### Axis network cameras

A wide portfolio of products for professional video surveillance.













# The market's widest range of network cameras

The video surveillance market is thriving, driven by increased public and private security awareness. At the same time, the market is rapidly undergoing a technology shift where analog CCTV systems are being replaced by network video – a technology that started at Axis. Axis invented the first network camera in 1996, and continues to lead the market. Today, Axis provides the market's widest range of network cameras, delivering key benefits to video surveillance users.

### Experience the benefits of Axis network cameras

- > Remote and secure access to live and recorded video. Axis network cameras can be accessed at any time from any networked device, ensuring cost-efficient and flexible video management.
- Sharper images for reliable identification. Axis network cameras extend beyond PAL/NTSC, and allow much higher resolution. In addition, many Axis network cameras use progressive scan to minimize motion blur.
- Powerful event management with intelligent video. Systems with Axis network cameras can automatically look for and act upon different events and threats. This drastically reduces staff workload, lowers bandwidth and storage requirements, and enables more reliable and effective video surveillance.
- Scalable, easy to integrate and future proof. Axis network cameras, based on an open technology platform, can be easily integrated into other systems such as access control or point of sales, allowing for continued expansion and increased functionality.
- > Lower total cost of ownership. Axis network cameras work with standard IP networks, computers and servers, and support Power over Ethernet, to ensure substantial savings in installation, management and equipment costs.













### Network cameras for any need

Axis network cameras are divided into categories based on functionality and suitability for specific customer needs. With the industry's most complete portfolio of network cameras, Axis can provide professional video surveillance solutions for any indoor or outdoor situation.

#### Fixed network cameras

A fixed network camera meets a variety of application needs, and its traditional camera design adds a deterring effect. The viewing direction is set once the camera is mounted. There are several models with a varifocal lens and/or exchangeable lenses for increased flexibility. Housings are available for mounting the camera outdoors or in harsh environments.

#### Fixed dome network cameras

A fixed dome network camera is a compact camera solution with a dome casing. Its main benefit lies in its discreet, non-obtrusive design, as well as in the fact that it is difficult to see in which direction the camera is pointing. The camera's dome casing design offers efficient protection against redirection and defocusing.

#### PTZ network cameras

A PTZ network camera offers network video functionality combined with pan/tilt/zoom capability. The camera's movement is easily controlled via a computer connected to the network. Depending on the application, the most suitable choice may be a PTZ network camera where both movement and viewing direction are visible, a more discreet model where all moving parts are inside the casing, or a model with no moving parts.

#### PTZ dome network cameras

A PTZ dome network camera provides full flexibility by offering 360° pan, 180° tilt, extensive zooming capabilities and advanced mechanical design for continuous camera movement. PTZ domes are ideal for live monitoring, where the user needs to actively follow a person or object. They can also be operated in guard tour mode, where the camera automatically moves between preset positions.

#### Thermal network cameras

A thermal network camera creates images based on the heat that always radiates from any object, vehicle or person. The cameras see through complete darkness and deliver images that allow operators to detect and act on suspicious activity around the clock in all conditions. Thermal network cameras are a perfect complement to any professional IP-surveillance system.

### Axis network cameras - How they work

Axis network cameras enable users to remotely view and record live video from anywhere in the world. They use standard IP networks such as local area networks (LANs) and the Internet for transporting information rather than dedicated point-to-point cabling, used in analog video systems. This ensures a cost-effective, flexible and scalable video surveillance solution that can be easily expanded as needs evolve.

#### Full range of network cameras

Axis' broad range of high-quality network cameras meet a variety of customer needs. They include day and night, indoor and outdoor, wireless, vandal-resistant, IP66rated, megapixel and HDTV network cameras.

#### Wired and wireless connections

For optimal installation flexibility, some Axis network cameras offer a wireless connection to the network. This is useful, for example, in a building where the installation of network cables would not be possible, or within a facility such as a retail outlet where there is a need to move the camera to new locations on a regular basis without having to pull network cables to every location.

#### Integration with other systems

There are almost no limitations as to where a network camera can be placed. Axis network cameras have the capacity to provide a high level of integration with other equipment and functions, creating a continually developing system. A fully integrated Axis network video system can be used for a multitude of applications simultaneously such as access control, building management, point-of-sales systems, ATMs, as well as fire, intruder and visitor management.



