

# Why MOBOTIX

Innovative Video Technology Solutions



Beyond Human Vision

**MOBOTIX**



*“Our mission statement to go ‘Beyond Human Vision’ is the heart of a philosophy that recognises that video surveillance is part of a wider potential with MOBOTIX as a foundational platform for innovative solutions to address real world challenges in manufacturing, retail, health-care, transportation and many other areas.”*

Thomas Lausten, MOBOTIX CEO

# Pioneering The Video Security Industry

## MOBOTIX Is More Than Just Another Camera Manufacturer

We do not see ourselves as a typical camera manufacturer. In terms of IoT, our video systems are computers with lenses, working intelligently and with embedded storage capacities. MOBOTIX is distinctly characterised as a pioneering global company that develops solutions based on German engineering and processing, which is appreciated as particularly innovative and of high quality. MOBOTIX set themselves apart with their uncompromisingly reliable and intelligent solutions that can be

expanded virtually without limits and which ensures long-term investment security.

The company remains true to their core values and DNA, including their proprietary software, hardware and the MxPEG+ video codec, for example. It was specially developed for security applications and has enormous advantages in times of cyber attacks and threats. We will stay true to our original DNA, while also opening up our systems for integration

and increased usability. The ONVIF industry standard is included in our products and facilitates using them within third-party video management systems and integrating more easily in projects.

As a video solution provider, we are the right choice for everyone who seeks intelligent systems to enhance daily business, security and life. To deliver this promise, we provide the appropriate mix of networked hardware, software and service products.



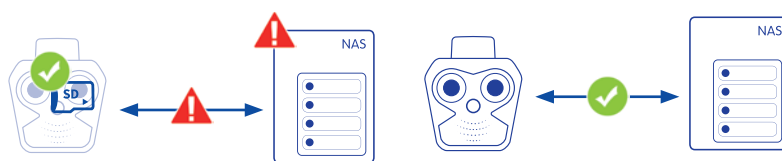
# Integrated Intelligence

*“We Do Not Make A Camera, It Is A Computer With A Lens”*

MOBOTIX IP video systems have been optimised for remote applications and cloud-based technology because they can reduce video bandwidth by scaling the size and frame rate. However, image details are still available thanks to the onboard virtual

PTZ functionality. The cameras store high-resolution video onboard while also delivering low-bandwidth live images and playback, on demand. Additionally, MOBOTIX cameras can manage an event-driven video ring buffer via network or Internet. The

live channel and the recorded video are highly secured because the video encryption is performed inside the camera.



The microSD card fitted into every MOBOTIX camera is a backup storage device, that continues to capture video recordings should the external network recording device fail (MxFFS Archive Storage). When reconnection is made, the camera will resync the recordings with the central recording device. No dedicated NVR or VMS is required to manage this fail-over process.

- Distortion correction in real time in the camera
- Adaptive bandwidth management
- Live analysis locally in the camera
- Easy configuration
- Intuitive operation for the user



# Decentralized Concept

## Our Most Important Unique Selling Point

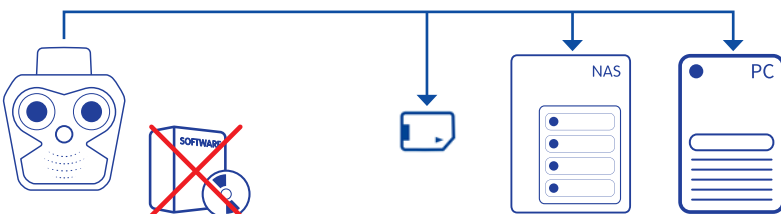
The first MOBOTIX product released was an IP camera with recording and DVR management technology built-in. It was a world-first. This decentralized approach was so revolutionary, it changed the video surveillance industry forever. Because the camera was completely self-managing, expensive central recording systems were, for the first time, no longer required.

The MOBOTIX decentralized system platform uses comparatively little computing power, even in megapixel resolutions. This makes it far more cost-effective and easier to scale in size than traditional centralized systems.

As more cameras are added to the system, you only need to add more storage. No dedicated servers or recording software licenses needed. This low-cost, low-maintenance solution saves customers both upfront and over the life of the system.

MOBOTIX cameras are 'decentralized' because they are VMS-enabled with in-camera video recording, alarm and storage management.

MOBOTIX cameras do not require licensed recording software to record, store and manage the video, as the management software is already in the cameras.



- Video analysis and recording in the camera
- No computer
- No additional software
- No digital video recorder
- No single point of failure
- Very easy to scale, maximum level of reliability



Original MOBOTIX Kamerabild

# Excellent Image Quality

## Only The Best Components Deliver The Best Results

Great imaging starts with great technology. For many security specialists, our innovative history is legendary and the reason they continue to choose MOBOTIX. Each and every product of our flagship line is carefully constructed using the most advanced optical, electronic, manufacturing and quality assurance technologies. We use only the highest-quality CMOS sensors and develop image processing software, which enables our cameras to produce exceptionally sharp, clean images. The MOBOTIX devices are continually perfected in our laboratories in Germany.

### Low Light, No Problem

The maximum resolution of the color and B&W sensors is 6 megapixels. Thanks to the latest color sensors that feature higher light sensitivity, it is often possible to use MOBOTIX day cameras with color image sensors around the clock, even under low-light conditions.

### Higher Performance And More Intelligence

MOBOTIX latest decentralized IoT cameras use a powerful CPU and software platform that delivers a lot more of detailed and super sharp

images per second than ever before. For example, they deliver up to 40 frames per second in full HD. This allows for even better capture of quick movements. The latest camera line is not only faster, but also has more capacity for software applications such as 3D motion analysis with MxActivitySensor 2.1 and other analytic functionalities. Regular software updates ensure that the performance of the intelligent camera system continually improves. This makes every MOBOTIX IoT video system a smart investment.



Each camera is tested at extreme temperatures before shipping.



# Unique Modular System Design

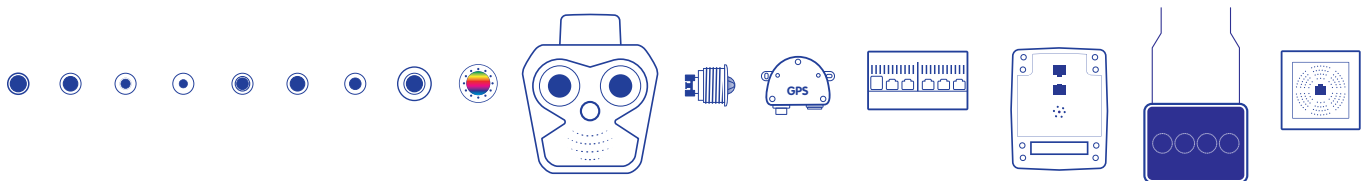
## M16 AllroundDual – The Unmistakable Face Of MOBOTIX

MOBOTIX's renowned AllroundDual camera balances flexibility and features continuing the trend of modular system design. The M16 features exchangeable image sensors for day, night and thermal use along with flash memory, microphone, speaker, PIR and optional feature modules.

Housed within a weatherproof (IP66) chassis along with a comprehensive set of built-in cyber security controls, the camera offers powerful application and integration options. The M16 also proves that standards and innovation can truly co-exist; being the MOBOTIX video surveillance device that brings together the MxPEG+ video codec, specifically developed for security applications, and the H.264 industry standard

within an ONVIF-ready camera system.

The M16, as common with all MOBOTIX models, benefits from regular software updates to ensure reliability while adding additional feature enhancements that make the M16 one of the most intelligent yet flexible camera systems on the market.



