

Video Innovations for Your Safety



MOBOTIX

German System Manufacturer
of Professional VMS and Smart IP Cameras



Professional Video Management System (VMS)
MxManagementCenter

No
license &
no update
costs



MOBOTIX IP Cameras

German System Manufacturer of Professional Video Management (VMS) and Smart IP Cameras

MOBOTIX is a software company with own IP camera products, all made in Germany. Fields of application include high-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 the 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 investment with one of the highest returns on investment. Since 2015, all MOBOTIX cameras have used 6MP **“Moonlight Sensor Technology”**, which is very light sensitive and produces brilliant videos even in difficult low-light conditions without any motion blur.



Standalone System incl. Network Recording



SD Ring Buffer



NAS Ring Buffer



Video Sensor



Recording



Video Analysis



Alarms



Less
Infrastructure



Less
Energy



Lowest
System Costs



Decentralized Architecture Increases Reliability and Reduces System Costs

Since 2000, MOBOTIX IP cameras have been known for their high-quality video performance and low bandwidth consumption thanks to their “**decentralized architecture**”. The cameras themselves execute video analysis & event detection **internally**, and manage their video ring buffer on a NAS or server by themselves. This reduces the workload of the VMS workstation and network dramatically. Network fluctuations or

longer interruptions are compensated by an onboard video buffer (SD card). As a result, MOBOTIX video systems are very reliable and need fewer servers, fewer workstations and less network infrastructure than other brands. This reduces the overall system costs as well as power consumption and the total energy bill. Encrypted recording by the camera itself guarantees data security and privacy.



The Perfect Solution for the Cloud is Decentralization

Since 2000, MOBOTIX IP cameras have been optimized for remote applications and cloud-based technology because the cameras can reduce the bandwidth of the video by scaling the size and the frame rate. Image details are still available thanks to the onboard virtual PTZ functionality. So the cameras store high-resolution video onboard and deliver on demand low-bandwidth live images and also low-bandwidth playback.

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 already done **inside the camera**.



No license & no update costs

Grid

Playback

Graphic



No limits

MxManagementCenter
Professional Video Management System

MxManagementCenter • A New Milestone in Professional VMS Technology

In 2005, MOBOTIX launched its first professional video management system which is still being used in thousands of installations around the globe. With the professional and platform-independent VMS software “**MxManagementCenter**” MOBOTIX set new standards in summer 2015. This is a new milestone in the professional VMS industry because of its gesture and drag&drop user concept, which makes it very intuitive to use. The MxManagementCenter (MxMC) has no system limits and can

handle hundreds of cameras and users. It offers at the same time the integration of third-party cameras using the ONVIF protocol. The MxMC can manage multiple monitors and video walls. Ultra-fast playback and post video search is implemented as well as a POS (Point-of-sale) interface. This allows to synchronize the recorded cashier data with video. A big part of the development was the new innovative configuration module that reduces the setup time for large camera systems by a factor of ten or more.

Standard Codec (e.g. H.264)
Motion blur, loss of details, license costs



MOBOTIX MxPEG
No motion blur, no loss of details, license free



MxPEG • The Optimized Video Codec for Security

Since 2003, MOBOTIX has used MxPEG, which is a video codec especially developed for security applications to ensure the validation of the recorded images. 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.





Heat map with Hot Spots



Object or people statistics



Multiple behavioral events

MxAnalytics • Video Analysis and Behavioral Detection

The hemispheric MOBOTIX cameras are perfectly suited to monitor stores and other retail environments. In 2012, MOBOTIX included a video analysis package **inside** the camera to produce 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.

100%
incl.



MxActivitySensor

Most reliable video sensor in most difficult situations



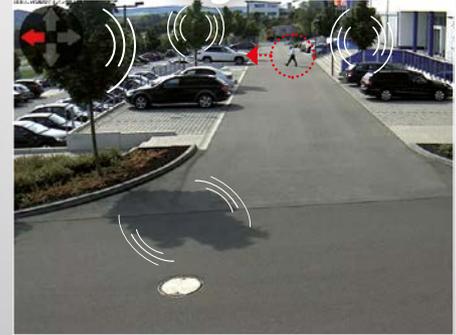
Snow



Heavy rain



Shaking tree & pole



MxActivitySensor • Dramatic Reduction of Maintenance Cost by Prevention of False Alarms

In 2013, MOBOTIX introduced an innovative new onboard video sensor technology called “**MxActivitySensor**” that detects moving objects even in worst weather conditions like heavy rain and snow fall. Scene irritations like shaking trees and swaying camera poles caused by heavy wind are compensated as well. This new sensor is **self-configuring**, reduces false alarms dramatically and saves configuration and maintenance cost.



