

Transportation



Discover a new level of public transport security.

Centralized surveillance
in real time.

The right decision for every incident.

Handling multiple challenges in a diverse and dispersed transit system.

It's a complex task to overlook all the events that can happen in a city's transit system. At any given moment you could face violence at a station, critical injuries near moving vehicles, metal theft along the rails, vandalism at a depot and more. In order to stay on top of things you need a centralized surveillance system that can deliver crystal clear video – so you have the means to make the right decisions for every incident.

We offer a complete portfolio for monitoring the transit system ranging from cameras and encoders to recorders. Axis' cameras are platforms for the best intelligent applications in the industry, enabling early and smart decision-making support to security operators. With Axis you have the technology that lets your staff respond quickly and efficiently to incidents in real-time and thereby help to keep passengers, staff and property safe at all times.



Centralized surveillance in real time for total security.

For a transit system to be perceived as secure, passengers need to feel safe throughout their entire ride. For you, this means being connected with every node of the transit system so you can efficiently detect, prioritize and respond as incidents occur. With Axis' solutions the security center is connected to all cameras with live video – even wirelessly from rolling stock. And when an incident occurs, it's possible to share video with police and first responders for everyone to have a common operating picture and be prepared when arriving at the scene.

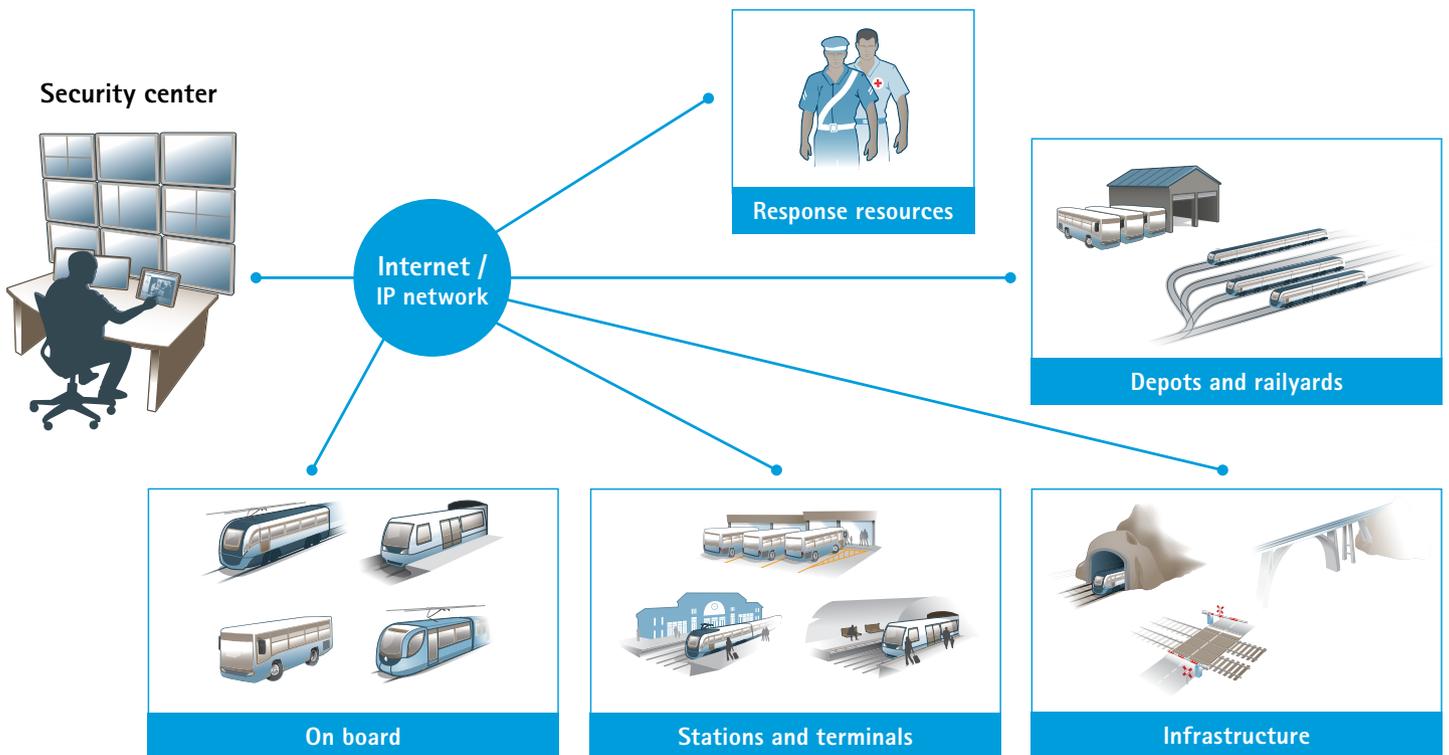
Smarter surveillance with intelligent cameras.

