

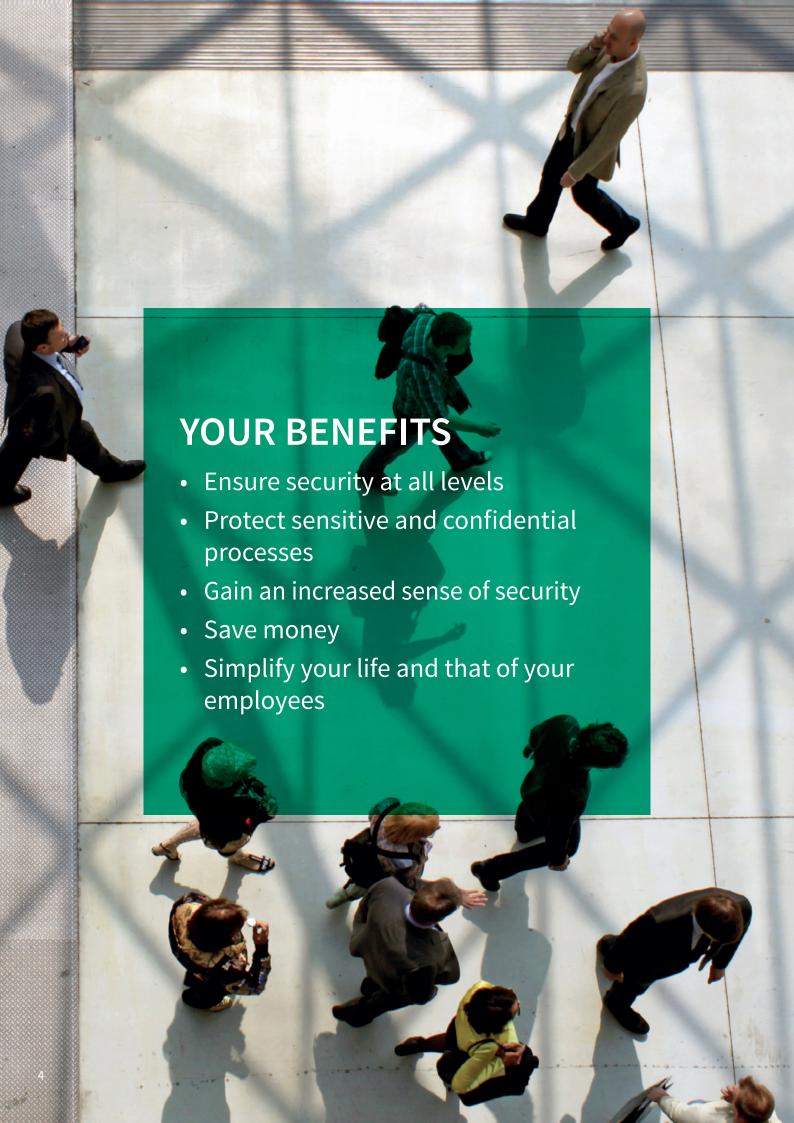
# How MOBOTIX Technology Can Make Your Life Easier

### High-End Video Surveillance – Tailored to You

Beyond**HumanVision** is more than just our motto; this way of thinking comes with genuine added value for you! High-end video surveillance offers you comprehensive solutions – for **smooth workflows** and **maximum security** at all levels. As a public company, organization, or agency, you have your own unique requirements that are very different from those of other industries and economic sectors. That's why we focus all our efforts on meeting those requirements.

MOBOTIX does much more than simply provide surveillance cameras. We'll provide you with the perfect holistic and onestop solutions that are tailored to your needs. Our expertise and the MOBOTIX high-end technology can only come into effect once we know you, your way of thinking, your environment and your aspirations. Because every project is unique and incomparable. Let's have a talk.





# When It Comes To Security, We're All In It Together!

### Public Safety Is A Shared Asset That Is Worth Protecting

The administrative and organizational tasks carried out by public authorities form the basis for our daily lives. Public infrastructures are the lifeline of our social coexistence. As valuable shared assets, these structures must therefore be **reliably protected on a long-term basis**. And it's just as important **to relieve the burden on** state officials. Intelligent video technology ensures efficient workflows and conserves resources in this area.

MOBOTIX is ready to tackle these challenges. With robust high-end camera technology and highly efficient AI-based apps that are tailored to the demands faced out in the real world. **That increase the level of security and are also cyber-secure**, because potential troublemakers and intruders are nothing new, even in a digital sense. We're here for you!





