6MP Sensor

Full Moon
(Light sensitivity approx. 0.5 lux)

MOBOTIX Moonlight Technology

The New Benchmark in Lowlight for Objects in Motion

The brand-new MOBOTIX 6MP cameras have an outstanding increase of light sensitivity of more than 100-times than the former 3MP cameras. The monochrome version reaches even a 300-times higher sensitivity than the previous series. Instead of one full second of exposure time the new 6MP systems can select only 1/100 s which results in capturing even fast moving objects in low light conditions.

Short Exposure Times are Essential

In security monitoring every moment and therefore every single frame of a video recording has to be as sharp as possible. For moving objects this implies the necessity of short instead of long exposure times. Unfortunately a short exposure time of 1/100 s grabs 10-times less light than a 1/10 s. Especially in low light conditions, the lens, the image sensor itself and the image processing for sure have to be very sophisticated to generate a sharp and crisp image of the moving object.

Only a Sharp Image is a Proof

In dark scenes long exposure times of up to 1 second create bright images and visible static objects. Perfect to acknowledge objects in darkness. But if objects are moving, long exposure times will create blurring or ghost images, and make verification of moving objects nearly impossible.

In security applications moving objects are of utmost importance, therefore short exposure times are essential to understand what's going on. Some manufacturers are using a combination of technologies like adding frames to generate a brighter image (e. g. Lightfinder, HDR, etc.). However, with this adding and overlaying of subsequent frames, small details or objects in the scene could be suppressed or distorted, which is inacceptable in security applications.

Optimized for Best Performance

This huge increase in light sensitivity was achieved by several means: wider sensor with bigger pixels to catch more light, a hardware noise reduction filter directly at the sensor, a new sophisticated lens with a better light transmission, and an improved image processing software reducing the noise of low light images. This is called the new MOBOTIX Moonlight Technology.

More Details ...

... with shorter exposure times

3MP F2.0
Color Sensor @ 0.5 lux

5MP F1.8
Color Sensor @ 0.5 lux

6MP F1.8
Color Sensor @ 0.5 lux

6MP F1.8
B/W Sensor @ 0.5 lux
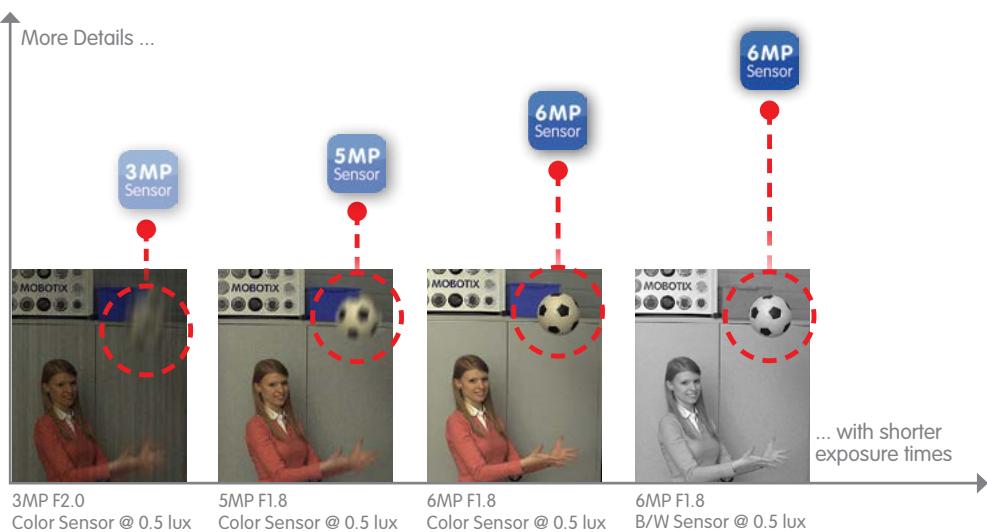
Professional Video Solutions

The German company MOBOTIX AG is known as the leading pioneer in network camera technology since 1999 and its decentralized concept has made high-resolution video systems cost efficient.

www.mobotix.com

MOBOTIX Management Center (MxMC)
The New Milestone of Video Management

Scalable • High Performance • Easy to Use • H.264/ONVIF

The new MOBOTIX Management Center (MxMC) is a complete new development for PC/MAC/Linux systems with the focus on a unique and intuitive user experience, providing the highest cost savings and flexibility in the market. Following the MOBOTIX software concept, MxMC is 100% included in the MOBOTIX portfolio, requiring no extra software, license or update costs.