### Megapixel and HDTV network cameras

Megapixel network cameras enable at least three times higher resolution of video images than can be provided by analog CCTV. An HDTV network camera provides even better video quality with full frame rate and excellent color representation. Megapixel and HDTV technology enhances the ability to identify people and objects.



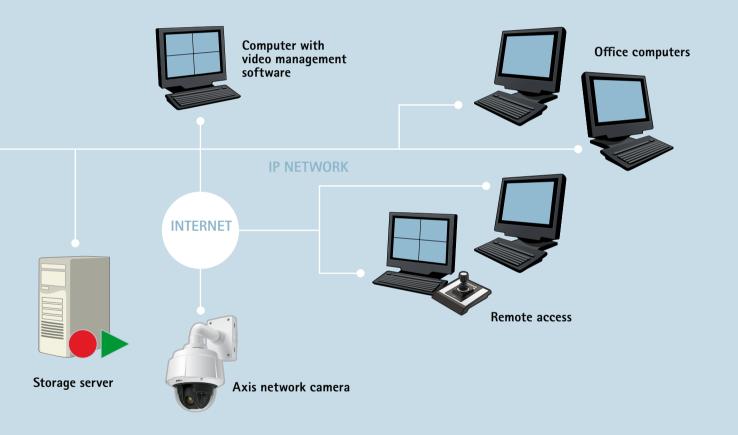


#### Accessories help build complete solutions

Axis provides a wide range of accessories to facilitate the installation and maintenance of a network video system. This includes protective camera housings, mountings, illuminators, lenses and equipment for Power over Ethernet. Accessories from Axis ensure straightforward installation and superior performance.

### Video management and digital storage

Axis network cameras are supported by the industry's largest base of video management software. Video images are digitally recorded on standard computer servers rather than proprietary equipment such as DVRs (digital video recorders), which radically reduces management and equipment costs. All video data can be saved on a central server – even in a remote location to prevent tampering – with efficient access from any authorized computer. Multiple installation sites can be monitored and managed from one location.





### Outdoor, day/night and thermal video surveillance

Many video surveillance cameras are placed in tough environments. Axis provides cameras that are resistant to dust, vibrations, humidity and vandalism. Many Axis cameras come with automatic day and night functionality that ensures good image quality even during nighttime – outdoors as well as indoors. Thermal network cameras enable operators to detect people, objects and incidents also in complete darkness and other difficult conditions such as smoke and haze. Axis also offers an extensive portfolio of protective housings.

### Lightfinder Technology - lifelike colors in low-light

Through careful choice of sensor and lens in combination with meticulous elaboration of image data, Axis has mastered the art of low light video. Network cameras incorporating Axis' Lightfinder technology offer better resolution and more lifelike colors in low-light conditions than any analog camera on the market, without compromising important features such as progressive scan and video intelligence analysis.



### Unique capabilities of Axis network cameras

Axis invented and launched the first network camera back in 1996 and ever since, the company has been recognized as the leading expert in network video. To satisfy ever-increasing customer demands for more intelligent video surveillance systems, Axis continues to deliver products with innovative and unique features.

### Superior image quality

Axis network cameras are built around the company's own application specific chips and provide crystal-clear video images as well as outstanding network performance. Megapixel and HDTV network cameras are available to provide even more image details. In addition, almost all Axis network cameras employ progressive scan for superior image quality even in scenes with a high degree of motion.

### Flexibility in video format, including H.264

Axis network cameras offer users the option of more than one video compression format. These formats include Motion JPEG, MPEG-4 Part 2 and H.264. H.264 is the latest addition and it offers substantial savings by reducing storage costs and increasing the overall efficiency. Without compromising image quality, H.264 can reduce the size of a video file by 80% compared with Motion JPEG and up to 50% compared with MPEG-4.

#### Multiple, individually configurable streams

With this capability, the network camera can provide multiple streams from each video channel and each stream can be configured differently in terms of compression format and level, frame rate and resolution. For example, one stream can be configured with maximum compression and low frame rate for storage purposes; another stream can be sent with a higher frame rate and less compression for live viewing; and a third stream with high compression and low resolution can be sent to mobile devices.