# Protecting Public Infrastructures & People

### Security And Cybersecurity Are of Fundamental Importance

Local government and municipal buildings are busy hubs, as are museums and concert halls. That makes them preferred targets for potential attackers. Authorities and institutions must always be in a position to perform their organizational and infrastructure-related tasks. That calls for accurate and reliable video-based solutions, such as those offered by MOBOTIX.

Stringent fire protection requirements always apply in high-traffic areas. And unauthorized intruders need to be kept out of sensitive areas, both those in the real world and those in the digital sphere. Intelligent MOBOTIX camera-based apps can **now detect suspicious behavior** or **trigger an alarm in the event of overcrowding**. High-performance video surveillance even reliably detects **unattended luggage**.

"Being able to rely on video technology in a high-security environment, and even in poor lighting and weather conditions, is a critical factor in safe working procedures."

Phil Lisk, Bergen County Sheriff's Office





### Relieve The Burden on Staff, Save Money, Earn Trust

### Secure Workplaces and Efficient Workflows In The Public Sector

Public budgets and taxpayer money should be used responsibly. Robust and durable MOBOTIX high-end video systems do not require constant maintenance or replacement. This saves money and stress.

Intelligent video technology also helps reduce the pressure on staff. Security guards **no longer need to patrol certain routes or walk around the perimeter of the property**, and **processes can be automated**. MOBOTIX cameras with intelligent apps can **estimate crowd sizes**. **This avoids overcrowding and queuing**, allowing authorities to provide a better public-facing service to citizens, for example. Not least, **access to sensitive or non-public areas can be reliably controlled**. A sense of security and order among the general population has a positive effect on overall wellbeing. MOBOTIX helps in this respect too.

"The initial investment will have paid for itself within five years. With the MOBOTIX system, we've **reduced costs by 50**% thanks to longer service lives, less maintenance outlay, and energy savings.

Saverio La Monaca, Ministry of Economy and Finance, Rome





- Discreet surveillance
- Visible surveillance & prevention
- Cold, wind & weather
- Poor lighting & darkness
- Cameras in public spaces

### Impenetrable Fortresses!

### Resistant, Robust and Cyber-safe

MOBOTIX video systems, made in Germany, are designed to cope reliably with extreme conditions over the long term. Regardless of whether highly visible systems are to be installed in public spaces for preventive purposes, or particularly discreet surveillance is required.

- The mean time between failures (MTBF) of our cameras is 80,000 hours (> 9 years).
- We offer additional anti-vandalism housings for systems installed visibly in high-risk areas.
- **Discreet solutions** such as flush-mounting can be used for near-invisible surveillance.
- Highly sensitive optics, thermal sensors, infrared lamps and intelligent apps overcome the most difficult visibility and ambient conditions, such as darkness or unfavorable weather conditions.

### Hold Tight. That Goes for Digital Too: Top Cybersecurity Included

Cybersecurity is a top priority at MOBOTIX, and it's also of central importance for government agencies and administrations. MOBOTIX solutions are widely recognized for excellent cybersecurity. **The MOBOTIX Cactus Concept** sets standards in the video surveillance industry that you can rely on.







### Fighting Crime In Real Time

### Practical Application: Westchester County Police Department, USA

Westchester County has a population of around one million and is immediately adjacent to New York City. The "Real Time Crime" (RTC) police unit consists of 100 investigators in 38 departments. Their goal is to surveil and track criminal activity in real time. And they are actively supported by MOBOTIX video technology, machine learning analysis, license plate recognition, and government databases.

MOBOTIX systems on traffic controls and lights log and archive information about every vehicle that passes. Deep learning applications can be used to identify the vehicle type, license plate, color, brand, and model. Vehicles that have been stolen or used to commit crime are highlighted immediately. This has already made it possible to recover 537 vehicles. The system has been able to provide valuable clues in over 4,000 other cases, such as missing person searches and terror warnings. The RTC is now one of the leading technological tracking networks in the USA.

The MOBOTIX M16 AllroundDual cameras with IR illuminator and the hemispherical S16 DualFlex cameras deliver high-resolution images, even in low-light conditions or under extreme weather conditions. The cameras – which now number over 200 in total – are also durable and maintenance-free. This saves valuable taxpayer dollars.



