



# City Surveillance Solutions from Bosch Security Systems for Ensuring Public Security & Safety

Security, Safety, and Communications Products



**BOSCH**  
Invented for life

# A Huge **Responsibility**

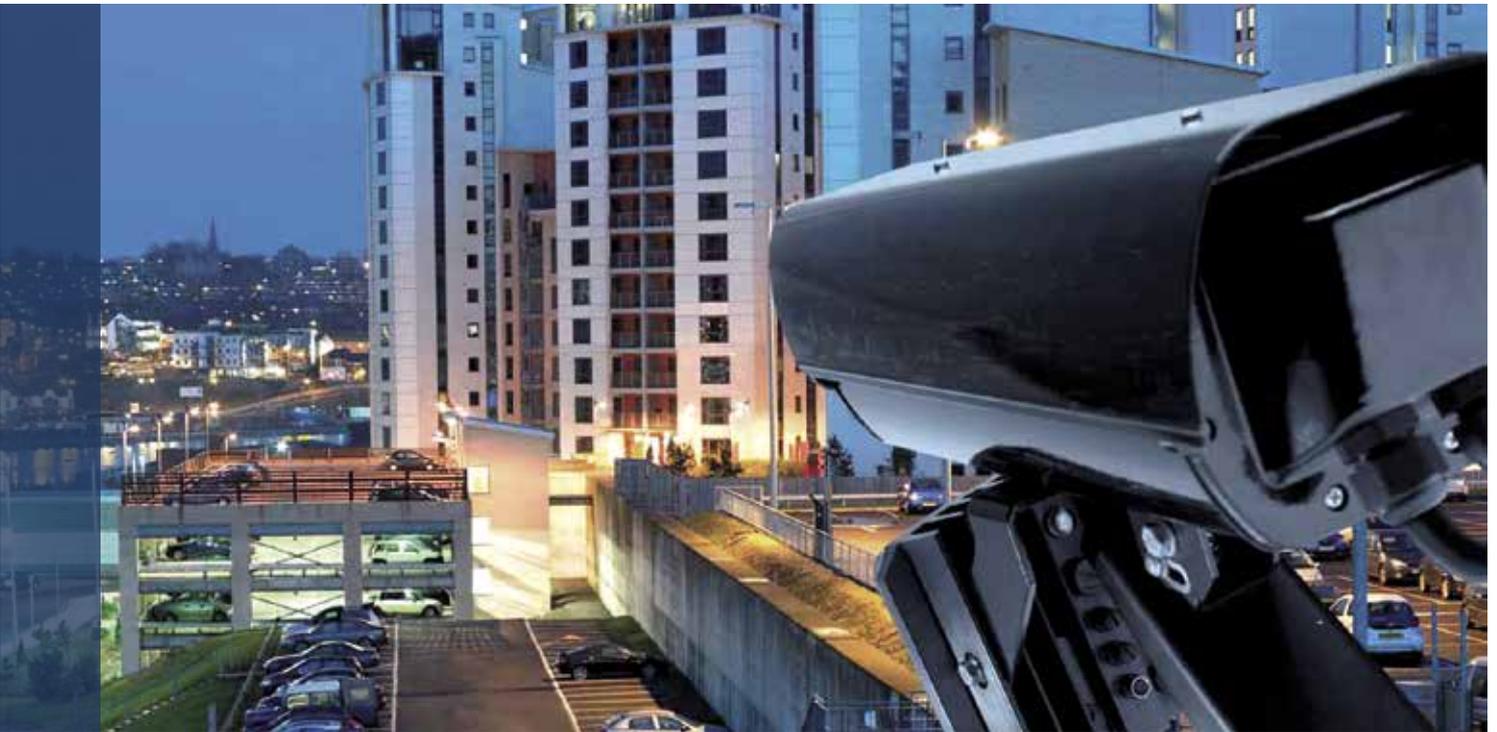
How to meet cities' security challenges – with solutions from Bosch Security Systems. Cities are growing at a very fast pace – by 2050, another three billion or so people will be living in urban instead of rural areas. This trend poses new challenges for society; among other things, it is already increasing the need to improve and reinforce existing security concepts.

