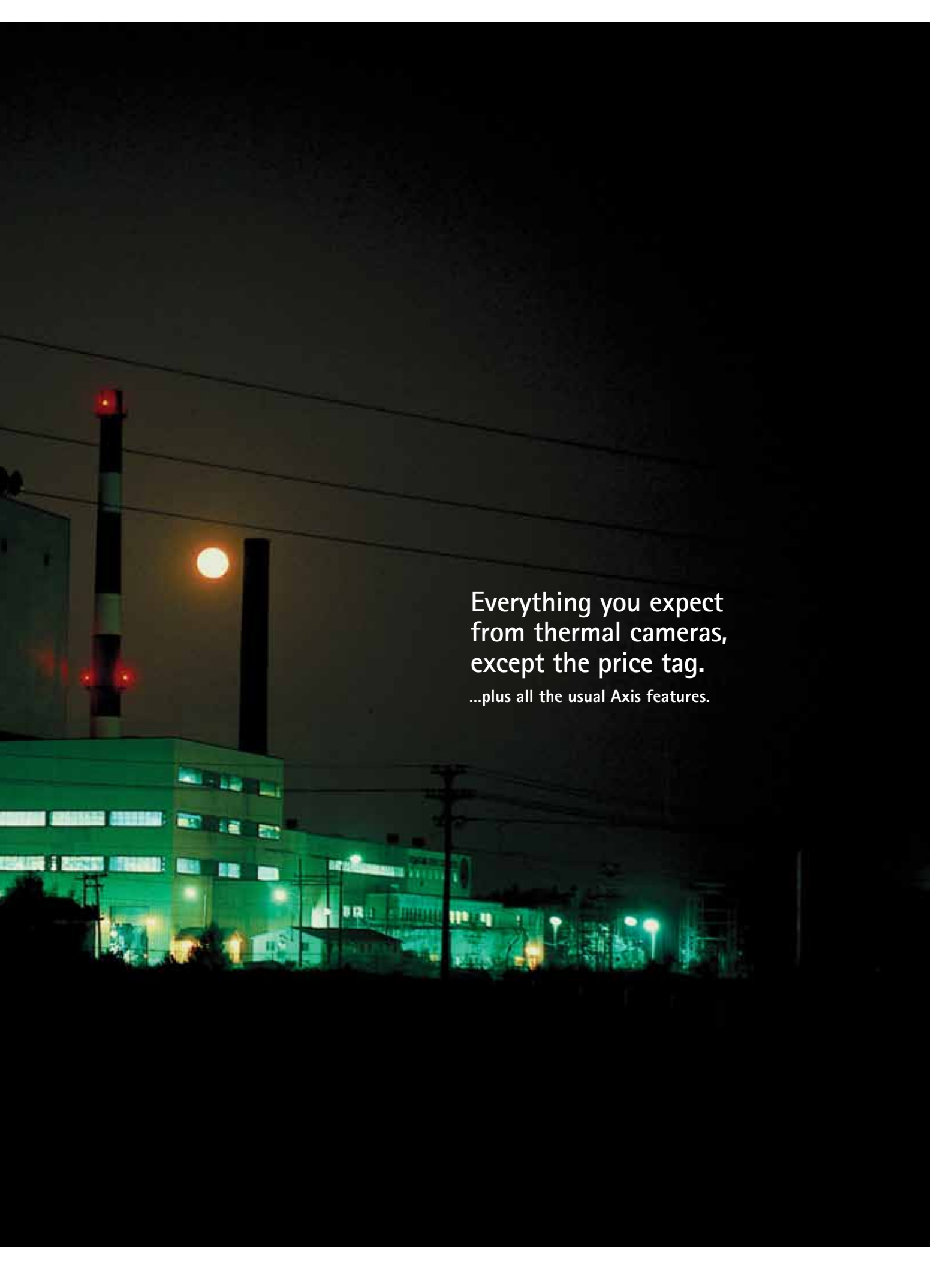


## Axis Thermal Network Cameras

High-quality detection in dark and challenging conditions







Everything you expect  
from thermal cameras,  
except the price tag.

...plus all the usual Axis features.