Unmistakable MOBOTIX design

The system can be easily (re)configured to adapt to any application with two mix-and-match image sensors

User can easily replace sensor modules

Camera does not need to be disassembled



# Quality And Reliability

## The Most Robust Cameras In The Industry

MOBOTIX provides high-quality video surveillance systems that ensure comprehensive security in a modern, networked world. Fields of application include most demanding security areas like prisons, airports or soccer stadiums because MOBOTIX systems have no restrictions in terms of number of users or cameras. The professional VMS and video analysis are parts of the system offering and free of charge without any license fees. In addition, software updates are free via download and transform every MOBOTIX product into a future-proof solution.

### Low Maintenance

Every MOBOTIX outdoor camera is a solid investment, built to withstand extreme weather conditions and temperatures for a very long time. No additional housings or climate control systems are needed for outdoor installation. The fibre glass re-inforced housing protects the camera and is immune to corrosion and direct sunlight.



A MOBOTIX camera has already established a world record being the highest webcam in the world. The scientific team Ev-K2-CNR from Bergamo, Italy has installed a standard fitted MOBOTIX camera in 2011 on nearby Kala Patthar (5,675 meters) which delivers impressive images of Mount Everest (8,848 meters).



The low energy consumption and minimal bandwidth load of MOBOTIX cameras means that Ethernet cabling is usually all that is required to create a network and supply power.

Made in Germany

Mean Time Between Failures (MTBF): 80,000 hours (> 9 years)





# End-To-End Cyber Security

## The MOBOTIX Cactus Concept

MOBOTIX developed the unique cactus concept for a reliable and complete protection of end-to-end video security systems. Protect yourself against serious hacker attacks – with an intelligent video system that is ready to go, but can also stand up to the ever-evolving challenges of our world. This ensures, that your data stays where it is supposed to be – and nowhere else.

### Stay Untouched With MOBOTIX

For an increased level of network security and a protected zone of pri-

vacy, MOBOTIX IP cameras integrate many special security technologies:

- The customer password can only be reset in the MOBOTIX factory, meaning there is no hidden back door for camera thieves and hackers.
- Extra-long passwords (up to 99 characters) with SHA-512 Hash and a display of password quality level.
- The camera web server recognizes and blocks the execution of external scripts.
- Effective protection against brute force attacks, where hackers systematically test passwords, as well as email alerts in the case of repeated login activities.
- The scanning of network addresses is prevented by individually assigning port numbers.
- Cameras allow access exclusively to defined IP addresses.
- Highly secure 128-bit data encryption on all storage units and transmission paths (MxFFS).
- Signed and tested camera firmware allows no malware.
- Access to cameras is automatically logged on the web server.
- Free of charge firmware updates ensure consistently high system protection throughout the product's entire service life.



The risk of cyberattacks is a problem today, even for video surveillance systems  
MOBOTIX delivers a solution that vastly exceeds the industry standard

Encrypted end-to-end security concept

The MOBOTIX system was tested successfully by an external company



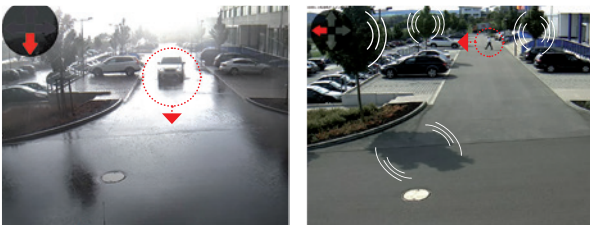
## MxActivitySensor

Most Reliable Video Sensor  
In Most Difficult Situations

MxActivitySensor is a revolutionary MOBOTIX technology that only registers movement of people and objects, while dismissing all redundant changes in the scene, like rain, snow, clouds or trees and bushes moved by the wind. Through the development of the MxActivitySensor, MOBOTIX has re-invented video motion detection, offering a reduction in false alarms by up to 90 % compared to conventional video motion detection (VMD) systems.

### Game-Changing Technology

MxActivitySensor surpasses traditional motion detection for accurately detecting general human and vehicular activity. This revolutionary technology is years ahead of other VMD systems.



Weather compensation

No extra costs

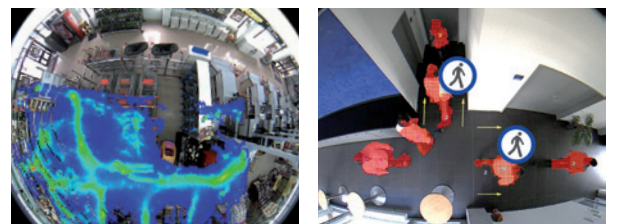
Automatic configuration



## MxAnalytics

Video Analysis And Behavioral Detection

The hemispheric MOBOTIX cameras are perfectly suited to monitor stores and other retail environments. MOBOTIX included a video analysis package inside the camera to visualize activities with heat maps and to count objects in user-definable corridors with automatic reports. It also analyzes the behavior of moving objects and can generate automatic alarms if these objects for example stop, turn or reverse direction. For video analysis there is no workstation and no network load required because the processing is done onboard in each camera. This of course increases reliability and reduces the overall system costs.



Heat map with hotspots, object and people statistics, multiple behavioral events

No additional hardware and software required

100% license-free

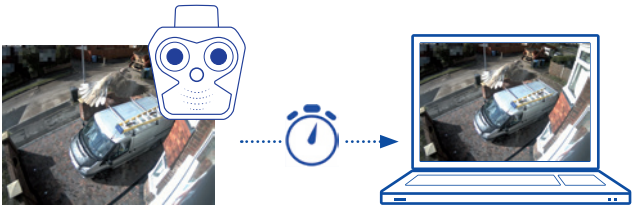


# MxPEG+

## The Optimized Video Codec For Security

MOBOTIX has developed MxPEG+ as existing video compression codecs were deemed unsuitable for video surveillance systems. MxPEG+ is the only video codec specifically designed for IP video surveillance solutions that ensures that still images are barely blurred – with crisp pictures also of moving objects.

MxPEG+ is open, freely available and integrated in all main third-party professional VMS of the market. In contrast to H.264, it also offers the shortest reaction time between scene and screen and supports video resolutions of up to 6 megapixel and higher.



Shortest reaction time from frame to frame

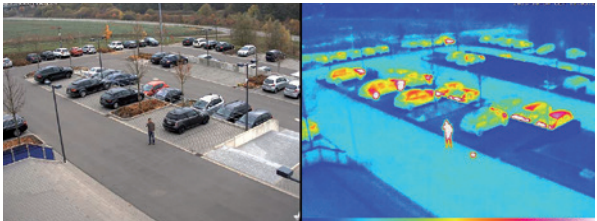
Designed for video security applications  
Open and license-free  
Every single frame is sharp



# Dual Thermal

## Inventor Of Dual Thermal IP Cameras

The dual lens thermal system automatically supports additionally a second optical video sensor with 6MP resolution. Together with the onboard video sensor “MxActivitySensor“, the thermal camera is the best tool to detect and report moving objects in complete darkness. The thermal camera can trigger automatic alarms and messages if the temperatures in user-defined areas differ from the default range. The thermal image can be overlaid on the visual image to localize the hot spot. Automatic temperature alarms can be generated automatically with thermal radiometry (TR), which is vital to detect potential fire or heat sources.