Axis' solutions are based on open standards, so you have total flexibility to integrate with other IP-systems and all major video management providers. This allows you to add cameras step by step - as they're needed. With Axis' encoders, it's possible to seamlessly integrate existing analog cameras into the network.

To make sure nothing escapes your attention, Axis has a video analytics platform which is open for some of the best partner applications in the industry.

Applications for

- > Perimeter and intrusion detection
- > Rail-track access
- > Overcrowding
- > Smoke detection
- > Aggression detection
- > Loitering
- > Face recognition



The right decision every step of the way.

When an incident occurs in the transit system, it is important to detect it early and respond quickly. The main goals of incident management are to minimize the incident impact, not escalate unless necessary and to use appropriate response resources. Axis' network video solutions provide a clear value in each step of an incident lifecycle, from detection, prioritization and response to investigation and follow-up.

Immediate detection

Traditionally, incidents are reported by passengers, staff or any of your security systems. Now, incidents can also be discovered automatically by an intelligent camera application. This enables the cameras to send an automatic alert to the security center at the moment an incident occurs.



During incident



Detection

Prioritization

Response

Visual assessment and identification

After detection, the incident needs to be prioritized against all other events happening at that time. With clear video from every part of the transit system regardless of light and weather conditions, operators can make a visual assessment and decide on what action to take – in real-time. Axis cameras deliver high-quality video to provide a clear view of the situation and valuable details of persons and objects.

Common operating picture

The handover between security personnel and response personnel can be done by sending live video streams to mobile devices wirelessly. This gives everyone a common operating picture, where it's possible to continuously monitor how a situation potentially escalates or develops, and responders can prepare for arrival at the incident scene.

Main search and re-evaluation tool

As an incident evolves and changes, video is the key to scanning and re-evaluating the incident. For instance, if a suspect leaves the scene, live and recorded video can be viewed to aid in the search for people involved. Access to relevant video makes it possible to quickly re-prioritize actions and response while keeping everyone informed.



Re-prioritization

Investigation

Follow-up

Post-incident

Positive identification and valid evidence

Video evidence is key in investigating incidents and showing the actual scenario from many different angles. It's vital for positively identifying people and avoiding any doubt of who did what. In low-light stations or in very bright light, Axis' cameras can adjust to still give high definition video.

Incident playback and organizational learning

In the follow-up phase, video can be played back to review real incidents with staff. By discussing and studying recorded video, a learning organization is created where newer and experienced staff can benefit from shared thoughts from real incidents.

Solutions for every part of your transit system.

With Axis you get a clear view of your transit system. Even in bad lighting conditions we'll make sure you can see what's going on. In the end it's about making sure your cameras have what it takes to capture the video you need.

Overcome difficult light

Axis' cameras are capable of seeing even in the most challenging of light conditions. For areas such as station backsides or rail infrastructure, Axis' Lightfinder gives high definition video in dark scenes without losing color. Wide Dynamic Range (WDR), on the other hand, adapts to varying levels of light in a scene. A person standing in front of a large window or traffic entering a tunnel is clearly captured with WDR. Our thermal cameras can furthermore aid in detection in complete darkness and challenging conditions. By using thermal imaging for detection of objects, vehicles and people, conditions such as smoke, haze, dust, and fog will not stop you from catching perpetrators crossing the tracks, for instance.

Intelligent video capabilities

Thanks to Axis' intelligent video capabilities, it's possible to make your transit system even more secure. Our open application platform allows specialized video analytics companies to develop applications that bring unique value to your incident management. These smart applications enable your cameras to automatically alert for potential or actual incidents.

Dedicated onboard solutions

With Axis you are able to get stable HDTV images of everyone onboard a bus or a train despite vehicle vibrations and movement. Video can be remotely viewed live at the same time as recorded onboard. All our solutions are certified for onboard use.