City governments face the challenge of reassuring citizens and businesses by preventing and minimizing potential threats. These include vandalism, burglary, and all other forms of crime. There is also a need to ensure efficient processes in everyday public life, for instance managing traffic and crises.

Governmental bodies are therefore embracing advanced technologies for enhancing security and safety as efficiently and reliably as possible. We also see a growing need for user-friendly, intelligent

systems that are easily integrated with multiple other systems, such as those that link and coordinate the responses of police, fire departments, and hospitals to accidents or natural disasters.

Bosch Security Systems offers you a comprehensive portfolio of innovative, reliable, high-quality products for implementing a city surveillance solution that meets your requirements. You can depend on them to deliver a fast, substantial return on your investment.



## Public Surveillance with CCTV

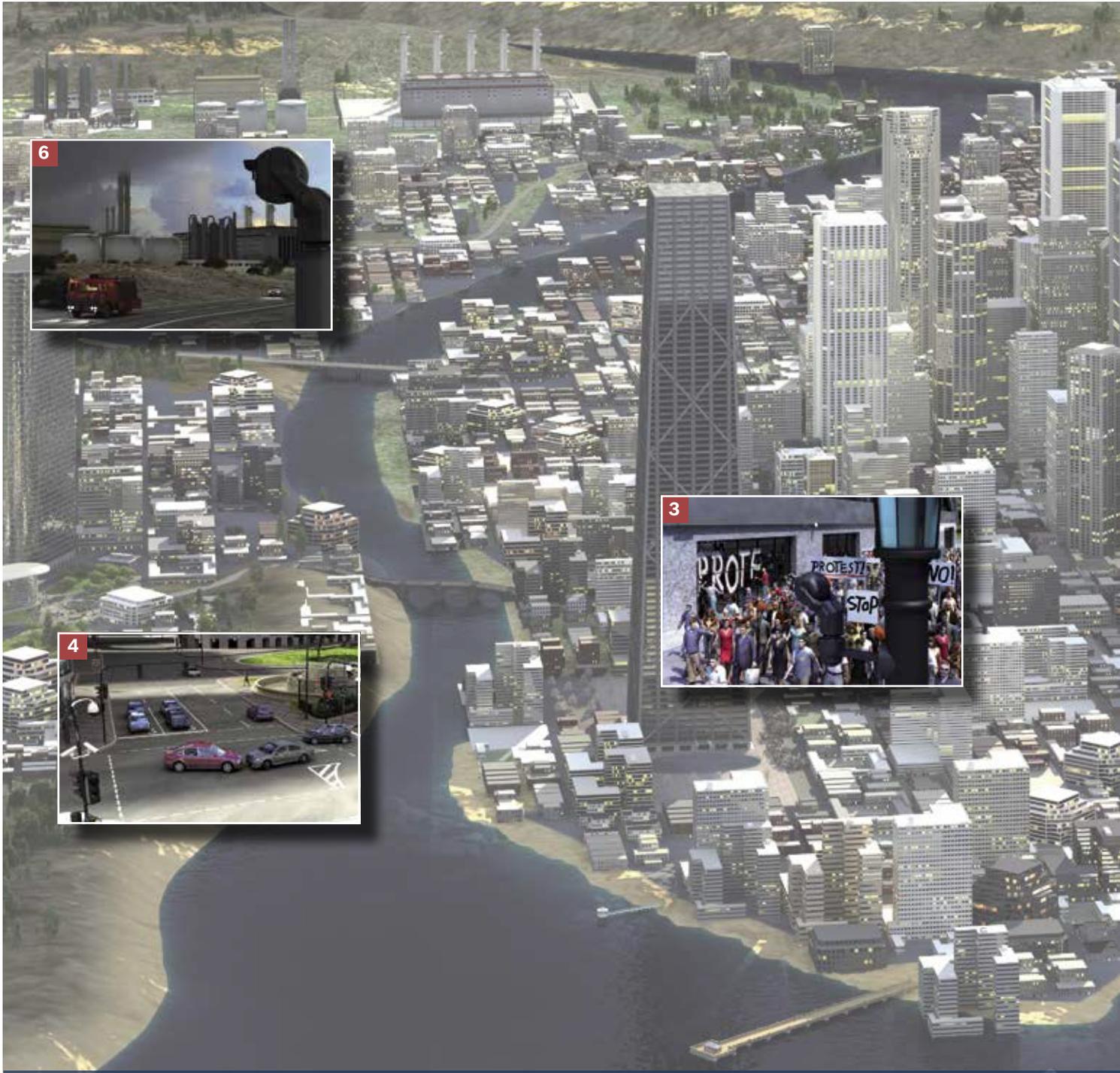
### **Bosch Products and Solutions**

Bosch offers a wide range of networked solutions for efficiently monitoring public areas in cities and effectively managing security, safety, and communications.