Combination of thermal and optical sensor, the most innovative dual camera system, embracing thermal, video and MxActivity sensor in one device to capture events in absolute darkness

Unique concept with optical and/or thermal image sensors  
Affordable MOBOTIX thermal camera system  
Optimum solution for perimeter and fire prevention, process optimization, monitoring of electric equipment, etc.



## MxBus

### Smart Functional Extension Solution For MOBOTIX IoT Systems

Originally developed for the MOBOTIX IP Video Door Station, the encrypted (128 bit) MxBus system represents the uncomplicated, easily expandable and cost-effective communication system for numerous peripherals of MOBOTIX IoT cameras. MxBus is a core component in the MOBOTIX decentralized system.

With MxBus, IO-functions for smart homes and alarm systems can be easily extended to the cameras or the IP Video Door Station. MOBOTIX offers IO, GPS, temperature and other accessories as well as radar-based proximity sensors via MxBus.

Encrypted transmission of data (9,600 baud) and power

Simultaneous supply and use of up to 7 MxBus modules on one camera

Maximum length of MxBus two-wire cable: 100 m (solid wire YSTY, core diameter 0.6 to 0.8 mm)

Configuration of MxBus modules via camera software (firmware)

MxBus comes as a standard function for all MOBOTIX IoT video systems



## MOBOTIX NAS

### MOBOTIX Storage And ONVIF-S Recorder

Perfect device to store MOBOTIX IoT cameras, **MOBOTIX MOVE** cameras and ONVIF-S based IP cameras. Through our VMS (MxMC 2.0 and higher) the user can playback all recording of the MxNAS including the ONVIF-S footage. A highly efficient complete solution with secure data storage from a single source, which now allows decentralized and centralized video components to be easily combined.

- Integrated recording software supports MJPEG, H.264 and ONVIF-S compatible network cameras
- Unlimited number of recording channels for MOBOTIX IoT cameras (with MxPEG+ video codec)
- Hot swappable HDD, redundant power supply and support of external JBOD storage
- Fully supported by MOBOTIX

Recording software supports MOBOTIX MOVE and third-party ONVIF cameras

Ready for up to 32 ONVIF recording channels

No license fees required for MOBOTIX IoT cameras



## 100% Future-Proof

### Added Values And Artificial Intelligence

The decentralized intelligence in our camera system is crucial for Artificial Intelligence and makes it easier for our products to communicate with other sensors and devices in the network to help achieve solutions “Beyond Human Vision.” These solutions include reliably detecting threats by combining various sensor technologies, as well as independently initiating actions to defend against such threats. Meanwhile, the state-of-the-art data analysis function, located on the camera itself, helps users increase process efficiency and develop innovative business models. Future software updates will enable totally new functions, such as recognizing license plates, faces or voices.



## Extensive Warranty Up To 8 Years

At MOBOTIX, We Don't Just Talk About Quality. We Deliver It.

We have therefore extended our standard warranty to three years: The new RMA and Warranty scheme applies to all of the Mx6 camera range, MxDisplay, MxThinClient, Mx Interface Boxes and sensors, Mx2Wire+, MxSwitch, MxSplitProtect, and all of their related accessories. All products of the MOBOTIX MOVE series have a warranty of two years. Consumable parts such as batteries and microSD cards have a warranty of six months. For Mx6 products a warranty extension of up to five additional years can be purchased along with the products through MOBOTIX resellers.



Standard warranty of 3 years, expandable up to eight years for the MOBOTIX Mx6 camera line  
Warranty of 2 years for MOBOTIX MOVE cameras

# Outdoor IoT Video Systems

## Dual Lens



**AllroundDual M16**

Thanks to superb features, our flagship product delivers videos in brilliant color during the day and high-contrast black/white footage in dark settings. Switching between the day and night sensor is carried out in a fully digital manner without any mechanical parts. This makes the process extremely reliable in any weather conditions.

2x 180° to 8°

Day/Night

Wall/Ceiling/Pole



**DualDome D16**

It resembles a classic dome camera, but take a closer look: This is a genuine MOBOTIX system. The two lenses can be positioned independently from one another, enabling completely new image perspectives and applications.

2x 103° to 15°

Day/Night

Wall/Ceiling/Pole



**DualFlex S16**

Thanks to its highly flexible design with especially compact camera housing and sensor modules that can each be positioned at a distance of up to 3 m, the S16 covers two areas at once - while remaining virtually invisible.

2x 180° to 8°

Day/Night

Wall/Ceiling

Concealed



**Vandalismus V16**

Our bullet-proof, high-security camera system for high-risk areas of use. With its stainless steel armor and light-sensitive MOBOTIX video technology, the V16 maintains a constant overview inside and outside buildings that are at risk of vandalism.

2x 90°/45°

Day/Night

Corner

## Mounting Options



Wall Mount / Ceiling Mount



Wall-/Pole Mount Set



SurroundMount



Pole Mount



Wall Mount



HaloMount



DualMount



PTMount



SpeakerMount

# Outdoor IoT Video Systems

## Single Lens



**Vandalismus M26**

The full range of MOBOTIX HD Premium lenses is available for the M26: From our fisheye lens with a 180° field of view to the 7° telephoto lens, which can be used to identify a car's license plate number even from a distance of 70 m.

1x 180° to 8°  
Day or Night  
Wall/Ceiling/Pole



**Dome D26**

The D26 is perfect for applications that call for classic camera design with a shock-resistant dome. However, the camera's internal components are anything but traditional, featuring trailblazing technology for a complete video security system.

1x 103° to 15°  
Day or Night  
Wall/Ceiling/Pole



**Hemispheric Q26**

The Q26 hemispheric camera stands out for its elegant design and a high-resolution, 360° all-round view. The camera can record every area of an entire room – replacing up to four conventional cameras.

1x 180°  
Day or Night  
Wall/Ceiling/Pole



**Flex S26**

Hard to see, but sees everything. The S26 with Hemispheric technology is an extremely functional specialty camera. This compact system can be integrated so discreetly that only the lens is visible once the camera's installation is complete.

1x 180°  
Day or Night  
Concealed

## Mounting Options



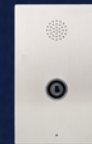
Wall Mount / Ceiling Mount



On-Wall



On-Wall



AudioMount

Even more flexible: The S26B/S16B series can also be used as door station camera alternatives to the T26B.



Pole Mount



Wall-/Pole Mount Set



Wall-/Pole Mount Set



Wall Mount



Wall Mount



Pole Mount



In-Ceiling

# Indoor IoT Video Systems

## Single Lens



**Indoor 180° i26**

The i26 is the discreet indoor variant for in-wall or on-wall installation. Thanks to a horizontal viewing angle of up to 180° and housing that is slightly aligned downwards, the system delivers high-resolution overview images of entire events.

1x 180° to 15°  
Day or Night  
Wall



**Indoor 360° c26**

For Quick Installation In Suspended Ceilings. With a diameter of 12 centimeters and a weight of approximately 200 grams, the c26 is the smallest and lightest hemispheric complete video system. It is particularly well suited for use in the retail industry: The camera can store customer movements in heat maps.

1x 180° to 15°  
Day or Night  
Ceiling/Corner



**Indoor PT p26**

Thanks to the manual tilting and panning function, the lens can be adjusted very easily and precisely to the area to be monitored. The p26 is fitted with a super wide angle lens; when it is installed in a corner of the ceiling, it can monitor the entire room in high resolution.

1x 180° to 15°  
Day or Night  
Ceiling/Wall



**Indoor Dome v26**

The dome camera, which is available in black or white, can be fitted with six different MOBOTIX HD premium lenses with fields of view of 103° to 15°. An on-wall set with an integrated microphone and speaker is optionally available, as is a vandalism set with a stainless steel ring and reinforced dome.