See through complete darkness, with Axis thermal cameras



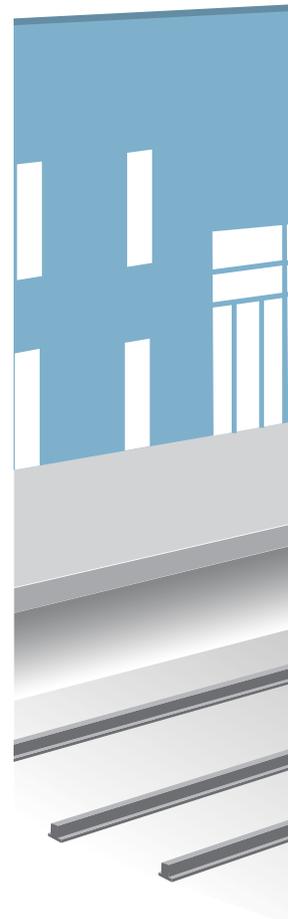
Maintain high definition and color in low-light



Image clarity in backlight and blinding light

Electronic image stabilization

Minimize effects from vibration and shaking.
> High video quality despite wind, train vibrations, etc.





AXIS Q60 Series

PTZ domes with up to 35x optical zoom for impressive detail in the most demanding surveillance applications, both indoors and outdoors. Exceptional coverage for large areas, for example in stations.



AXIS Q35 Series

Indoor and outdoor-ready cameras with HDTV resolution featuring seamless transition between WDR and Lightfinder technologies. Suitable for station areas, entrances and exits.



AXIS P39-R Network Cameras

Designed specifically for surveillance on buses, trains, subway cars and emergency vehicles. These compact, rugged and discreet cameras have protection against dust and water, and withstand vibration and shocks



AXIS Q19 Thermal Cameras Series

Detect people, objects and incidents in complete darkness and difficult conditions such as smoke, haze, dust and fog.



AXIS P13 Series

Robust cameras with up to 5-megapixel resolution. Ideal for stations, terminals and platforms.

Proven in some of the transit systems in the world



Madrid, Spain (buses)

With 2,100 buses operating 365 days a year, 24 hours a day, Madrid transports more than 425 million passengers each year in a 3,618-kilometer bus net.

“ We were very impressed by the capabilities of the Axis cameras. They provided the best image quality and...we haven't had a single issue with the cameras so far, despite the high number of units in use. ”

Iñigo Rodríguez-Rovira Rodríguez, Security Manager,
La Empresa Municipal de Transportes de Madrid (EMT)



Munich, Germany (trains)

MVG provides one of the most modern transit systems in the world. More than 500 million passengers travel every year via bus, tram and subway lines.

“ In addition to the preventative aspect - i.e., the curbing of crime - video surveillance also makes an indispensable contribution to the criminal investigation and identification of perpetrators. ”

Harald Pickert, Head of Crime Division, Police Headquarters Munich



Ningbo, China (subway)

All 20 stations are equipped with Axis video solutions to assure excellence in security. The installation, which is connected to public security bureaus and police stations, enables efficient security management, immediate response to incidents and timely interaction among critical stakeholders.

“ Axis helps keep Ningbo's Subway #1 open to traffic with outstanding video images. ”

Luo Ji, vice general manager of Rail Transition at Zhejiang Supcon Information Co., Ltd.

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Quito, Ecuador (buses)

The Trolleybus public transportation fleet in Quito, Ecuador mobilizes a ridership of 250,000 passengers daily. The surveillance system is centrally monitored and includes a passenger counting solution for improved operations.

“ The solution has led to improved transportation system security, supporting operations through provisioning of the fleet and warnings given before events that could affect the operation and safety of transportation corridors. ”

Franklin Caranqui, Technology Coordinator for the Quito Metropolitan Passenger Transportation Authority.



Stockholm, Sweden (stations)

Jernhusen owns and manages two of Sweden's most visited properties, the Central Station and City Terminal in Stockholm. Both are equipped with a user-friendly and flexible Axis IP system for security, safety and efficiency.

“ As I am trained in analog systems, I was a little worried, but my reservations soon disappeared. All of the operators are extremely satisfied. ”

Markus Sedenberg, Safety Manager at Central Station and City Terminal.

About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the global market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to its customers and carried through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 1,800 dedicated employees in more than 40 countries around the world, supported by a network of over 70,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ Stockholm under the ticker AXIS.

For more information about Axis, please visit our website www.axis.com.