Bosch IP networked video surveillance is one part of our portfolio. It lets cities take a major step toward mastering these challenges. It provides a host of benefits that enable faster detection and prosecution of accidents and crimes and, in many cases, constitute effective deterrents to prevent crimes from being committed in the first place.

The reliable systems from Bosch feature modular, scalable, and esthetic design. They enable extensive automation of functions while reducing equipment, space, power, and maintenance requirements – thus also lowering the overall cost of ownership. Professional consulting and technical support make sure that you get the most out of your system at all times.

# Total Reliability with Bosch



1

Deter illicit transactions



2

Monitor Crowds



3

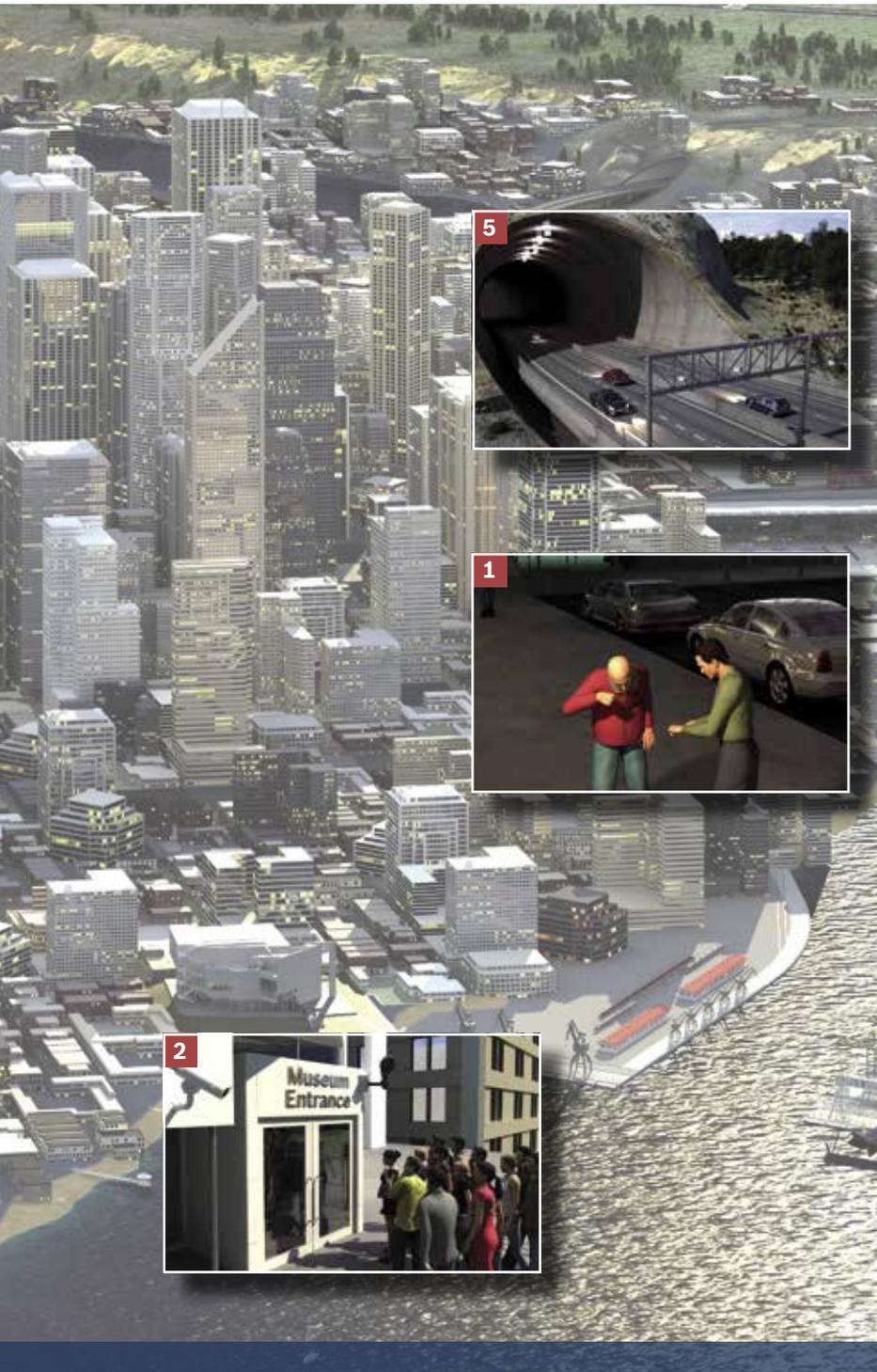
Fight Crime



4

Monitor traffic





## Keep an Eye Out with Bosch Solutions

The following scenarios illustrate how Bosch can help you maintain extremely high standards of security, safety, and communication in metropolitan environments.

**5** Catch traffic offenders

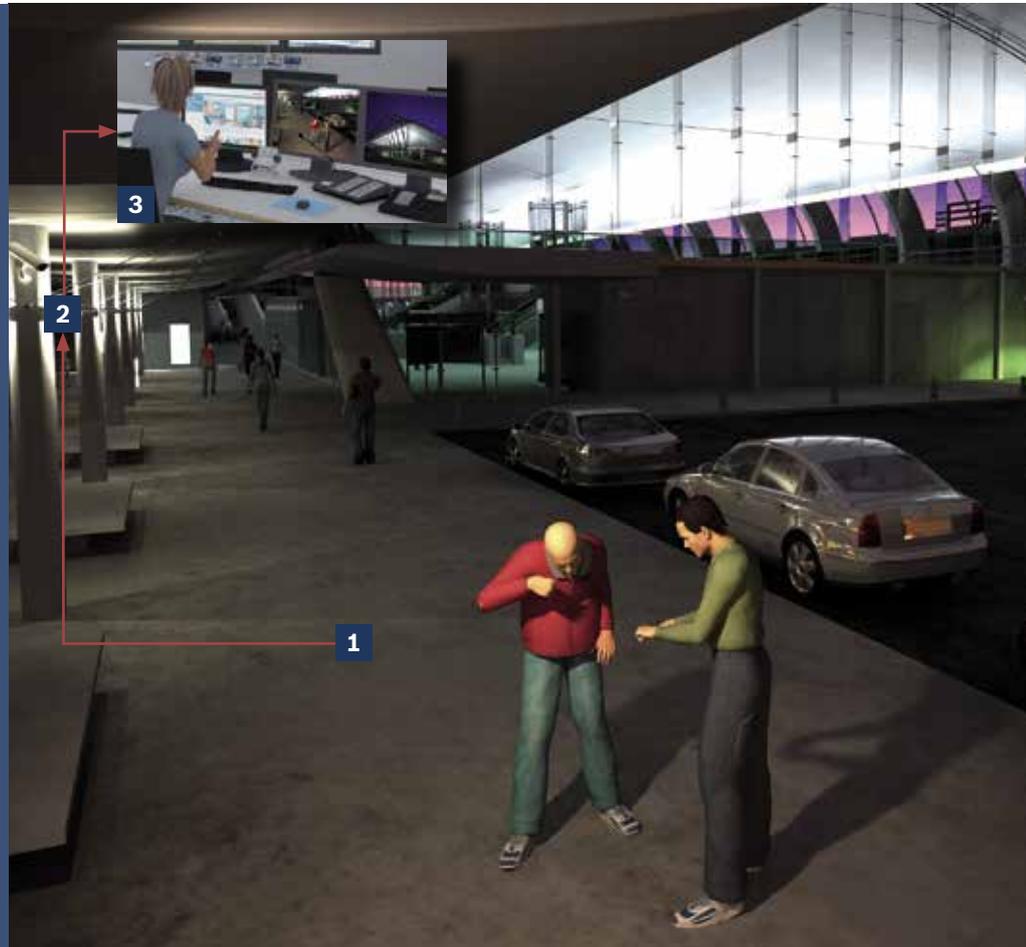


**6** Adapt to extreme conditions



# Deter and Detect **Illicit Transactions** in City Centers and High-Crime Areas

1. Suspicious individuals in a train station.
2. A high-sensitivity infrared camera zooms in on them. The video images are intelligently analyzed and criminal activity is identified. An alarm is triggered.
3. A remote operator verifies the situation.