1x 103° to 15°  
Day or Night  
Ceiling

## Mounting Options



On-Wall Set



On-Wall Set



On-Wall Set



In-Wall Set



Corner Mount



# Thermal IoT Video Systems

## Dual Lens



**Thermal M16**

The intelligent video system with an integrated high-performance thermal image sensor takes full advantage of the M16 camera design. Thanks to the two directly adjacent lenses, there is also a thermal overlay function with image overlay (thermal and optical) to pinpoint the exact location of hotspots like smoldering fires in a visible image.



**Thermal TR M16**

“TR” stands for thermal radiometry. This means that, in addition to carrying out the existing MOBOTIX thermal camera functions, these cameras feature a calibrated thermal image sensor that enables them to measure thermal radiation across the entire image area, even down to individual pixels. The power consumption of a MOBOTIX Thermal TR is less than 8 watts.



**Dual Thermal S16**

MOBOTIX present the most flexible dual thermal camera in the world. It is possible to connect either one or two weatherproof thermal sensor modules to the easily concealable camera module with up to three-meter-long sensor cables. The design concept of the S16 means that even thermal cameras can be installed discreetly or according to the customer's special needs.



**Dual Thermal TR S16**

Temperature values measured by the TR technology can automatically trigger an event from the camera (alarm, call, activation of a signal output, etc.) if the temperature increases above or decreases below an individually set trigger level. All settings can be adjusted via the camera firmware using a web browser.

1x Thermal: 45°/25°/17°

Thermal/Optical

Wall/Ceiling/Pole

1x Thermal: 45°/25°/17°

Thermal/Optical

Wall/Ceiling/Pole

2x Thermal: 45°/25°/17°

Thermal/Thermal

Wall/Ceiling/Pole

2x Thermal: 45°/25°/17°

Thermal/Thermal

Wall/Ceiling/Pole

## Mounting Options



Wall Mount / Ceiling Mount



Wall Mount / Ceiling Mount



PTMount Thermal



PTMount Thermal



Pole Mount



Pole Mount

# Access Control

## T26 Video Door Station and Access Module



**T26 Door Station**

The digital Video Door Station can be perfectly tailored to the required application by means of individual system modules.

### Door Modules



**Camera**



**BellRFID**



**KeypadRFID**



**Info**



**RFID Cards**

1 admin and 5 user  
RFID cards included

### Accessories



**Door Master**

This internal security door opener includes door access battery backup and encrypted security for the door access codes, to prevent unauthorized access. Compatible with standard door openers (6 to 12 V AC, 24 V AC/DC) using an external power supply.

Available in white only.

### Mounting Options



Single Frame



Double Frame,  
with BellRFID



Triple Frame,  
with BellRFID and Info Module



Double Frame,  
with Keypad



Triple Frame,  
with Keypad and Info Module

### Available Colors



White



Silver



Dark Gray



Black

# Access Control

## Remote Station



**MxDisplay+**

The MOBOTIX remote station for Door Stations. Flat and operated using gestures, like a smartphone.

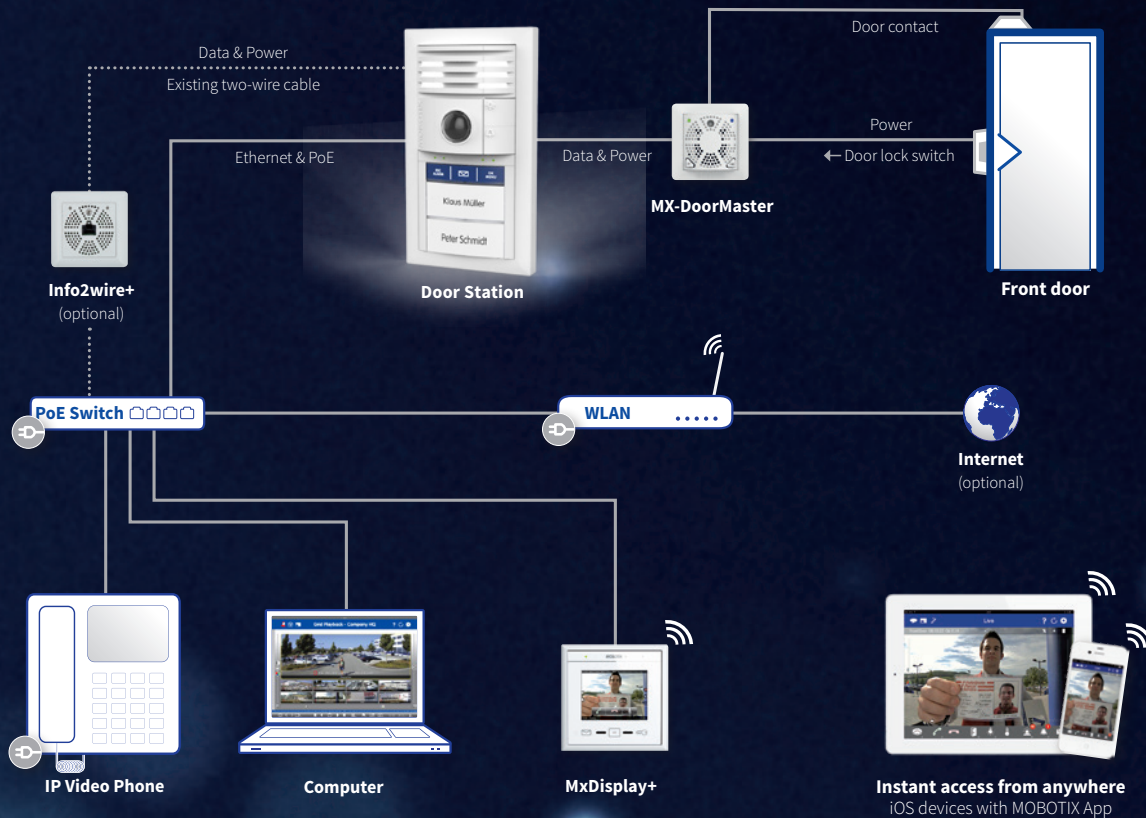
## Mobile Software



**MxBell App**

The mobile remote station app for MOBOTIX IP Video Door Stations and IoT cameras – featuring a two-way communication feature, remote door control and push notifications for all Door Stations and camera events. MxBell was developed with a strong focus on the highest possible level of stability, even though the connection quality is low, in addition to user-friendliness and ease of navigation. The MOBOTIX app MxBell 2.1 can be downloaded free of charge from Apple's App Store (for iOS devices) and from Google Play (for Android devices).

## Installation Diagram



# Supplement Program

Add-On Devices And Practical Tools For The Seamless End-To-End Solution



## Interface Boxes

Protect your MOBOTIX camera from damage caused by electrical surges, connect additional sensors and I/O devices or use the GPS signal as a precise time source and for tracking functions. The compact, weatherproof interface boxes, with a width of just around 8 cm, are extremely practical and affordable, and can be easily mounted safely out of reach.

Compact. Clever. Combinable.



RJ45



LSA

### Overvoltage-Protection-Box

Network Connector With Surge Protection

This network protection box allows you to protect your MOBOTIX camera from damage caused by electrical surges of up to 4,000 volts that are triggered by voltage fluctuations, high-voltage loads and lightning strikes nearby, for example. Used to establish an Ethernet connection using a MOBOTIX patch cable (RJ45) or via a single-wire terminal connector with an ETH installation cable.