No false alarms,
most reliable detection





MOBOTIX Headquarters Langmeil, Germany



Weatherproof from -30 to +60 °C



6MP indoor cameras



Innovative German IP Camera Manufacturer since 2000

Beside the professional VMS and video analysis software, MOBOTIX is known as an innovative producer of smart and autonomous IP cameras since the year 2000. From the beginning, cameras were equipped with CMOS sensors without any moving parts to improve backlight situations and longterm reliability. The camera itself runs the software for automatic event detection, alarm messaging, video analysis, direct NAS ring buffer storage and remote functions.

Two-way audio with VoIP messaging and phone connectivity using the SIP standard is included in all MOBOTIX cameras. From the first day, MOBOTIX cameras are produced weatherproof and IP66 protected with one of the highest quality standards. In 2015, a new range of competitive 6-megapixel indoor cameras for flexible ceiling and wall-mount installations was launched. MOBOTIX is located near the highway A63 approx. 90 km south west of Frankfurt Airport in Germany.



MOBOTIX Indoor Cameras • Competitive without Compromise

The new indoor cameras are especially designed to be very competitive and at the same time supporting all MOBOTIX features and functionalities including the new 6MP Moonlight technology. Due to short distances in indoor environments the new indoor camera line uses hemispheric technology to achieve 360° view without any blind spots. However, additional lens options are available for a complete room coverage or directed views. All indoor cameras are available with optional

audio package including microphone and loudspeaker for two-way-audio. Also included is the MOBOTIX Video Analysis software for objects or people statistics, heat map reporting and behavioral events without any extra costs, which is perfect for indoor locations like retail stores, hotels and restaurants, museums, health care, universities and schools. An optional expansion board can be plugged on the backside of the camera to realize additional IO- and alarm functions.

Corrected Panorama Image 180°

Inside the MOBOTIX camera



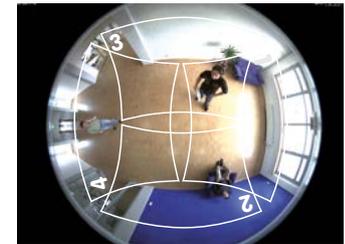
Hemispheric 6MP Moonlight

Sharp details at low-light conditions (ca. 1.5 lux)

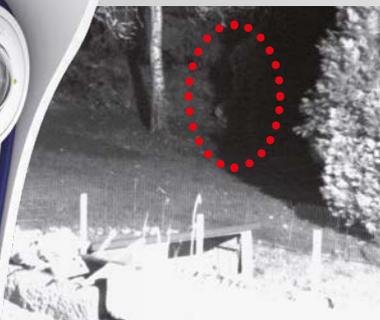


Inventor of 360° Hemispheric IP Cameras

In 2008, MOBOTIX invented the 360° hemispheric camera technology. Compared to other brands, hemispheric processing is done onboard to increase image quality and to reduce network bandwidth. The 180° panoramic view with onboard image correction delivers realistic impressions of the scene with sharp details at the lowest possible bandwidth.



Four virtual PTZ cameras out of a single 360° hemispheric camera



Combination of Thermal and Optical Sensor, incl. MxActivitySensor



Overlay of Thermal Image on Visual Image

Inventor of Dual Thermal IP Cameras

In 2014, MOBOTIX launched thermal cameras for detecting objects and persons in complete darkness by thermal radiation over hundreds of meters. These cameras support all standard features of MOBOTIX IP cameras like automatic object detection, messaging via network and onboard or network recording. The dual lens thermal system supports additionally a second optical video sensor with 6-megapixel resolution. Together with the onboard video sensor "MxActivitySensor", the thermal camera

is the best tool to detect and report moving objects in complete darkness automatically. The thermal camera can activate 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.





Flexible up to 3 Meters. Discreet and Flexible Dual-Lens Camera.

The S15 is a flexible camera with two discreet video modules to be connected via a 3 m cable. From the very beginning, the whole system is weatherproof and supports a microphone inside each lens. The S15 is perfect for mobile and customized installations where standard cameras simply won't fit. This cost-effective solution can simultaneously capture and record 6MP video and audio including 360° hemispheric technology.



