporary deactivation of ringing possible for individual MxDisplay units or for all units (e.g., at night or when absent, alarm messaging is still available)
WiFi (WLAN) feature with different operating modes: "client" for attaching MxDisplay to the network/Internet; "extended network" for using MxDisplay as WiFi access point for other devices in the building (smartphones, tablets, PCs)
Programmable switching feature for building automation devices (lights, shutters, etc.)
Settings of cameras and door stations can be adjusted without using a PC (program recording, change access data, adjust image settings, etc.)
System management functions controlled by MxDisplay can be locked at the device (changing these settings is still possible using security code or admin RFID card)
Integrated light sensor automatically controls display brightness (darkness, bright sunlight)
Individually configurable home screen for quickly accessing features that are used most often
Simple installation, wireless network connection also possible
Using any number of MxDisplay units in one building is possible – simple setup
Power supply via network cable (PoE) or standard power supply (24 to 50 V DC)

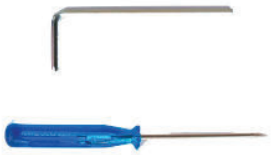
MxDisplay: Technical Specifications	
Model variant (currently available)	MX-Display1-EXT-BL (color: black)
Operating conditions	Indoors (no IP class), ambient temperature 0 to 40 °C/32 to 104 °F
Interfaces	Ethernet (single-wire terminal for installation cable AWG20 to 24), WiFi, RFID
Ethernet	PoE (IEEE 802.3af, Class 2)
WiFi (WLAN)	IEEE 802.11b/g/n, 2.4 GHz band; client or access point; WPA2 encryption
RFID	Mifare DESFire EV1
Outputs	1 potential-free relay output, max. 50 V AC/DC, max. 1 A
Power supply	PoE or 24 to 50 V DC
Power consumption	typ. 3.5 W

Product Announcement

Security-Vision-Systems MOBOTIX

MxDisplay: Technical Specifications	
Display size	3.5", resolution 320 x 240 pixels (CIF)
Supported video sources	All MOBOTIX cameras and door stations with software 4.2.3.x and higher (all 14/24 models, not for M12), supported number of cameras per unit: 8
Measurements (width x height x depth)	99 x 99 x 37 mm; MxDisplay fits into the frames and housing of the door station modules and the new FlatMount Frame
Weight (incl. Shopping materials)	270 g
User interface	Touchscreen and three non-mechanical function keys, two three-color status LEDs
Audio	Microphone and speaker, 16bit/16kHz (HD audio), conditional intercom (push-to-talk)
Delivery	1x MxDisplay, 1x sealing, 1x admin card (red RFID card for unlocking locked MxDisplay functions and for managing cards of KeypadRFID and BellRFID units), 1x screw driver, 1x Allen wrench, technical documentation
Accessories (optional)	FlatMount Frame (e.g., MX-OPT-FlatMount-EXT-BL), in-wall housing (MX-OPT-FlatMount-Box-EXT-IN), module frame (e.g., MX-OPT-Frame-1-EXT-BL) with on-wall or in-wall housing (e.g., MX-OPT-Box-1-EXT-ON-BL or MX-OPT-Box-1-EXT-IN)





Delivered parts: MxDisplay, RFID card administrator, Allen wrench 2.5 mm, screw driver, installation and user instructions, white foam sealing

Ordering Information MxDisplay:

Article No.	EAN	Description	MSRP Euro	Shipping from
MX-Display1-EXT-BL	4047438019804	MxDisplay, indoor viewing station for MOBOTIX door stations and video systems, with RFID and WiFi, 1x admin card, mounting accessories, user instructions. Color: black	598	Nov. 13, 2014

2. FlatMount Frame, In-Wall Housing and Module Frame

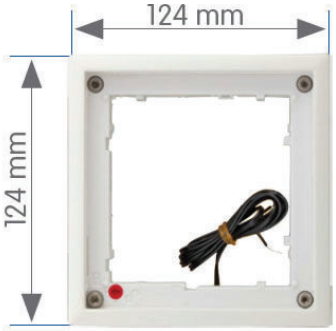
This section describes the three options (in-wall/on-wall, 2 frames) of installing the MxDisplay in a building.

Option 1: Mounting with FlatMount Frame (new)

Elegant frame for flush-mounting the MxDisplay

In order to flush-mount the MxDisplay in a building and at the same time maintain its sleek design, MOBOTIX has developed the **FlatMount Frame**. Once the FlatMount Frame (available in black or white) has been installed, all that can be seen is a slim 12 mm frame of varnished synthetic material around the unit.