### **Proven in Practice**

### Globally Successful Federal, State And Local Government Solutions

### MINISTRY OF ECONOMY & FINANCE, ROME (ITALY)

MOBOTIX DualDome cameras with a 180-degree panorama view are discreetly hidden in the wall lights surrounding the Ministry. The 40 high-resolution IP video systems form an integral part of the sophisticated security concept. This energy-efficient technology provides 24-hour surveillance, but is virtually maintenance-free.

Security personnel constantly monitor real-time camera images. An additional 36 Allround security cameras protect the roof of the palace from potential attacks. The security systems placed close to the entrances are capable of sending alerts in real time to the operations center, or automatically activating bollards along the perimeter thanks to a vehicle license plate reading system. The lamps form part of a broader concept. Each street lamp is a mini security center. Built-in microphones and speakers allow citizens to call the police or an ambulance via the MOBOTIX cameras.

### VATICAN APOSTOLIC LIBRARY, VATICAN CITY

The holdings of the "Pope's Library," one of the most prestigious research archives in the world, are priceless. The archive contains works dating back to the fourth century. It holds 150,000 manuscripts and 1.5 million books, as well as unique coins and maps. In 2010, 70 MOBOTIX M12D video systems were installed in the library's reading and storage rooms for reliable anti-theft protection. They have been protecting this unique cultural gem ever since.

Authorization is handled using a sophisticated system, which combines radio frequency identification (RFID) technology with MOBOTIX video surveillance. A message is triggered when the library's holdings are accessed, as well as an alarm if necessary. The individual responsible for library loans can identify and verify the person requesting a loan using video technology. The clear and distortion-free images supplied by MOBOTIX cameras are vitally important for those working within the Vatican, since they must be able to see people's faces properly.



- ROI within 5 years
- 50% lower costs (energy-efficient & maintenance-free)
- Automatic control of protection mechanisms



- Combined with RFID technology
- High resolution for optimum identification
- Accurate object and motion detection

#### BERGEN COUNTY COURTHOUSE & JAIL, USA

The Bergen County Courthouse and Jail in New Jersey, USA, controls inmate accommodation digitally via a control center. The integrated security and alarm system and access to restricted areas are also controlled digitally. The complex is already using 80 MOBOTIX D12 cameras and hemispherical Q22 cameras. It plans to install another 300 systems. The Department of Justice imposes stringent demands as far as image quality is concerned. It must also be possible to identify individuals, regardless of where they are. The MOBOTIX systems deliver clear images even in poorly lit and backlit conditions. The resolution is 30 times higher than the previous used analog standard.

Intelligent storage management in each camera eliminates the need for additional video recorders, reducing the cost of digital storage by 90%. The MOBOTIX cameras are also maintenance-free, even if they are exposed to adverse conditions outdoors. This ensures that taxpayer dollars are used as efficiently as possible.



- 90% lower costs for digital storage
- Clear images even in poorly lit or backlit conditions
- Budget-friendly: maintenance-free & durable