**Protect what you value most**

The Axis thermal network cameras' ability to detect thermal radiation makes it difficult for individuals to conceal themselves within a wide perimeter of a sensitive area or building.

# Thermal detection: the key to effective video surveillance

Effective video surveillance depends on accurately detecting and identifying objects, people or incidents, so that appropriate action can be taken. But conventional video surveillance cameras will have difficulties capturing usable images in complete darkness or under other challenging conditions such as smoke or fog, or when subjects are hiding or obscured by a complex background.

**Before you can identify, you must detect**

Visible light, which the human eye can see and standard cameras can detect and display, requires a light source such as the sun or a flood light. Even day/night cameras, which use the near-infrared spectrum, require some light to operate – either natural or a dedicated IR-lamp.

A thermal camera requires no light source, as thermal radiation is emitted from every object with a temperature above zero degrees Kelvin. Even very cold objects, like ice, emit thermal radiation. The hotter the object, the greater the radiation. The greater the temperature differences in a scene, the clearer the image a thermal camera will offer.

**Give your surveillance 100% capability**

The advantage of this is that thermal cameras quickly and unmistakably detect any incidents occurring in their field of view. They are robust and cannot be blinded by strong lights or put out of order using laser pointers. They provide an ideal first line of strength that triggers further action, thus dramatically enhancing the effectiveness of your surveillance system.

**Put video analytics to work**

Thermal cameras are immune to most problems with light conditions, normal shadows, etc. – which makes them ideal for video analytics. They achieve higher accuracy than conventional cameras in most intelligent video applications.

**No place to hide**

Thermal cameras detect thermal radiation from people, even when they are obscured by complex backgrounds, or trying to hide in shadows.





### We'll put you in the picture

Thermal cameras are excellent for detecting people and vehicles and other objects in darkness and challenging conditions. Thermal cameras do not, however, deliver images that allow reliable identification. That is

why thermal cameras and conventional cameras support and complement each other, and why thermal network cameras are a perfect addition to any professional network video surveillance system that needs to secure an area 24 hours a day, seven days a week.

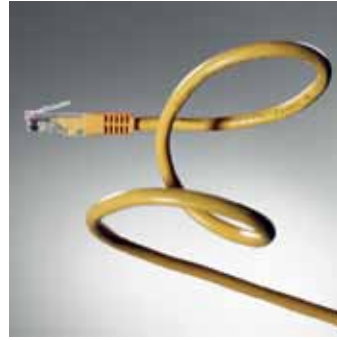
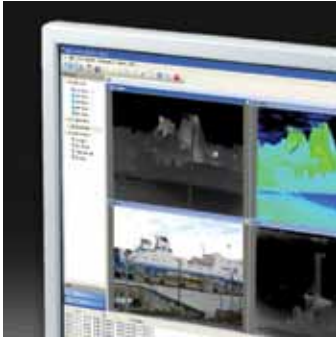
Network cameras



Thermal network cameras



Identification	★★★★★	★
Detection in daylight	★★★★	★★★★★
Detection at night	★★	★★★★★
Detection in difficult conditions	★★★	★★★★



## Easy, affordable thermal detection, plus all the usual Axis benefits

Offering reliable detection in darkness and other challenging conditions, Axis thermal network cameras are a perfect complement to any professional video surveillance system. They also offer all the benefits that make Axis network cameras your first choice, from out-of-the-box installation to support for the market's widest range of video management solutions. And unlike most thermal detection alternatives, they're easily affordable.

### **Cost-effective installation and easy integration**

Axis thermal network cameras are installed quickly and easy. They can utilize your existing IP infrastructure, so no new cabling needs to be drawn. Outdoor-ready models withstand harsh weather conditions – right out of the box. And the cameras run on Power over Ethernet, allowing them to be powered over the network, which eliminates the need for power cables and reduces installation costs. Or, for full flexibility, they can also run on standard 12/24V AC/DC power.

### **Smart cameras for smart systems**

Axis thermal network cameras have excellent processing power and offer intelligent video capabilities such as video motion detection and detection of camera tampering attempts like blocking or redirection. They also provide capacity for third-party analytics modules, including support for AXIS Camera Application Platform, an open interface for downloading video analytics applications to the cameras. Not least, Axis thermal network cameras support two-way audio, which allows the user to communicate with visitors and intruders.