MxMC can be used in projects independent of the number of cameras or the mix of products incl. doorstation, MxDisplay, accessories, storage devices, etc. All MOBOTIX products in the network will be automatically detected and can be configured with the brand-new graphical user interface without any web browser, easy and intuitive. So, it is possible to setup a complete system of cameras, home automation and alarm devices in the shortest time without extra software and license fees. Especially the configuration management of MxMC will help to reduce installation, configuration and maintenance costs dramatically.

Intuitive Layout View

MxMC helps users to manage huge numbers of cameras by sorting and structuring devices into groups and different layout views. MxMC is structured in 4 major areas:

1. Group or camera bar: Perfect preview of all available cameras and groups.

2. Layout area supporting grid, graphic and info view: Major display area for grid layout including focus and grid windows, graphic view supporting intuitive layout constructions with symbols and background images as well as an information screen where support, emergency or/and additional project information is displayed. All 3 views can be toggled and selected with a single click.

3. Intelligent event bar: Chronological preview of all recordings and events. The complete bar can be suppressed or displayed. All previews can be directly selected or filtered and sorted by cameras and type of events. With Drag&Drop every recording can be moved into focus window for live view or player view for deeper analysis. Vice versa,

complete groups or selected cameras can be dragged into the event bar for event research.

4. Command bar: Includes all buttons for different views, player and research, history, layout editing, management and control functions.

Power Player Technology

MxMC includes different player and research tools to provide fastest results on events and recordings, comfortable research and in-depth analysis.

Research Player allows high-speed rewind and fast forward for "on-the-spot" and "Jog-Dial" search with speeds of up to 16 times. Efficient time lapse provides extremely fast results even during longer history periods
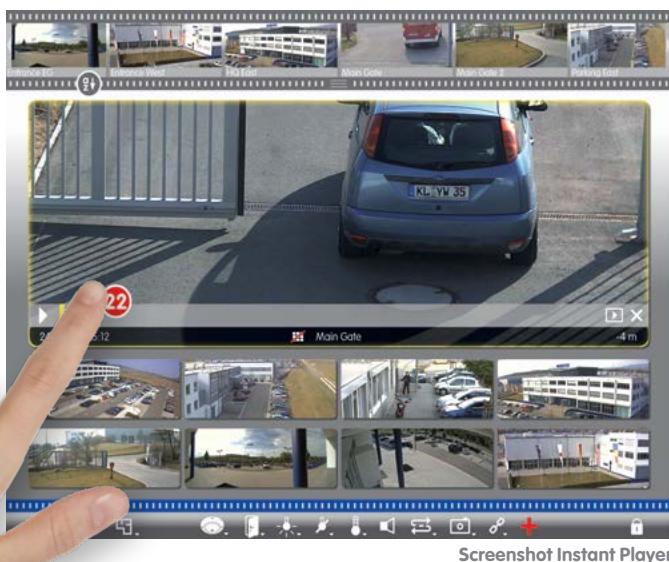
Screenshot Instant Player

Adaptive Bandwidth Management

MxMC handles predefined scenarios, depending on the available bandwidth – ideal for mobile devices without re-configuration. LowRes images are transferred via small bandwidth connection, but stored in full resolution. The fully intelligent MOBOTIX cameras manage frame rates and image resolution, depending on

with selectable steps from minutes up to days. Search and analysis can be conducted by time, date or range. Investigations across all cameras can be arranged by reference time with the pin symbol.