NPA

### NPA-Box

Weatherproof PoE Injector

The Network Power Adapter box (NPA) is an interface box used to establish the camera's network connection with an accompanying PoE power supply from external power supply units or batteries rated at 12 to 57 V DC. Ideally suited for battery-powered, mobile video systems.



Input



Output



RS232

### Input/Output/232-IO-Box

Additional Inputs/Outputs

Video solutions from MOBOTIX can be easily integrated into existing infrastructure thanks to their decentralized architecture, and the options for expansion are practically limitless. This makes it possible to install basic but effective protection on a tight budget and expand it step by step as needed.



GPS

### GPS-Box

Precision Time Source And More

The box includes a temperature and illumination sensor for outdoor use and an NTP time server for system synchronization. Tracking functions and alarms can be configured in the camera software based on position, speed, illumination and temperature. Connection via two-wire cable (MxBus).



Proximity

### Proximity-Box

Radar-Based Motion Sensor

Thanks to integrated radar technology, the MX-Proximity-Box detects the approach and direction of motion of objects, even through walls made of wood, plastic or plasterboard. The system complements the well-established PIR sensor technology and works best at close range at distances of up to eight meters.



BPA

### BPA-Box

Voltage Amplifier For MxBus

The Bus Power Adapter Box powers any MxBus module that is connected to the camera. The BPA Box is supplied with an external voltage of 24 to 48 V DC. It delivers a maximum power output of 9 W, allowing it to power up to seven MxBus modules simultaneously.

# Supplement Program

Add-On Devices And Practical Tools For The Seamless End-To-End Solution



**MxMultiSense**

Multi-sensor module for indoor and outdoor areas featuring four motion sensors: passive infrared sensor (PIR), illumination sensor, temperature sensor and an acoustic sensor (acoustic pressure). Camera connected and powered via MxBus. Easy to install in suspended ceilings: Device fits in standard mounts for recessed spotlights.

Indoor and Outdoor



**Mx2wire+  
Media Converter**

Mx2wire+ transforms analog cables (for example, unused telephone or antenna cables) into a modern PoE network via plug-and-play. With maximum connection lengths of 500 m, the system can be used as an affordable, secure method to connect and power IP cameras, Video Door Stations and standard PoE devices, or to connect a computer to the network.

PoE Network Connection.  
Via Two-Wire Cable.



**MxIRLight &  
MxSplitProtect**

Invisible to the human eye, energy-saving light even in total darkness. A MOBOTIX infrared illuminator only requires standard PoE+ as a power supply. Without having to lay a lot of additional network cables, up to two PoE devices (IEEE 802.3af/at) can be connected via an existing network cable, thanks to the MxSplitProtect.

Discreet Infrared Illuminator.  
Intelligent Installation.



**MxThinClient**

The PoE-powered network device is the intelligent, easy-to-use MOBOTIX solution for viewing the live feed from our cameras and Door Stations on a monitor or TV equipped with an HDMI port. It offers completely new applications by foregoing all control elements such as a keyboard and mouse and due to its "live image functionality."

MOBOTIX Now On TV As Well.  
Practical IP Video Interface.



**MxSwitch**

A 100 Mbps network switch is a compact hat rail module that can be used to directly connect and power up to four MOBOTIX cameras or other PoE/PoE+ devices. In addition, the MxSwitch offers exclusive split technology that make connecting and powering a MOBOTIX Door Station easier than ever.

The More Compact, The Better.  
The PoE+ For Hat Rails.



8-Bay/32 Channels.



8-Bay/32 Channels.



8-Bay/32 Channels.

## MOBOTIX NAS (Network Attached Storage)

### MOBOTIX storage and ONVIF recorder

Three high-quality NAS devices with up to 32 channels for saving recordings from MOBOTIX IoT cameras, MOBOTIX MOVE cameras and ONVIF S-based IP cameras. Users can simply play back all MxNAS recordings (including ONVIF S recordings) via the MxManagementCenter.

- Integrated recording software supports MJPEG-, H.264- and ONVIF-compatible network cameras
- Recording software supports not only MOBOTIX MOVE, but also ONVIF cameras from other vendors
- License-free management solution for MOBOTIX IoT cameras
- All-encompassing support from MOBOTIX

# MOBOTIX MOVE

## Centrally managed ONVIF cameras



Our MObotix camera portfolio is incredibly broad in terms of technology – these products will have you perfectly equipped for virtually any video project and enable you to meet virtually any requirement!

Alongside its decentralized IoT camera product line, MObotix also offers the conventional, centrally managed MObotix MOVE camera range. This series includes three different camera types in different designs: PTZ SpeedDome cameras, Bullet cameras and Dome cameras. These thoroughly weatherproof, high-quality IP cameras are equipped with the latest standard features of centralized video systems, such as integrated infrared lighting, automatic day/night switching with a mechanical IR blocking filter, Wide Dynamic Range and High Speed PTZ.

MObotix MOVE is the ideal supplementary range for our decentralized premium video systems for the newest Mx6 IoT technology platform.

Please note: MObotix MOVE cameras are centralized video systems in ONVIF S/G standard format with H.264 and therefore usually require additional centralized data storage (MObotix NAS) and a suitable Video Management System (VMS) which supports the ONVIF standard (MxMC 2.0+).



### Vandal Dome

Modern and compact standard cameras that reliably transfer images of up to 4 MP, even in total darkness, at a range of up to 30 m, thanks to its integrated IR LED spotlight. The durable metal housing and shock-resistant dome reliably protect the camera against bad weather, vandalism and vibrations. Available model versions: VD-4-IR, VD-4-IR-D and VD-2-IR.



### Bullet and VandalBullet

Weatherproof and robust network cameras with integrated infrared LEDs for use during day or night. Thanks to the stable, manually positioned metal housing in the popular bullet design, the cameras are suitable for use in publicly accessible areas – especially the Vandal model with Full IK10 – if greater vandalism protection is required. Available model versions: VB-4-IR, VB-4-IR-D, BC-4-IR, BC-4-IR-D and BC-2-IR.



### SpeedDome SD-330

The weatherproof, motor-controlled ONVIF S/G PTZ camera is easily adjusted from the control center using a joystick, providing a 360-degree view (continuous) and a 120-degree tilt. The camera also has a powerful 30x optical zoom. MObotix MOVE SpeedDome cameras are therefore perfectly suited for live monitoring of medium-sized to large areas both indoors and outdoors.



### SpeedDome SD-340-IR

Thanks to the motorized panning and tilting function, the Vario lens can be adjusted very easily and precisely to the area to be monitored. The 40x optical zoom and integrated high-performance IR LEDs enable important details to be captured clearly from 200 m away at an image resolution of up to 3 MP – even in total darkness.

# Software

Everything From A Single Source. Intuitive, Flexible MOBOTIX Software Solutions For Video Management, Video Analysis And Device Control



## MxManagementCenter (MxMC)

MxMC is a powerful, intuitive MOBOTIX video management system for Windows and macOS. The state-of-the-art (basic) version of MxMC is totally free of charge and suitable for application solutions of any size. MxMC fulfills the ONVIF industry standard and thus facilitates the integration of ONVIF S standard cameras.