### **Optimized storage and outstanding video performance**

Employing industry-standard video compression techniques such as Motion JPEG and H.264, Axis thermal network cameras minimize storage and bandwidth requirements on the network. At the same time they deliver outstanding video streaming performance of your choice of a variety of color palettes, which further enhances detection possibilities.

### **Access to the market's best range of video management systems**

Axis thermal network cameras employ Axis' industry-standard open interface, VAPIX®. This ensures that they will instantly work with the market's broadest selection of video management systems, ranging from Axis' own AXIS Camera Station for smaller systems, to hundreds of leading video management solutions from Axis' Application Development Partners.

# Strengthen your security system

Detecting any intruder that crosses your chosen perimeter, Axis thermal network cameras are your first line of strength. Besides alerting active physical response, they mesh perfectly with Axis network cameras, so you can make the most of your video surveillance capability.

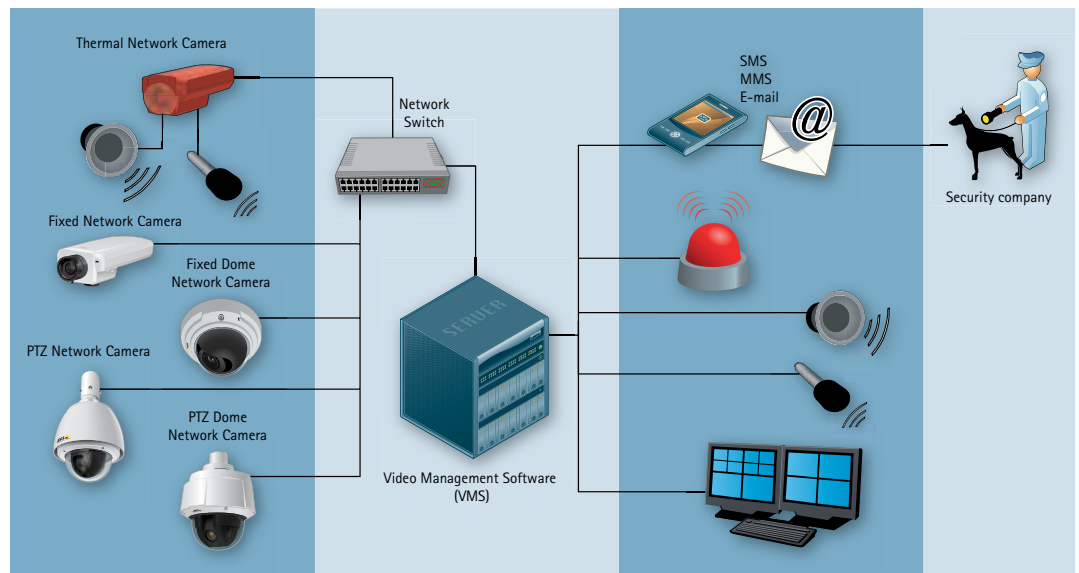


## A reliable trigger for the right response

Axis thermal network cameras are ideal for detecting people, objects and incidents in total darkness or a wide variety of difficult conditions. They can be used in many surveillance applications – and in manned as well as unmanned surveillance configurations. In either case, a moving object such as a person or a vehicle can function as a trigger.

Response can range from switching on lights, to steering a PTZ camera to the thermal camera's detection point, to video recording, to alerting a patrolling guard.

With affordable IP-based thermal network cameras from Axis, thermal imaging is a realistic option for enhancing any professional network video surveillance system.





# Thermal detection that solves real problems

Axis thermal network cameras form a perfect part of video surveillance systems in a variety of segments, such as government, transportation, city surveillance and education.