Visible CCTV cameras installed in vulnerable areas have proved to be effective deterrents. Illegal activities such as drug dealing, street violence, and vandalism diminish sharply when police forces are supported by surveillance technologies.

Changing or poor light conditions, both indoors and outdoors, pose particular challenges. To produce usable images, there is a need for high-quality cameras with advanced features such as high sensitivity, a wide dynamic range, and night vision using thermal or infrared technologies.

Because they are exposed to weather conditions such as rain, sun, and snow, these products must be highly resistant to humidity and extremes of cold and heat. This calls for cameras and housings that are specifically designed for outdoor use.

Bosch offers appropriate products to comply with all of these prerequisites. Our broad product range, which includes high-definition, thermal, infrared-assisted, and high-speed moving cameras, meets all of your requirements under the full range of environmental conditions.

# Monitor Crowds



1. A camera zooms in on the crowd.
2. An operator at a workstation remotely controls moving and fixed cameras to observe the crowd on monitor screens.
3. The operator watches for suspicious behavior and vandalism.
4. High-quality recordings help the police and can be used as legal evidence, supported by forensic screening.



Tourist areas and other crowd situations pose considerable security and safety challenges. Video surveillance helps police and security forces respond more effectively when people or property are threatened.

Wherever crowds gather – at tourist sights, public transportation facilities, stadiums, street demonstrations, etc. – video surveillance can help authorities quickly detect potential threats.

An intelligent user interface ensures that operators know exactly where an incident occurs, also helping them pinpoint the locations of cameras in use by displaying the captured images on maps. Automated virtual guard tours can monitor critical areas by periodically sequencing through multiple cameras. Complete flexibility in configuring monitors lets operators focus their attention on the right spots at the right times – for example, a busy station entrance in the daytime or an unattended bank branch at night.

1. During a street demonstration, an individual breaks into a shop.
2. His actions are recorded by a surveillance camera.
3. An operator alerts the police, who move in to arrest him.



## Fight **Crime**

When a crime is committed during a street demonstration, CCTV surveillance helps security forces take rapid, targeted action. Recorded footage can also be presented in court as evidence.

Fixed cameras can be supplemented by moving cameras for real-time monitoring. They are controlled by an operator via a joystick or workstation. Advanced signal encoding and transmission technologies minimize delays to ensure immediate operator responses.

Storage capabilities are also essential for follow-up investigations, requiring video footage to be kept for varying periods of time. This calls for video compression and recording technologies, as well as the ability to scale the storage capacity to meet different needs. Especially when sensitive data are involved, resilience, redundancy, and protection are very important.

# Monitor **Traffic** Flows

CCTV surveillance enables centralized traffic monitoring, especially at major road intersections. It supplies relevant information to help law enforcement agencies and emergency services deal with accidents. Road and highway crews can also be dispatched to remove hazards or repair malfunctioning equipment.

Cameras can also help mitigate congestion by collecting data on traffic patterns. This information can then be used to reprogram traffic lights and improve traffic flows.

IP video streams can be transmitted over wired or wireless networks, so all of a city's surveillance cameras can be easily monitored from a single operations center. The low bandwidth and advanced networking capabilities of IP cameras additionally facilitate this.