- License-free management solution for MOBOTIX IoT cameras
- Integration of MOBOTIX MOVE and ONVIF S/external vendors' cameras is also supported
- Integration of and support for MOBOTIX NAS
- Integration of and support for MxThinClient
- Optional additional licenses: PoS integration, smart data solution (e.g., HUTH cash registers, CarReader license plate capture), advanced config, advanced service, integration of H.264/ONVIF S cameras



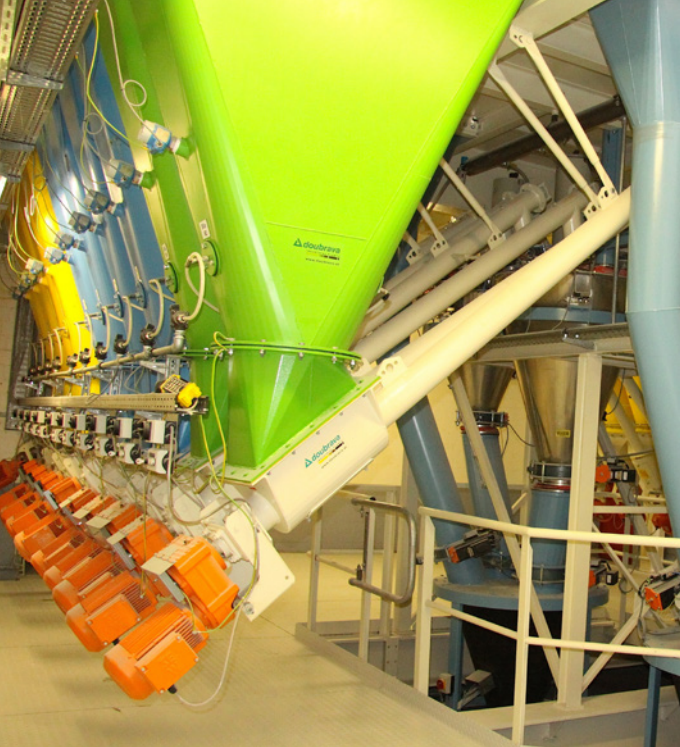
## Camera-Integrated Video Analysis

MxAnalytics makes it possible to collect statistical behavioral data on people and objects. This is done by defining recognition zones and counting corridors. The camera then records how often the object crossed each counting corridor within a specified period. Hemispheric MOBOTIX cameras achieve the best results.



## Mobile Video Management

Turn your Apple iOS device (iOS 6.0 and higher) into a powerful mobile surveillance station with this app. That way, you can stay in contact with your MOBOTIX cameras and Door Stations at all times and from anywhere in the world through an Internet connection. Download the latest version from the App Store now – even if you still don't have a MOBOTIX camera, you can test out the app with demo videos!



## Industry

### STO AG, Germany: Intelligent video security for efficient process optimization

The leading manufacturer of insulation and coating systems, relies on intelligent IoT solutions from MOBOTIX to ensure smooth running production processes. STO AG uses eight AllroundDual cameras and twelve Allround cameras, which provide high-resolution images around the clock to monitor production facilities, prevent downtime and provide accurate fault analysis.



## Retail

### Brighton Toyota, Australia: Video security as a preventive and security measure

Australia's largest TOYOTA dealership is a popular target for burglaries and thefts. To protect this extensive area, MOBOTIX has developed an intelligent security concept with just a few powerful cameras. Equipped with a photo-sensitive 6-megapixel Moonlight sensor and manually orientable lens (15° distance telephoto to 180° Hemispheric), a room can be optimally monitored by just one single AllroundDual camera. The motion detection software MxActivitySensor ensures safe motion detection during minimal lighting conditions, so reliable alert notifications to the monitoring station are assured.



## Transportation

### RFI stations, Italy: Critical infrastructure protection

Vandalism, petty crime and attacks on passengers or staff affect the safety and smooth operation of transport hubs. A total of 318 outdoor video systems from MOBOTIX have been installed in and around the RFI stations in Bologna to prevent, remotely monitor and protect evidence of criminal activity. All camera models provide high-contrast images without motion blur even in poorly lit settings, such as elevators. The complete solution was supplemented by the powerful and intuitive MOBOTIX video management system MxMC.



## Health Care

### Savelberg hospice, The Netherlands: More safety with freedom of movement

In order to increase the quality of life of the elderly and patients with dementia, Gouda selected the joint Conview Care solution from Leertouwer and MOBOTIX. The interplay of video, noise and motion detection plus electronic wristbands, facilitates the work of the nursing staff. Intelligent sensors inform the staff when residents move beyond defined areas. Also, these sensors help keep supervision and control channels to a minimum.



## Culture

### Löyly sauna, Finland: Video surveillance in public areas

This sauna in Helsinki relies on intelligent video systems from MOBOTIX to secure their extensive grounds, with hundreds of daily visitors and employees to monitor for theft and vandalism. For the outdoor areas, several dual-camera models have been installed. The indoor cameras of the p2x and c2x series secure the cash register area, the main entrance and all areas with a risk of slipping. By using MOBOTIX dual cameras, which have two sensor modules and two lenses, the acquisition and operating costs could be significantly reduced.



## Education

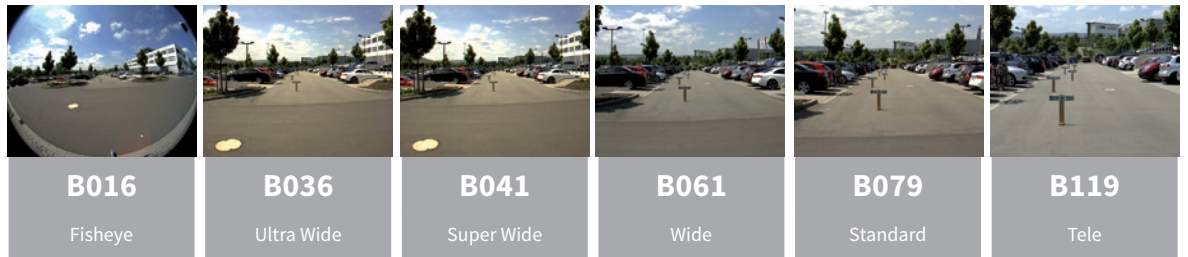
### Glacier landscape, Iceland: Intelligent video security system in research

Local research facilities have installed smart IP video systems from MOBOTIX on the largest glacier in Europe. In this way, members of the civil protection authority can observe the prevailing forces of nature and warn the local population of threatening dangers. All cameras used work in the most extreme weather conditions. They are robust, weatherproof to minus 30 °Celsius and enable a purely digital PTZ function. Without any mechanical parts, the cameras are virtually maintenance-free.



DIN EN 50132-7

As specified in the DIN EN 50132-7 standard, there are six different levels of quality for video surveillance. “Inspect” is the level with the highest demands on image quality, whereas “Monitor” is the one with the lowest. These can be used to determine the maximum distance between camera and surveillance area, the required minimum resolution, and the most suitable camera lens for optimal coverage of the surveillance area.
