Mobile • Transportation • Logistics • Special Forces



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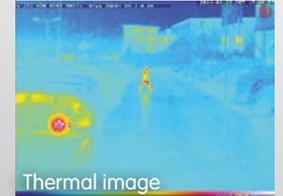
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Smart Home Technology via IP

In 2011, MOBOTIX expanded the product range with a hemispheric IP Video Door Station including IP-RFID reader and SIP telephony. In 2013, the functionality was enhanced by a flat wall mount display with RFID writer. So talking with a person in front of a door or switching the light remotely from anywhere in the world via a smartphone became reality. With the encrypted two-wire bus MxBus, IO-functions for smart homes and alarm

systems can be easily extended to the cameras or the IP door station. MOBOTIX offers IO-, GPS-, temperature- and other accessories as well as radar-based proximity sensors via MxBus.





Outdoor Dual Lens			Outdoor Single Lens				Indoor				Thermal	
M15 AllroundDual	S15 FlexMount	D15 DualDome	M25 Allround	S15M FlexMount	Q25 Hemispheric	D25 Dome	i25 Wall	c25 Ceiling	p25 Ceiling	v25 Ceiling/Wall	M15 Thermal	S15 DualThermal
												
Robust for extreme conditions	Flexible dual head camera	Dual lens manual dome	Robust for extreme conditions	Discreet hemispheric	Discreet hemispheric	Classic manual dome	Indoor wall hemispheric	Indoor ceiling hemispheric	Indoor ceiling camera	Indoor Vandal camera	Thermal dual	Thermal dual head camera



Door Modules					Door Sets				MxDisplay+
Camera	BellRFID	Keypad	Info	DoorMaster	Double Frame		Triple Frame		Remote Station
									

The complete T25 IP Video Door Station series is available in 3 colors.

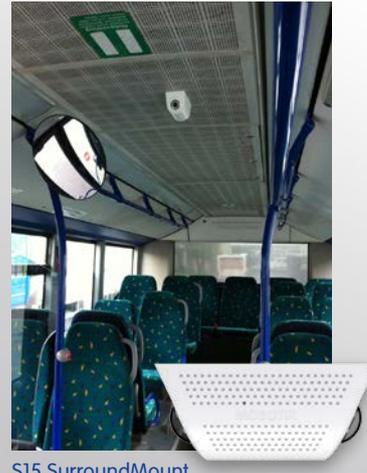
Mounting Accessories



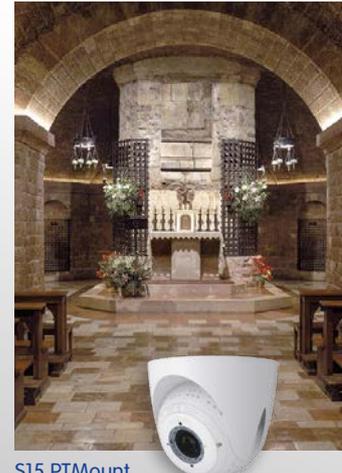
MxTubeMount



S15 Sensor Module



S15 SurroundMount



S15 PTMount

Interface Boxes

								
Overvoltage-Protection-Box	GPS-Box	PoE-Injector 12-57 V DC	232-IO-Box	Output-Box	Input-Box	MxBus Repeater	Proximity-Box	MxBus IO-Module

MOBOTIX interface boxes are perfect to set up a complete security solution. All interface devices 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 two-wire MxBus via 100 m.**



Lexington School
1,200 MOBOTIX Cameras, U.S.A.



Vatican Apostolic Library
70 MOBOTIX Cameras, Vatican City



DEPOT Logistics Center
66 MOBOTIX Cameras, Germany



Barwa Commercial Avenue
1,840 MOBOTIX Cameras, Qatar



Bergen County Jail
820 MOBOTIX Cameras, U.S.A.



BGU Hospital
53 MOBOTIX Cameras, Germany



City of Ghent Parking Authority
300 MOBOTIX Cameras, Belgium



Icelandic Road Traffic Directorate
256 MOBOTIX Cameras, Iceland



Interislander Ferries
30 MOBOTIX Cameras, New Zealand



National Museum Canberra
48 MOBOTIX Cameras, Australia

More references and demo clips on our website: www.mobotix.com

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