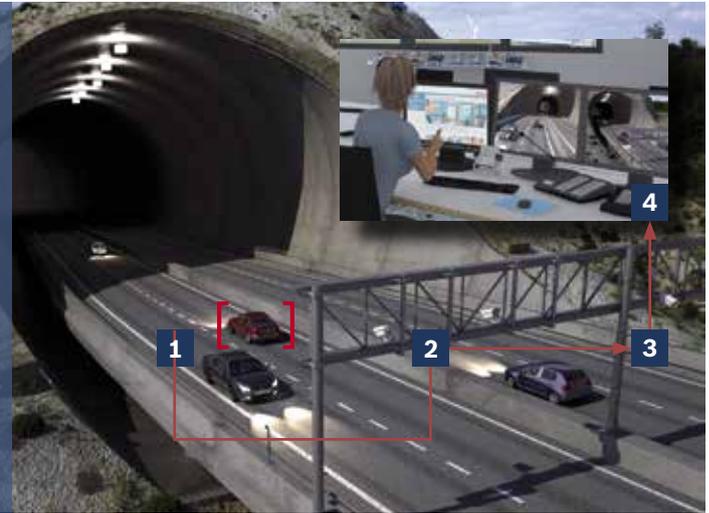


1. An accident has occurred, resulting in traffic congestion.
2. Three pole-mounted cameras at an intersection monitor the accident and its surroundings.
3. The operator, who has an overview of the accident situation, coordinates emergency services.





1. A car is driving against the direction of traffic.
2. Intelligent video analysis detects the wrong-way driving violation.
3. DINION capture cameras from Bosch capture the vehicle's license plate
4. An operator informs the police so it can warn other motorists and stop the car.



## Catch **Traffic Offenders**

Our license plate cameras capture details at any time of the day or night, even on vehicles moving at high speed and in any weather or ambient lighting conditions. Intelligent Video Analysis supports operators by

triggering an alarm when an individual or vehicle enters a prohibited area or behaves suspiciously. It can also greatly reduce the time required to search video footage.



1. A tornado strikes an industrial facility in the outskirts of a city. Robust cameras designed to withstand extreme conditions detect workers trapped in a collapsed structure.
2. A rescue team heads out to save them.

## Adapt to **Extreme Conditions**

When a natural or human-caused disaster occurs – such as a tornado, flood, or earthquake – video surveillance can deliver invaluable information to help assess

damage, locate injured people, coordinate rescue units, and identify criminal acts such as looting.

# Bosch Management Software – Our Answer to Your Integration Needs



With all of the systems and equipment that can be installed to monitor and manage potentially dangerous situations, it is a challenge to efficiently manage and coordinate them all. Enterprise-class management systems from Bosch include an advanced user interface cockpit that lets a single operator efficiently monitor and control all security systems. They also enable seamless management of digital video, audio, and data over any IP network.

When a critical situation arises, the system displays alarms on location maps: symbols and audible signals immediately indicate their source. You can also define alarm workflows based on scenarios to ensure immediate and appropriate responses.

## **A Complete Solution for Integrated Building Management**

No matter how comprehensive and complex your building management requirements are, the Building Integration System (BIS) from Bosch responds flexibly and is extremely easy to use. It is an all-in-one modular platform that combines multiple technical systems: for fire and intrusion alarms, video monitoring, access control, and evacuation. The BIS provides a complete overview of your organization, right down to showing the status of individual detectors. It is based exclusively on proven IT standards – which makes it easy to integrate third-party security and building management systems. This generates synergies while ensuring optimal service and compatibility with existing systems – thus safeguarding your investments.

## Selected References

Mendoza, Argentina



Greater Mendoza is Argentina's fourth-largest metropolitan area and a major tourist destination. It is currently installing a large-scale surveillance system to reduce crime.

The first three stages of the project have been completed, with the installation of 450 cameras and more than 10 monitoring centers; the last two stages will involve another 180 cameras and seven monitoring centers. These are connected by a gigabit fiber-optic network. Intelligent Video Analysis supports the operators by detecting, tracking, and analyzing moving objects. In the first six months of operation, the system led to more than 1300 arrests.

Griffith, Australia



Griffith in New South Wales is located in the heartland of wine and vegetable production in Australia. An IP video surveillance project has made the city much safer for pedestrians.

The system monitors each of six locations with a Bosch AutoDome 300 Series PTZ camera and two fixed AutoDome 100 Series dome cameras, plus two Bosch Dinion fixed domes at the municipal library. They are interlinked by a fiber-optic network and IP technology. Video footage is stored for one month on a 18TB HP Raid 5 array. Assaults and other forms of violent crime have decreased significantly in the monitored areas as a result.

## Portofino, Italy



To make the city a safer place for residents and tourists, the town council decided to implement a surveillance system from Bosch.