Another powerful research tool is the so-called **Grid Player** where all cameras are placed into player mode, showing all recordings synchronized with the search criteria of the camera in the focus window.

Another big innovation is the MOBOTIX **Instant Player**, providing immediate access to the last 25 events in all grid windows without changing the layout view. This new **Instant Player** gives "on-the-spot" access to camera recordings in every layout where a live camera is monitored.

Intelligent Configuration

MxMC includes a complete user interface to manage all parameters of all MOBOTIX products. No web browser is required in the future. MxMC provides a sorted overview of all devices and parameters and supports visual control and Drag&Drop configuration of cameras and complete groups. Furthermore MxMC supports intelligent parameter sorting and verification of configurations which will drastically reduce installation and configuration costs.

Multi-Monitor Capability

MxMC supports setup and arrangement of dual or multi-monitor installations without any extra software costs. A simple double-click leads to the second monitor. Or MxMC is able to detect multiple monitors from

different PCs in the network and can define target monitors for individual cameras or views. This is a perfect tool to setup and manage monitor wall systems in the most competitive and flexible way.

Multi Slider – Major Selection Tool

MOBOTIX has revolutionized selection and control of parameters. Multi Sliders enable users to manage multiple parameters in one selection line. Multi Sliders are available in grid, graphics and player view as well as in all different research and configuration screens.

Multi Slider is the fastest selection tool to define image settings, zoom views, set aspect ratios or to filter events and cameras. Multi Slider buttons provide also "jump tags" via context menus for direct selection.

Multi Slider

the available bandwidth. If more details are required, the user can define the area of interest down to the resolution provided by the camera. In this way the MOBOTIX solution makes best usage of available bandwidth and enables quality research even via low bandwidth connections.

The "Smartphone" on the Wall

The MOBOTIX Display is much more than an intercom system or a simple display of a door station. It is a building automation server and supports access to security cameras, manages the time based access control for each door, reads and writes **RFID transponders**, controls smart home functions and acts as a standard house alarm system

with several lines. The MOBOTIX **MxDisplay** supports gesture control like a smartphone and therfore it is very user friendly and intuitive in use.

The access control can be defined individually by groups, users and doors. Beside using **RFID** batches or transponder tags, also pin numbers for access control can be defined or the combination of transponder and pin code is supported. For example it takes approx. 10 seconds to set up an entry code

or transponder batch for a craftsman. The entry or access time can be set by time range or is defined by detailed weekly schedule. Access codes are encrypted and therefore reliable and safe.

Access Control

Weekly Program
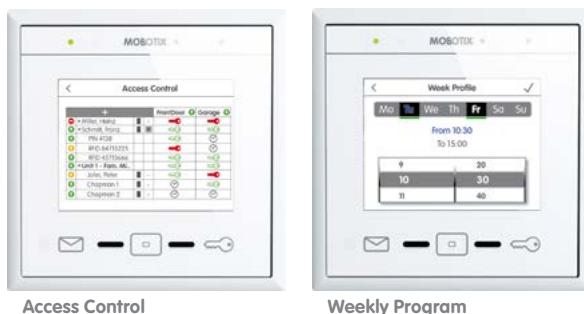
Interface Boxes

With the new interface boxes, MOBOTIX can provide a full security solution to sense different inputs and operate different outputs or 3rd party devices, like window or door contacts, lamps and motors. All interface boxes are weatherproof, outdoor resistant and can be installed invisible behind the standard camera wall mount, requiring only one installation point. All boxes are managed via the encrypted 2-wire MxBus from the camera, doorstation, MxDisplay or the Management Center.

Input Box

The MX-Input-Box provides 6 isolated, self-powered inputs with two wires each. This represents a perfect sensor extension to interface to a chain of window/door contacts, light barriers or other sensors without any extra power supply over 200 meters/yards.