### MANLY COUNCIL, AUSTRALIA

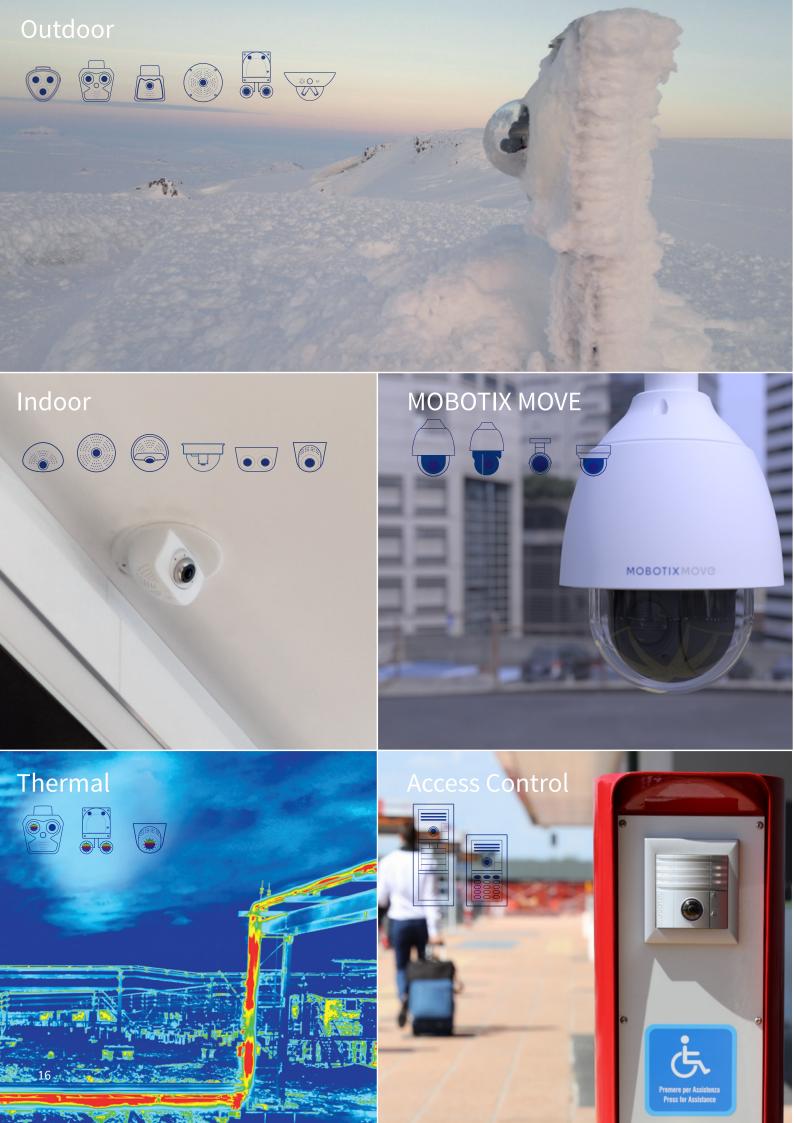
Manly is surrounded by the ocean on three sides. This buzzing suburb of Sydney welcomes 6 million visitors per year, most of whom are young. Back in 2007, however, there was a sharp rise in the rate of violent crime among these visitors, and Manly Council decided to surveil the area using video technology.

These cameras must cope with extreme conditions. Regardless of whether they're exposed to high temperatures, heavy rainstorms, or simply the high level of salt in the air: images of the best possible quality must be supplied in all lighting conditions. The low-maintenance, robust, and reliable MOBOTIX solution meets this requirement. And the images serve more than one purpose: high-quality footage of the "Hurley Australian Open of Surfing" is used to advertise the event. Even the festival set-up activities are monitored and managed using MOBOTIX technology. MOBOTIX also protects some very special inhabitants of the area: the only breeding colony of the endangered Little Penguin.



- 9 years of reliable operation
- Low maintenance and robust
- Withstands the maritime climate (no salt corrosion)





### When Potential Becomes Perfection!

### Extensive Portfolio for Your Tailor-Made Solution

There is no such thing as an off-the-shelf MOBOTIX solution. In cooperation with your MOBOTIX partner, your **project** is **configured to suit your needs** from the comprehensive MOBOTIX portfolio. We discuss your processes with you in considerable detail to define the relevant tasks and how we can provide an effective and dependable solution. This ensures our **solution suits your needs perfectly**, leaves nothing to be desired yet provides some leeway.

### Outdoor

MOBOTIX outdoor cameras are able to withstand ambient temperatures ranging from -40 to 65°C. The maintenance-free housing protects them from moisture, corrosion and dirt. High-quality image sensors produce high-quality video recordings even in low light.

#### Indoor

Indoors, the hemispheric video system with 360° allround view or 180° panoramic image can monitor an entire room discreetly and without any gaps — with intelligent video analysis tools for object and person statistics, heat maps and behavior detection.

### **MOBOTIX MOVE**

The weather-resistant, mobile IP cameras are equipped with the latest standard features of central video systems. MOBOTIX MOVE is the ideal supplement to the premium IoT video systems in the MOBOTIX 7 and Mx6 series.

#### Thermal

MOBOTIX thermal cameras register objects and people using a thermal signature, even in total darkness at distances of several 100 meters. They are also used with great success for early fire detection and can issue alarms automatically.

### **Access Control**

With its 360° lens, the technology captures the entire entrance area without any gaps. The system enables keyless opening of doors securely using an access code, RFID transponder or smartphone, and is even scalable for larger connected systems.







### **Digital is Pivotal!**

### **MOBOTIX Apps Enable New Applications**

The MOBOTIX 7 platform includes **special Certified Apps** for the M73 high-end camera. The applications take advantage of **artificial intelligence** and **deep learning**. In other words, the software is specifically tailored to individual applications using calculation methods and operating instructions.