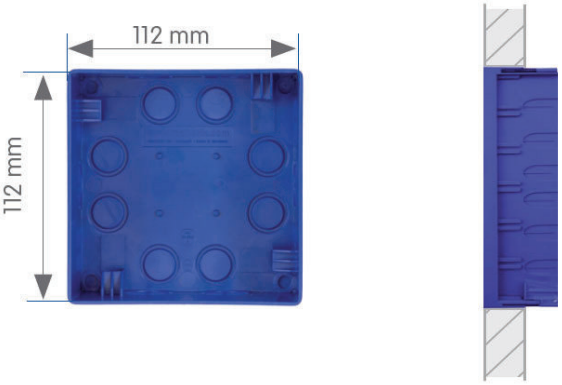
The FlatMount Frame also has an **electromagnetic theft protection** and can be used to install door station modules in indoor and outdoor applications.



FlatMount Frame in black or white

- Electromagnetic module theft protection
- Special tool for taking the module out of the frame
- Article number:
  MX-OPT-FlatMount-EXT-BL (color: black)
  MX-OPT-FlatMount-EXT-PW (color: white)
- Price 58 Euros

When installing in hollow walls, you can use the FlatMount Frame to install the MxDisplay **without any other accessories** (see fig. right). In order to **flush-mount the device in stone walls**, you can use the new **In-Wall housing** designed for the FlatMount Frame (width x height 112 x 112 mm, depth 60 mm).



In-Wall housing for FlatMount Frame

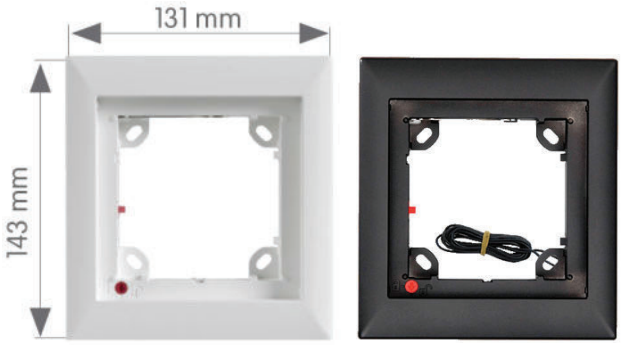
- Measurements of cavity (width x height x depth): 112 x 11
- Article number:
  MX-OPT-FlatMount-Box-Ext-IN
- Price 18 Euros

Options 2 and 3: In-Wall and On-Wall installation with module frame (available since 2011)

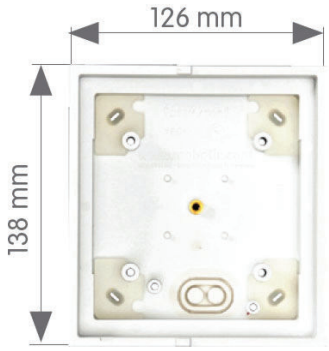
Standard frame for installing the MxDisplay

In principle, you can use all frames and housings of the door station modules for installing the MxDisplay. The single module frame, for example, can be used with either the **On-Wall housing or the In-Wall housing** by MOBOTIX.

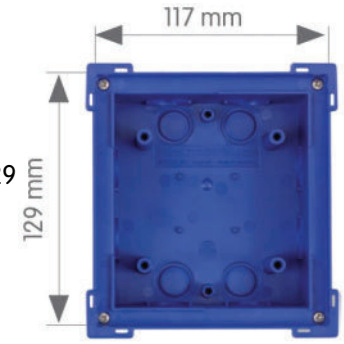
Module frame (single) in black or white
- Electromagnetic module theft protection
- Article number:
  MX-OPT-Frame-1-EXT-BL (color: black)
  MX-OPT-Frame-1-EXT-PW (color: white)
- Price 63 Euros (black), 58 Euros (white)



On-Wall Housing (single) in black or white
- Article number:
  MX-OPT-Box-1-EXT-ON-BL (color: black)
  MX-OPT-Box-1-EXT-ON-PW (color: white)
- Price 53 Euros (black), 48 Euros (white)



In-Wall Housing (single)
- Measurements of cavity (width x height x depth): 117 x 129
- Article number: MX-OPT-Box-1-Ext-IN
- Price 18 Euros



Ordering Information FlatMount Frame and In-Wall Housing:

Article No.	EAN	Description	MSRP Euro	Shipping from
MX-OPT-FlatMount-EXT-BL	4047438019835	FlatMount Frame for flush-mounting in hollow walls or for in-wall installations of MxDisplay and door station modules, integrated electromagnetic theft protection; width x height: 124 x 124 mm, color: black	58	Nov. 13, 2014
MX-OPT-FlatMount-EXT-PW	4047438019811	FlatMount Frame for flush-mounting in hollow walls or for in-wall installations of MxDisplay and door station modules, integrated electromagnetic theft protection; width x height: 124 x 124 mm, color: white	58	Nov. 13, 2014
MX-OPT-FlatMount-Box-EXT-IN	4047438019866	In-wall housing for FlatMount Frame, usually set into wall with plasster, size of cavity (width x height x depth): 112 x 112 x 60 mm	18	Nov. 13, 2014