Especially to protect the port and the Piazza Martiri dell'Olovetta, the two busiest parts of the city, a number of surveillance cameras were installed, including analog day/night AutoDome 26x cameras and a monochrome high-sensitivity Dinion XF for capturing license plates. The cameras are linked via Bosch's Bilinx coaxial technology and a wireless network, making them harder to tamper with. Immediately after the new system was installed, more cases of theft began to be solved.

## Bristol, United Kingdom

Bosch products have helped this major city solve its crime and road congestion problems.

Bristol began installing MIC Series surveillance cameras in the city center and has meanwhile deployed more than 250 of various kinds, including infrared and day/night models, for both security and traffic management. Images from the cameras are transmitted to a control room at the city council. Its manager, Gordon McLanaghan, says that "the image quality and zoom effectiveness of the cameras are second to none. Since trying out the first camera, we have never looked back."



Bosch Security Systems is an innovative, customer-focused global manufacturer and supplier of security, safety, and communication products and solutions. We are committed to remaining the supplier of choice by consistently offering top-quality products and solutions backed by superb service.

## The Bosch Security Systems **Promise**

### **A Consistently High Standard of Quality Worldwide**

All Bosch manufacturing facilities uphold the same high standards of quality to deliver first-class, internationally acknowledged product performance. This is supported by unflagging efforts to continually improve all products and processes. Bosch designs its products so you can count on them to work as intended and are free to focus on your core business.

### **Leaders in Innovation**

Bosch invests heavily in research and development, channeling a double-digit percentage of its sales revenues into these activities. Over the years, this commitment has consistently generated reliable, award-winning technologies and products to benefit customers.

### **Customers as Partners**

You reap advantages from the global network of qualified Bosch dealers, who help you with planning, project management, or installation, whatever your needs may be. Bosch runs partner programs in Europe, the Middle East, Africa, the Western Hemisphere, and Asia/Pacific.

The global Bosch sales organization is always near you, no matter where you are located. Count on high-quality service worldwide and keep up to speed with training from the Bosch Security Academy (BSA).

### **Local Support**

The worldwide presence of Bosch Security Systems makes sure you have access to high-quality business and technical services. You can rely on Bosch and its local partners to quickly and flexibly support you in dealing with your issues.



## Committed to **Quality in Our Entire Product Portfolio**

Safeguarding lives, buildings, and assets is the aim, and we have a long history of protecting people and property. You can feel safe with Bosch Security Systems.

Our business units offer you a wide-ranging portfolio of innovative, ergonomic products and solutions for security, safety and communication, all of which deliver top quality. Featuring intelligent functionality and modular concepts that grow with your needs, they include access control and management systems in addition to meeting video surveillance, intrusion alarm, fire alarm and voice evacuation requirements. Professional audio and conference systems for voice communications and music round out the program.

We are proud of the many awards we have received for the quality, user-friendliness, and innovativeness of our products. This recognition from prestigious professional institutions, trade journals, and industry organizations confirms the success of our unflagging efforts to provide the best possible solutions and optimally meet your needs and expectations.

### **Our many awards have included:**

#### **2012 Red Dot Design Award**

DINION HD 1080p D/N

#### **2012 GIT Security Award**

Blue Line Intrusion Detectors

#### **2011 GOOD DESIGN AWARD**

DINION HD 1080p

Chicago Athenaeum: Museum of Architecture and Design, and the European Centre for Architecture Art Design and Urban Studies

#### **2010 PSI Premier Awards**

The Dinion 2S won the CCTV Product of the Year award.

#### **2008 IFSEC Security Industry Award**

For the Professional Series Dual Tech Detector with Anti-Mask.

## **A Tradition of Quality and Innovation**

For over 125 years, the Bosch name has stood for quality and reliability. Bosch is the global supplier of choice for innovative technology, backed by the highest standards for service and support.

Bosch Security Systems proudly offers a wide range of security, safety, communications and sound solutions that are relied upon every day in applications around the world, from government facilities and public venues to businesses, schools and homes.

### **Bosch Security Systems**

To learn more about our product offering, please visit [www.boschsecurity.com](http://www.boschsecurity.com) or send an e-mail to [emea.securitysystems@bosch.com](mailto:emea.securitysystems@bosch.com)

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