Output Box

The MX-Output-Box provides 8 outputs, where 6 outputs are powered with 12VDC per output and where the remaining 2 outputs can either be used as powered outputs (12VDC) or as isolated relay output in order

to handle AC/DC loads. Ideal device to control or operate AC actuators or relays to drive motors, shutters, lamps, barriers, etc.

Proximity Box

This interface box enables motion detection with direction and distance detection up to max. 10 m/32 ft. based on radar microwaves. It can be mounted behind walls (e.g. wooden, plastic, dry walls) and is a MOBOTIX alternative to PIR.

Door or Window Contacts

Light, Bars, Gates, Buttons

MOBOTIX Thermal Imaging Technology

Reliable Over Long Distances

Thermal cameras detect the thermal radiation or temperature profile of objects and therefore can operate in complete darkness. MOBOTIX uses industrial grade sensors with a very high thermal resolution of 50 mK, which is equivalent to 1/20 of a degree Celsius and enables people or object detection over very long distance ranges of up to 400 meters/yards. Using the integrated and software based MxActivitySensor, the detection of moving objects is easy and reliable even in complete darkness.

Dual Platform for 2 Technologies

The MOBOTIX thermal camera system supports all features and functions of the actual camera portfolio, including automatic recording or messaging features which can be triggered by any type of event. The weatherproof M15 or S15 thermal camera can additionally be equipped with a 6MP color sensor module to achieve thermal and normal video of the scene at the same time. This weatherproof dual monitoring capability expands the number of applications

dramatically. The standard Power-over-Ethernet (PoE) compatibility and the market leading low power consumption of only 5 watt of power consumption allows operation of MOBOTIX thermal camera systems in every situation.

Cost Effective Perimeter Solution

Only one thermal MOBOTIX camera is required to protect a huge outdoor area without the need of any additional illumination. The combination of thermal, video sensor and intelligent software based motion detection like MxActivitySensor are perfectly suited to cover wide perimeter situations efficiently without any secondary equipment like IR-conventional light or additional sensors and to detect all relevant events even in complete darkness.

Respecting Privacy

A thermal camera can guarantee perfect privacy in exclusive residence situations or in public areas because the produced thermal image profile does not show any details for identification. This privacy feature will

help to increase the acceptance of video surveillance in public and sensitive environments like pool areas, hospitality or sport facilities.

A MOBOTIX dual camera system can automatically switch from thermal sensor to the optical sensor, producing visible high resolution video in the case a moving object was detected within a certain predefined area of interest or non-privacy zone. This unique MOBOTIX feature combines two aspects, first to ensure the privacy aspect during standard video monitoring, but secondly gives full access to high resolution video in the case of a relevant or critical events like motion.

50 mK 1/20 °C	For industrial applications
+60°C / -30°C	Temperature range °C
140°F / -22°F	Temperature range °F

MxActivitySensor motion analysis
80.000 h MTBF Certified for continuous operation
6MP Sensor 6 megapixel sensor
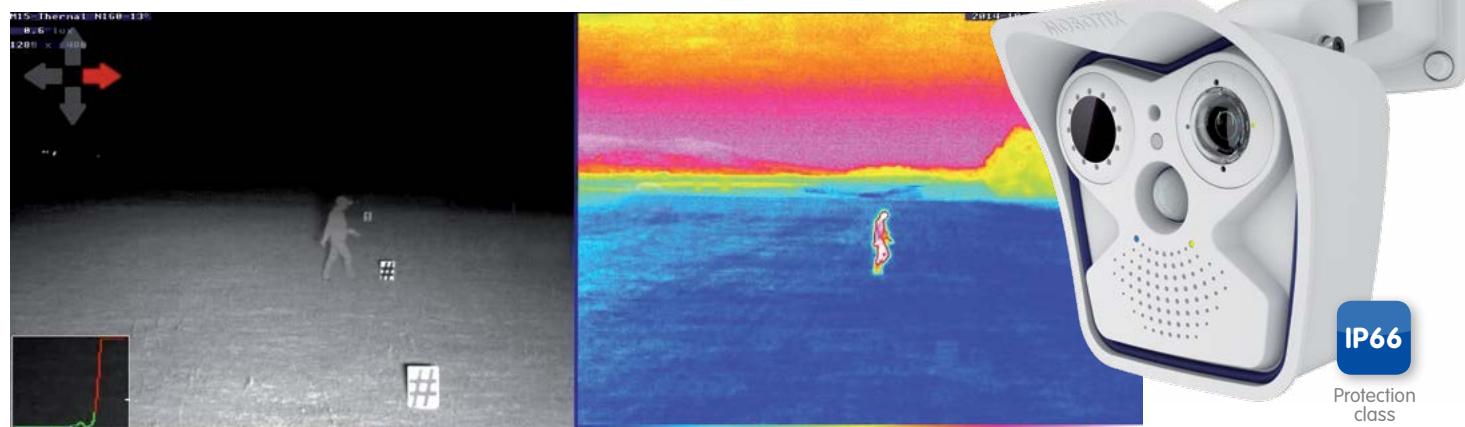
IP66