The MOBOTIX 7 platform can already cover a significant number of industry-specific applications with its special custom apps. It is also open for **apps developed by our partners and customers** themselves. This means that practically every conceivable application can be mapped. The possibilities are virtually endless!

### These MOBOTIX apps are ideal for use in the PUBLIC SECTOR:



### **MxAnalytics AI**

Reliable, object-based counting and behavior detection.



### Al-Fire

Early detection of flames indoors and outdoors (e.g. vehicles, containers).
For all optical image sensors.



### MxActivitySensor Al

Reliable object-based motion detection independent of weather and brightness interference.



### Al-Lost

Detects unattended luggage and other objects (e.g. garbage) as well as the removal of objects (e.g. paintings in museums).



### **Al-Intrusion PRO**

Shows intruders crossing one or a sequence of virtual lines. Multiple lines increase system reliability.



### AI-Crowd

Appraises the number of people in busy areas, recognizes queue situations, among other things.



### **Al-Loitering**

Detects suspicious behavior of people who remain in certain areas for an extended period of time.



#### Al-Overcrowd

Identifies crowded areas based on user-defined thresholds (number of people).



**MOBOTIX** 

# MOBOTIX SOLUTION Partner

MOBOTIX

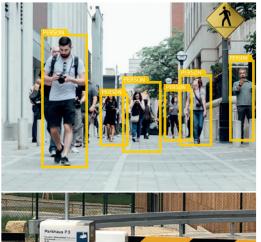
TECHNOLOGY Partner

### **Outstanding Expertise: There's No Such** Thing As Impossible!

### **MOBOTIX Partners Develop Specific Solutions**

We closely monitor developments and trends in the industry on an ongoing basis. At the same time, we are aware that we cannot maintain a worldwide overview of the many requirements on our own. That's why working with experienced experts is extremely important. These are our qualified MOBOTIX partners.

Together we meet particular challenges and continuously develop new complete industry-specific solutions. MOBOTIX solution partners provide their own intelligent application solutions for MOBOTIX technology, such as vehicle recognition or the detection of suspicious behavior. MOBOTIX technology partners are innovative manufacturers of add-on solutions that MOBOTIX has integrated into its own product. This means that we can offer you the best available market solutions with our premium camera technology.



### Secure scenarios – engaging partner projects

#### AI & deep learning – camera apps for specialist areas

Apps that incorporate artificial intelligence and deep learning can offer new solutions. They can be used to count people accurately, for example, and even to break the numbers down by gender and age. They can detect unattended luggage and individuals behaving suspiciously. The possibilities are almost infinite.

### License plate recognition - reliable vehicle identification

License plate recognition systems can be used for many different purposes. To control access to high-security areas or to manage a fleet of vehicles, for example. Even at night and in extremely bad weather, vehicles can be identified clearly and reliably using the high-end video technology in MOBOTIX cameras.

#### Building and property protection - a clear, centralized overview

The web-based software centralizes building security management. When used in conjunction with MOBOTIX, the system combines access control, CNPP-certified video surveillance, intrusion detection, visitor management, time management, and room reservation. It can be used across different sites and is compatible with RFID technologies.



**MOBOTIX** 



# The Way to Your Customized MOBOTIX Solution

### To cut a long story short: Discuss, Plan and Ensure Sustainable Benefits

MOBOTIX solutions are sold by qualified distributors, dealers and partners around the world.

Professional MOBOTIX installers and service providers for video surveillance and sector applications have proven expertise. Our partners will work with you to design and implement your intelligent MOBOTIX solution to meet your specific requirements.

### MOBOTIX – there for you every step of the way... that includes online too!

Of course, we will be happy to help you directly with any questions you may have about your requirements.

- Explicit video system solutions for the public sector
- Complete overview of the powerful MOBOTIX portfolio
- Free download of brochures and documentation
- Practical examples of MOBOTIX solutions





# Intelligent Video Security Solutions Made in Germany

MOBOTIX offers a comprehensive range of solutions for all aspects of video-based security systems. We develop high-quality, decentralized, energy-efficient systems that mean our customers save money on every MOBOTIX system installed.

Our motto Beyond **Human Vision** is also our mission: MOBOTIX is fully committed to making itself the most reliable company it can be, one that protects people and property by using intelligent, cyber-secure video technology to go beyond human vision.

EN\_03/20 MOBOTIX AG

Kaiserstrasse 67722 Langmeil, Germany

government.mobotix.com government@mobotix.com