## Perimeter protection

An invisible thermal fence provides discreet and cost-effective detection

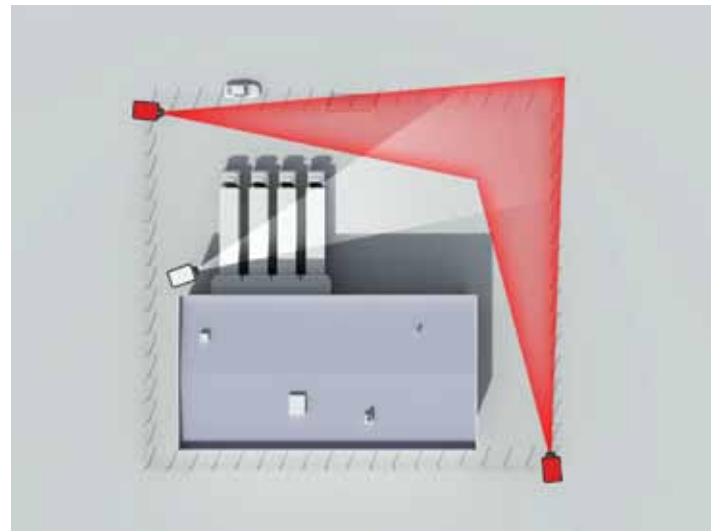
### Key drivers:

Powerful and cost-effective alternative to radio frequency intruder detection, electrified fences, CCTV/flood lights, etc.

- > Strengthens/augments physical fences
- > No IR illumination needed
- > Discreet - No light pollution

### Typical applications:

- > Ports and marinas
- > Power plants
- > Utilities
- > Prisons



## Area protection

Effective area protection gives cost-effective security

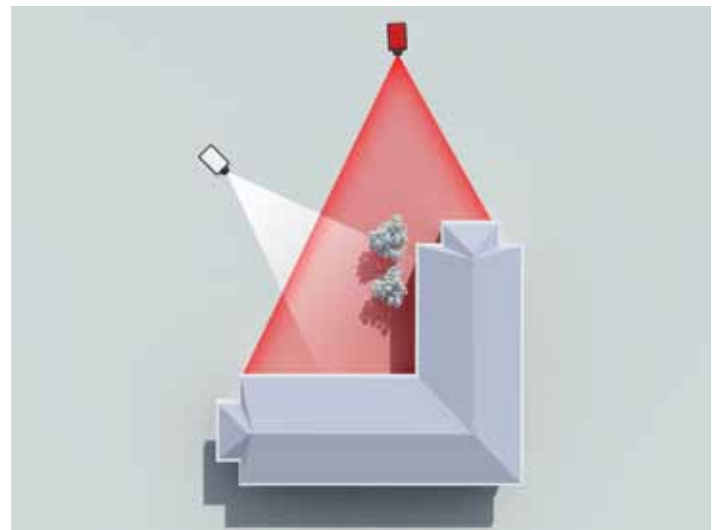
### Key drivers:

Thermal detection at outdoor locations triggers front line response to intruders, thereby helping minimize:

- > Vandalism
- > Burglary
- > False alarms

### Typical applications:

- > Parking lots
- > Schools and campuses
- > High-security premises
- > Loading docks







## Building security and emergency management

Detecting human presence indoors, after business hours or during emergencies

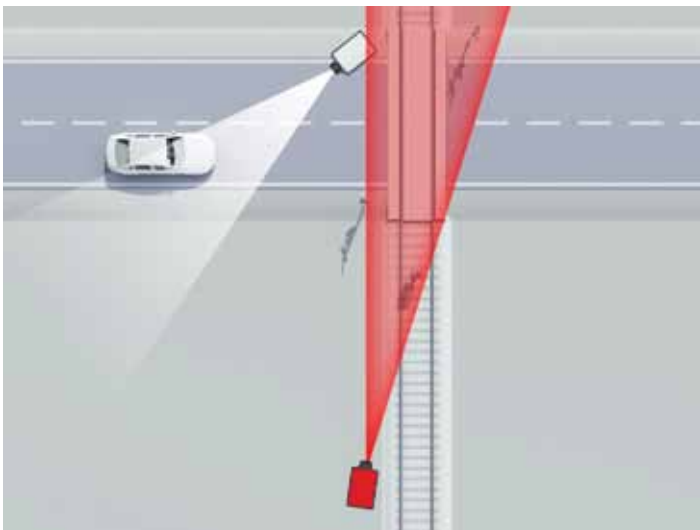
### Key drivers:

Quickly detecting human presence and incidents at indoor locations reduces or prevents:

- > People hiding in the building after closing time
- > Fire
- > Riots
- > False alarms

### Typical applications:

- > Retail stores
- > Office buildings
- > Prisons
- > Warehouses



## Public safety and security

Detecting human presence in dangerous or off-limits areas enables fast remedial action

### Key drivers:

Detection enhances safety and security in potentially dangerous environments:

- > Reduces accident risk and potential loss of life
- > Prevents vandalism and crime

### Typical applications:

- > Tunnels
- > Railway tracks and platforms
- > Bridges
- > Crossroads

# Axis thermal network cameras

In addition to their unique thermal detection capabilities, Axis thermal network cameras incorporate all the features that are standard in our top-of-the-range network video cameras, thus delivering a host of tangible benefits to professional video surveillance installations.



## AXIS Q1910 and AXIS Q1921 Thermal Network Cameras

- > Detection even in complete darkness
- > No separate light sources needed
- > Affordable – realistic complement to conventional network cameras
- > Multiple H.264 video streams with individual color palettes
- > Two-way audio
- > Motion detection, active tampering alarm, third-party analytics
- > Built-in SD/SDHC card slot
- > Power over Ethernet
- > 160x128 resolution at 8.33 frames per second
- > Easy integration with a wide range of video management systems
- > Supports ONVIF for interoperability between network video products



## AXIS Q1910-E and AXIS Q1921-E Thermal Network Cameras

Out-of-the-box outdoor-ready thermal network cameras designed to withstand harsh weather conditions, with all the features of the indoor version, plus:

- > Integrated window heater
- > Dustproof and protected against strong water jets – IP66-rated



## Wide range coverage

The wide selection of camera models makes it possible to optimize detection performance to meet most application requirements.

		Focal length	Viewing angle	Detection range			
				Size: 1.8 x 0.5 m		Size: 2.3 x 2.3 m	
	Resolution	Focal length	Horizontal	meters	yards	meters	yards
AXIS Q1910 AXIS Q1910-E	160x128	13 mm	17°	200	220	550	600
AXIS Q1921 AXIS Q1921-E	384x288	10 mm	55°	200	220	460	505
		19 mm	29°	380	415	870	950
AXIS Q1921-E	384x288	35 mm	15°	700	765	1610	1760
		60 mm	9°	1200	1312	2760	3020

# A broad portfolio of products

Axis offers the world's largest selection of network video products. Axis and its partners can meet all your needs for a complete professional video surveillance solution – from specification, to product, to installation and support.



## PTZ domes

Axis offers PTZ dome network cameras that perfectly complement thermal network cameras. Some, like AXIS Q6032-E, are even delivered outdoor-ready for easy installation. With IP66-rated casings, these cameras withstand the toughest weather conditions.



## Fixed cameras

Axis' portfolio of fixed network cameras includes several with megapixel/HDTV resolution for easy identification of people and vehicles. The robust AXIS P13 Series also offers remote back focus, digital PTZ, and superb HDTV image quality.



## Fixed domes

For discreet video surveillance, Axis offers a complete range of fixed domes. The AXIS P33 Series includes IP66-rated outdoor cameras with wide dynamic range for handling difficult lighting situations, and HDTV video quality for exceptional image detail.



## High resolution, for clear identification

Axis network cameras deliver superior image quality. AXIS Q1755 is an outstanding HDTV camera, ideal where clear images and greater image detail are required. It is the perfect solution when high quality identification is needed, such as airports, passport controls and casinos.



## Making analog CCTV work with network video

For customers with analog CCTV cameras, we offer a simple path to network video. Axis video encoders allow users to keep their analog cameras, while gaining key IP advantages. The products range from compact models to enterprise solutions such as AXIS Q7900.



## Industry-standard VAPIX® interface

All Axis products offer the same industry-standard VAPIX interface. When designing their video surveillance system, users can choose from the market's broadest range of video management systems – including Axis' own AXIS Camera Station.

## 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](http://www.axis.com)