	<b>B016</b> Fisheye	<b>B036</b> Ultra Wide	<b>B041</b> Super Wide	<b>B061</b> Wide	<b>B079</b> Standard	<b>B119</b> Tele
Image angle (horizontal)						
Focal length	1.6 mm	3.6 mm	4.1 mm	6.1 mm	7.9 mm	11.9 mm
Aperture f/	2.0	1.8	1.8	1.8	1.8	1.8
Image angle (horiz. x vertical)	180° x 180°	103° x 77°	90° x 67°	60° x 45°	45° x 34°	31° x 23°
Image width/height (dist. 1 m)		2.5 / 1.6 m	2.0 / 1.3 m	1.2 / 0.8 m	0.8 / 0.6 m	0.6 / 0.4 m
Image width/height (dist. 10 m)		25.1 / 15.9 m	20.0 / 13.2 m	11.5 / 8.3 m	8.3 / 6.1 m	5.5 / 4.1 m
Image width/height (dist. 50 m)		125.7 / 79.5 m	100.0 / 66.2 m	57.7 / 41.4 m	41.4 / 30.6 m	27.7 / 20.3 m

Maximum Distances In Meters @ 6MP (3072 x 2048 Pixel)						
Monitor (1 px = 80 mm)	13.7 m	103.0 m	123.8 m	197.8 m	267.9 m	402.7 m
Detect (1 px = 40 mm)	6.9 m	51.5 m	61.9 m	98.9 m	134.0 m	201.3 m
Observe (1 px = 16 mm)	2.7 m	20.6 m	24.8 m	39.5 m	53.6 m	80.5 m
Recognize (1 px = 8 mm)	1.4 m	20.3 m	12.4 m	19.8 m	26.8 m	40.3 m
Identify (1 px = 4 mm)	0.7 m	5.6 m	6.2 m	9.9 m	13.4 m	20.1 m
Inspect (1 px = 1 mm)	0.2 m	1.3 m	1.6 m	2.5 m	3.4 m	5.0 m

		
<b>B237</b> Distant Tele	<b>B500</b> Super Tele	<b>B045-100-CS</b> CS Vario
		
23.7 mm	50 mm	4.5 - 10 mm
1.8	2.5	1.6 - 2.3
15° x 11°	8° x 6°	39°-89° x 29°-65°
0.3 / 0.2 m	0.1 / 0.1 m	
2.6 / 1.9 m	1.4 / 1.0 m	
13.2 / 9.6 m	7.0 / 5.2 m	

Lens Range For MOBOTIX MOVE Cameras			
			
<b>BC-4-IR</b> Wide to Tele	<b>VD-4-IR</b> Wide to Tele	<b>SD-330</b> Wide to Tele	<b>SD-340-IR</b> Wide to Tele
			
3 - 9 mm		4.3 - 129 mm	4.3 - 170 mm
1.7		1.6	1.6
35°-103° x 23°-53°		2°-62° x 2°-47°	2°-62° x 1°-49°

850.8 m	1,563.1 m	
425.4 m	781.6 m	
170.2 m	312.6 m	
85.1 m	156.3 m	
42.5 m	78.2 m	
10.6 m	19.5 m	

Indoor Single Lens		B016 Day	B016 Night	B036 Day	B036 Night	B041 Day	B041 Night	B061 Day	B061 Night	B079 Day	B079 Night	B119 Day	B119 Night	B237 Day	B237 Night	B500 Day	B500 Night	Vario Day	Vario Night
	i26	●	⊕	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	i26 Audio	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	c26	●	●	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	c26 Audio	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	p26	●	⊕	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	p26 Audio	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	v26	-	-	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
Outdoor Single Lens		B016 Day	B016 Night	B036 Day	B036 Night	B041 Day	B041 Night	B061 Day	B061 Night	B079 Day	B079 Night	B119 Day	B119 Night	B237 Day	B237 Night	B500 Day	B500 Night	Vario Day	Vario Night
	D26	-	-	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-	-	-
	D26 Body D26 Body Night	-	-	●	●	●	●	●	●	●	●	●	●	●	●	-	-	-	-
	M26	●	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	-	-
	M26 Body M26 Body Night	-	-	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	-
	Q26	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	S16M	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T26 White	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T26 Silver (s)	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T26 Black (b)	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	V16M	-	-	-	-	⊕	-	-	-	⊕	-	-	-	-	-	-	-	-	-
	V16M	-	-	-	-	⊕	-	-	-	⊕	-	-	-	-	-	-	-	-	-

**PLEASE NOTE – Special Export Regulations For Thermographic Cameras**

Cameras with thermographic image sensors ('thermographic cameras') are subject to special U.S. and ITAR (International Traffic in Arms Regulation) export regulations: According to the currently valid export regulations of the U.S. and ITAR, cameras with thermographic image sensors or their component parts cannot be exported to countries that have been embargoed by the U.S./ITAR. This currently applies to Syria, Iran, Cuba, North Korea and Sudan, in particular. The equivalent delivery ban also applies to all individuals and institutions included in the 'Denied Persons List' (see [www.bis.doc.gov](http://www.bis.doc.gov), under Policy Guidance > Lists of Parties of Concern). These cameras and their installed thermographic image sensors are not to be used for the design, development or production of nuclear, biological or chemical weapons, or installed in these systems.

Outdoor Dual Lens		B016 Day	B016 Night	B036 Day	B036 Night	B041 Day	B041 Night	B061 Day	B061 Night	B079 Day	B079 Night	B119 Day	B119 Night	B237 Day	B237 Night	B500 Day	B500 Night	Vario Day	Vario Night
	D16 Fix	--	+	+	+	+	+	+	+	+	+	+	+	+	+	Two parallel aligned sensors			
	D16 Pano	--	--	--	--	+	--	Two 90° aligned sensors											
	D16 Pano Night	--	--	--	--	+	--	Two 90° aligned sensors											
	D16 Day/Night	--	+	+	+	+	+	+	+	+	+	+	+	+	+	--	--	--	--
	D16 Body	--	+	+	+	+	+	+	+	+	+	+	+	+	+	--	--	--	--
	M16	--	+	+	+	+	+	+	+	+	+	+	+	+	+	--	--	--	--
	M16 Body	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	S16 Set 1	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	S16 Set 2	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	S16 Set 3	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	S16 Body	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	V16	-	-	-	-	+	+	-	-	+	+	-	-	-	-	-	-	-	-
	V16	-	-	-	-	+	+	-	-	+	+	-	-	-	-	-	-	-	-

Thermal / Thermal TR		T079	T119	T237
Image Angle				
horizontal x vertical		45° x 32°	25° x 19°	17° x 13°
	M16 Thermal	+	+	+
	M16 Thermal TR	+	+	+
	S16 Thermal	+	+	+
	S16 Thermal TR	+	+	+
	Thermal	+	+	+
	Thermal TR	+	+	+

MOBOTIX MOVE		Vari-Focal
	VB-4-IR(-D) BC-4-IR(-D) BC-2-IR	+
	SD-330	+
	SD-340-IR	+
	VD-4-IR(-D) VD-2-IR	+

● Standard program: Available lens/sensor configuration

⊕ Supplement program: Lens/sensor configuration only based on order and price adder

🌀 Available standard lenses/sensor modules/camera bodies for self-assembly, to be ordered separately



# Friendly To Your Budget

## MOBOTIX Systems Save Money...

...because when all system costs are taken into account (purchase, installation, usage, maintenance and software), MOBOTIX systems are significantly less expensive than non-decentralized systems (save up to 70 percent with MOBOTIX).

...because they can get by with far fewer cameras than conventional systems thanks to the greater precision that comes with megapixel technology (high resolution). A double hemispheric camera such as the S14D can replace as many as eight regular cameras.

...because a MOBOTIX network camera uses less than five watts on average, and can be powered cost-effectively via PoE.

...because there are genuine “out-of-the-box” solutions. That means you can just unpack the camera, install it on the ceiling, wall or column, and connect the network cable or UMTS module; done!

...because the hardware is particularly easy to mount and highly user-friendly (low weight, only one cable for data and power, variable

installation position for hemispheric models).

...because the use of standardized, network technology available worldwide with low-cost components means an existing network infrastructure can also be used with professional video security technology.