Protection class

S15D – World First Dual Thermal Camera (IP66)

Thermal technology can detect objects in complete darkness and smoke. Low power consumption – 1.5 W per thermal sensor. The S15D is the perfect choice for customized solutions or installations where standard cameras won't fit.

The New Indoor Camera Generation

Security-Vision-Systems

MOBOTIX

i25   c25   p25

Competitive Without Compromise

Since more than 15 years MOBOTIX is developing and producing weatherproof cameras for rough and extreme outdoor applications providing a very long product lifetime. Outdoor cameras have to be sealed, certified and tested, therefore resulting in higher production costs. The new indoor camera products are especially designed to be very competitive and at the same time supporting all MOBOTIX features and functionalities.

Due to short distances in indoor environments the new indoor camera line uses hemispheric technology mainly to achieve 360 degree view without any blind spots. MOBOTIX was the pioneer of this technology in 2007 with the launch of the so-called Q22 camera. However the new indoor series is also available with other lens options.

Optional Alarm Interface

An optional expansion board can be plugged on the backside of the camera to support two input lines, two 12 V outputs and the MxBus interface. The input lines are isolated and do not require any power supply to monitor a chain of door or window contacts over several hundred meters/yards.

The outputs can directly drive a relay to switch high power AC loads like lamps or motors. The MxBus is a 2-wire encrypted IO-Bus developed by MOBOTIX and allows an easy and secure interface to several different IO-Boxes over 100 meters/yards.

MxAnalytics 100% included

All indoor cameras include microphone and achieve a very good audio quality. An integrated loudspeaker for two-way-audio is available as option. Also the newly released MxAnalytics software for objects or people counting and heat map reporting is included without any extra costs, which is perfect for indoor locations like retail stores, museums, shops, health care centers, universities and schools.

i25 – Wall

The i25 is a 5MP hemispheric and will be wall mounted with a tilt angle of 15 degree to achieve a perfect panoramic overview of a room. If mounted above the door the i25 looks even partially underneath or into the door. A surface mount kit for concrete ceilings is available as well.

c25 – Ceiling

The c25 is our smallest 5MP hemispheric camera and comes with three clamps for easy installation in suspended ceilings like a halogen downlight. Alternatively equipped with a telephoto lens and mounted above a cash box the c25 will provide a very detailed video of the content and allows even reading the serial numbers of the bank notes.

p25 – PT Ceiling

The new p25 is a ceiling camera with a manual pan/tilt functionality, using the same diameter like the c25 for ceiling installations. Equipped with a telephoto lens, the p25 can be directed to a specific spot in the room, with a 90 degree lens and mounted in the corner of a room the p25 covers the entire room in detailed resolution.

Set Price Example   **€1,598**

i25
€398

c25
€398

i25
€398

POE Switch
€79

NAS
ca. €325

Including all software and licenses