#### Enhanced video surveillance with audio

A microphone or audio equipment can be connected to Axis network cameras with integrated audio. Audio enhances the video surveillance capability by enabling users to also listen in on an area or pick up unusual sounds. Audio detection can also be used as an event trigger, which for example can be used to direct a PTZ network camera or initiate recording of video at the sound of a broken window or footsteps.

#### Cost-saving Power over Ethernet (PoE)

Most Axis network cameras can be powered over the Ethernet (using the same Category 5 cable as for data transmission). Installation is easier and costs are reduced since there is no need to run separate cables for power. It also makes it easier to move a camera to a new location. With Power over Ethernet, a camera can still operate in the event of a power failure if the network is connected to a centralized backup power with an Uninterruptible Power Supply.





#### Intelligent video that solves real problems

With network video, intelligence has been brought into the camera itself, which allows for scalability and flexibility that are not achievable with analog cameras. Most Axis network cameras have built-in multi-window video motion detection, audio detection and event management. Other intelligent features include autotracking and active tampering alarm for increased camera reliability. Many cameras also provide the unique AXIS Camera Application Platform, which allows easy download of third-party analytics applications to the camera.



### Powerful event management for interaction with the environment

Axis network cameras provide powerful event management capabilities with inputs/outputs for connecting external devices such as sensors and relays. This enables the system to be constantly on guard in analyzing inputs to detect an event. Once an event is detected, the system can automatically respond with actions that may include video recording, sending an e-mail, activating lights, closing doors and sounding alarms.



### Thermal imaging for detection even in total darkness

Working outside the spectrum of visible light, thermal cameras register thermal radiation and produce images that show the temperature variations in the scene. The reliance on thermal imaging enables the camera to detect people, objects and incidents in total darkness and under other challenging conditions such as smoke or fog, or when subjects are obscured by a complex background. These qualities make thermal network cameras ideal for detection and thus a perfect complement to any network video system. Axis network thermal cameras have all the features of Axis other highend network video products and can be seamlessly integrated into an existing IP surveillance system.

### The market's broadest video management software support

Axis network cameras are supported by the industry's largest base of application software through Axis' Application Development Partner Program, which currently consists of more than 800 partners. The network cameras are also supported by AXIS Camera Station, a video management software solution that provides video monitoring, recording and playback capabilities, as well as management, configuration and security functionalities.

### Advanced security and network management

Axis network cameras offer more ways to secure access to video than can be provided by an analog system. Security features include multi-level password protection, IP address filtering, HTTPS encryption to secure the communication, and IEEE 802.1X to control network access. Internet Protocol version 6 (IPv6) addresses are supported in addition to IPv4, eliminating the need for network address translation and simplifying configuration. Network utilization is optimized with the support for Quality of Service (QoS), which enables reservation of network capacity and prioritization of mission-critical surveillance.

### Edge storage for more robust video surveillance systems

Power failure, network failure, system maintenance... Video recordings can be interrupted for many different reasons. Edge storage is a concept in Axis network cameras and encoders that allow them to record video directly to a storage device such as an SD/SDHC card, thereby creating a more robust, reliable and flexible video surveillance system. The cameras can record video locally when the central system is not available, or continuously record in parallel. Missing video clips are later retrieved and merged with the central storage, thereby ensuring the user seamless, uninterrupted video recordings.

## Active tampering alarm protects camera installations

Active tampering alarm is an intelligent video analytics application available in AXIS M3113-R Network Camera and other Axis products that automatically sends an alert when a camera is manipulated. Active tampering alarm detects incidents such as redirection, blocking or defocusing of cameras, and reacts when the camera is attacked, spray-painted, or covered.



### **About Axis Communications**

Axis is an IT company offering network video solutions for professional installations. The company is the global market leader in network video, driving the ongoing shift from analog to digital video surveillance. Axis products and solutions focus on security surveillance and remote monitoring, and are based on innovative, open technology platforms.

Axis is a Swedish-based company, operating worldwide with offices in more than 20 countries and cooperating with partners in more than 70 countries. Founded in 1984, Axis is listed on the NASDAQ OMX Stockholm under the ticker AXIS. For more information about Axis, please visit our website at www.axis.com