Software updates for newly developed features, also for older camera models, free of charge

MOBOTIX systems offer additional industry standards such as H.264 and ONVIF compatibility

Use of standardized and cost-effective network infrastructure

IoT-enabled since 1999

Communication with IoT devices via MxMessageSystem, SIP, HTTP, etc.



# Friendly To Our Environment

## MOBOTIX Green IP Video

MOBOTIX systems are just as friendly to the environment as they are to a customer's budget because they have earned the "Green IP Video" label by proving that they value certain factors:

**Economical:** MOBOTIX cameras are cost-effectively powered via PoE. Not only does this lower the energy costs, it also reduces the need for copper and other important raw materials because less cabling is required.

**Robust:** MOBOTIX cameras are extremely resistant and can operate

in a temperature range from -30 to +60° C (-22° F to +140° F) without the need for energy-consuming heating or ventilation.

**Resourceful:** The camera's integrated high-speed processor and flash memory make energy-consuming server and storage devices and their disposal a thing of the past.

**High resolution:** One hemispheric MOBOTIX camera with two image sensors replaces up to eight conventional cameras, including their energy and resource consumption.

**Long-lasting:** The lack of mechanical moving parts means that MOBOTIX cameras require practically no maintenance and are still completely operational after many years of use, making them more sustainable than other systems.

**Forward-looking:** Even older cameras have access to newly-developed functions with a simple software update. Remote updates via the Internet and maintenance-free cameras reduce the number of journeys that have to be made and the harmful emissions that come with this.

Power supply via PoE (approx. 5 watts/camera only)

No additional server or storage devices required

A hemispheric dual camera with two image sensors replaces up to eight conventional cameras



# Technology Alliance Partners

## Unlock The Power Of Networking With MOBOTIX Partners To Help Your Business

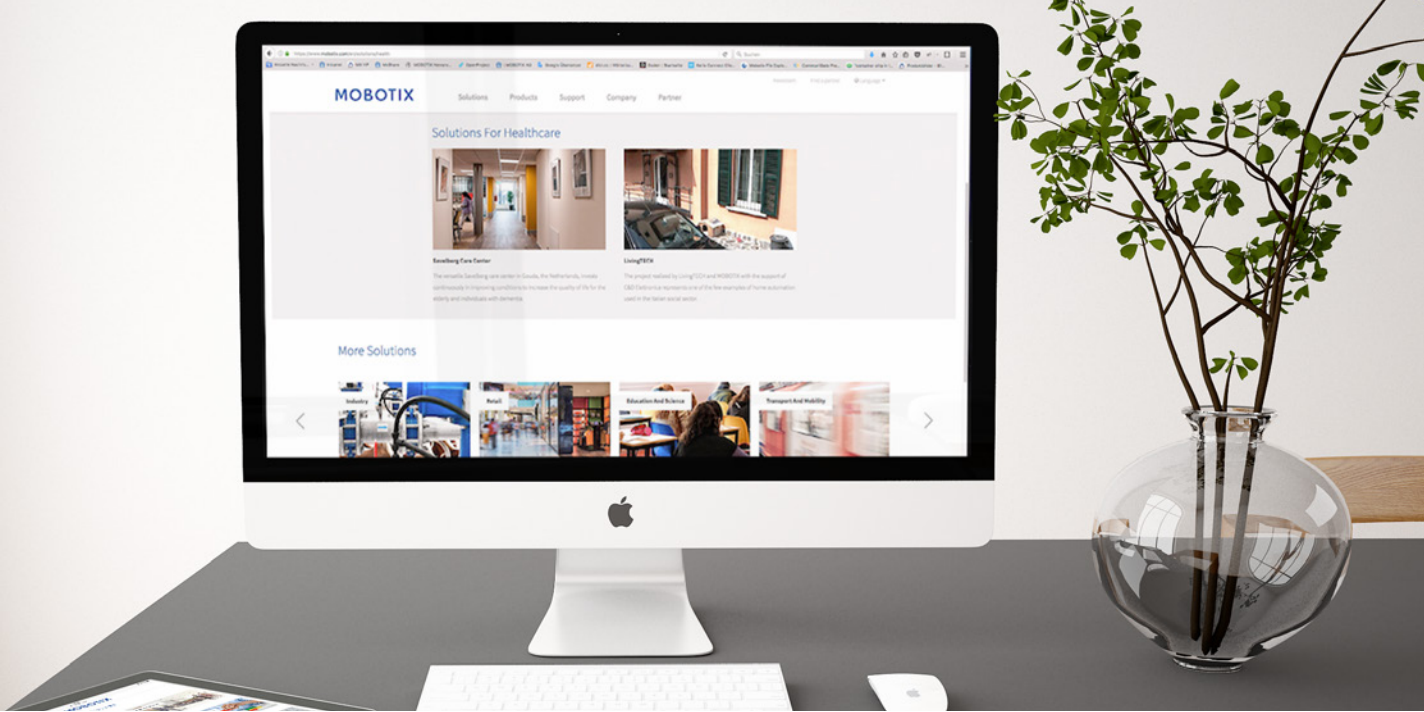
MOBOTIX has always been at the forefront of technology. Now with our Alliance Partnerships we bring the best of breed solutions which will open new horizons for all your application needs.

The Alliance program is designed to support the market and channel through extensive testing and integration, whether hardware or software based, by working closely with organisations which are innovative and leaders in their field.



For more information visit: [mobotix.com/en/technology-alliance-partner](http://mobotix.com/en/technology-alliance-partner)





# We Are Here To Support You

[www.mobotix.com](http://www.mobotix.com)

Now would you like to find out more about the successful and innovative MOBOTIX products and solutions?

Then visit us at [www.mobotix.com](http://www.mobotix.com) and get to know the numerous benefits of this extensive and constantly updated source of information:

- Industry-specific overview of up-to-date video security solutions
- User-friendly, easy-to-understand product descriptions
- Support area with help desk and free-of-charge online training courses
- Free download of software, demo tools, brochures, documentation and tutorials



## Designed to Last

Built in Germany with a focus on engineering excellence, our future-proof devices offer industry leading reliability that is tested against the toughest International Electrotechnical Commission (IEC) standards. With lowest in class energy consumption and mean-time-before-failure (MTBF) of over 9 years of continual use, MOBOTIX offers extended value through proven design, quality component and extensive quality control.

## Secured for Life

With the rise of Internet connected devices offering a major target for cyber-attacks, all MOBOTIX hardware and software is independently and continually tested by third party digital security experts to ensure proven protection against cyber-attack. By maintaining software development and testing in-house in our secure facility in Germany, MOBOTIX leads the industry in cyber security for video surveillance ecosystems.

## More for Less

Our innovative decentralised concept allows you to protect larger areas using fewer cameras without complex or expensive control rooms. Together with our specially created MxPEG+ compression technology designed for video surveillance, MOBOTIX significantly reduces network bandwidth requirements without sacrificing quality of individual image frames.

## How To Buy

MOBOTIX solutions are sold through qualified distributors, dealers and partners around the world, also to professional installers and service providers for video surveillance, home automation and industrial applications. Our partners have the experience that is necessary to implement intelligent solutions with our systems especially tailored to your needs.

[mobotix.com/en/find-a-partner](https://www.mobotix.com/en/find-a-partner)

EN\_07/19

**MOBOTIX AG**

Kaiserstrasse  
D-67722 Langmeil  
Tel.: +49 6302 9816-104  
Fax: +49 6302 9816-190  
sales@mobotix.com  
www.mobotix.com



BeyondHumanVision

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