# **Transportation**



# The road to smarter traffic monitoring

with Axis network video solutions.



# Bringing u closer traffic

By 2025, it's predicted that every day 6.2 billion private motorized trips will be made in cities worldwide\*. That means more roads, more road users and even greater pressure to get everyone from A to B, safely and efficiently. It's a huge challenge for traffic management centers and a testing time for traffic monitoring technology.

Roads don't run on guesswork. Traffic management centers need instant access to accurate, real-time information – 24/7. Only then, can you detect incidents early and respond quickly. That's where Axis traffic monitoring solutions can help.

Together with our partners, we offer smart solutions that give you a broader, deeper understanding of the traffic situation - in any conditions.



# With our 30 years of experience, spanning a broad range of industries from retail and transport to education and healthcare, we've been Aware, able to develop technology that can perform in any condition and bring unique value to each user group. Our traffic monitoring solutions put you at the heart of the action and help you keep the traffic flowing smoothly – at all times. prepared and in control - today and tomorrow.

From congestion and stopped vehicles

weather, we understand the challenges you face every day. We know it's not just important to improve the traffic situation in real time, but also over time. That's why we've developed the right solutions

to serious accidents and extreme

to help you achieve this.

### Smarter traffic monitoring with intelligent cameras.

# Network cameras are a giant leap forward for traffic monitoring; they provide better video quality and allow for additional, built-in 'intelligent' capabilities.

At Axis, we've taken camera intelligence a step further. We've included an open application platform in all of our cameras and video encoders, allowing specialized video analytics companies to develop applications that bring unique value to specific users. So now, not only can your traffic cameras provide high-quality live monitoring, they can also be used for automatic incident detection, vehicle counting, vehicle classification and license plate recognition.

The smart applications run directly in the cameras so you don't need to stream video continuously to your traffic management center from all your cameras. This minimizes the costs for storage and processing power in comparison with server-based applications.





#### **Applications for**

- > Automatic incident detection
- > License plate recognition
- > Vehicle counting
- > Vehicle classification

For all available applications, visit www.axis.com/apps

- new apps are added regularly.

#### **Automatic incident detection**

You no longer have to wait for someone to report an incident – Axis traffic cameras can automatically alert you when there is congestion, a stopped vehicle or even someone driving in the wrong direction. You can act quickly, minimize the impact and keep the traffic flowing as smoothly as possible.

#### **Data collection**

With the right application, Axis cameras can automatically provide real-time and historical statistics of the traffic situation. So instead of using induction loops, magnetic sensors or similar, you can use your Axis cameras for efficient data collection.

## A complete traffic monitoring solution – for any light and

To manage your traffic efficiently, you need a clear, accurate, instant view of the traffic situation - 24/7. Axis solutions can give you just that, bringing you closer to the traffic than ever before.

#### Overcome difficult light

Axis' Wide Dynamic Range (WDR) capabilities give you impressive video quality in complex, high-contrast light conditions. They can minimize the effects of blinding headlights, sunlight and wet pavement reflections, allowing you to see what is going on - even in the trickiest light conditions. And if there is no light at all, you can count on Axis' thermal cameras to keep you in the picture, creating images of the heat that radiates from objects, vehicles and people.

#### Withstand extreme weather

Traffic cameras are up against the elements. With robust, weatherproof casings, Axis cameras withstand harsh weather conditions. Features such as Arctic Temperature Control and Active Cooling enable daily operation at extreme temperatures from -40°C up to 75°C (-40°F up to 167°F).

#### Minimize disruption

Our aim is to make your job easier from the very beginning. That's why our cameras are quick and easy to install. So, even before you've switched them on, they've already helped to minimize delays and keep the traffic moving.

#### Get more from your cameras

Still using analog traffic cameras? We can guide you to cost-efficient migration to IP, enhancing the investments you've already made. And, because our world-leading range of network video products is based on open standards, you'll always benefit from a scalable, flexible and future-proof solution.



Read distant license plate with 18x optical zoom and HDTV 1080p



See through complete darkness with Axis thermal cameras



Get valuable incident details in HDTV video quality

#### High-speed PTZ cameras

Support mission-critical incident management.

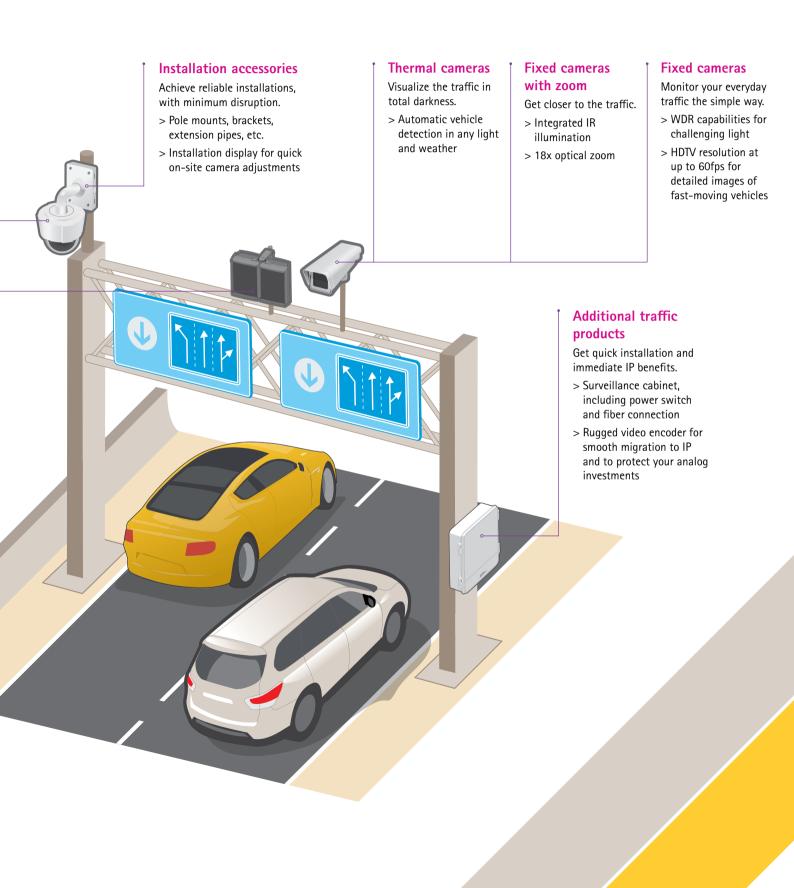
- > Up to 36x optical zoom
- > Models with image stabilization and defogging

#### Illuminators

Choose the green option for continuous light in darkness.

- > White and infra-red LED illuminators
- > Extremely low energy consumption

#### weather situation.



#### Proven on some of the busiest roads in the world.



#### Safer tunnels in England

Axis network cameras help safeguard motorists traveling through the Tyne Tunnel in the North East of England. The system alerts the tunnel staff when incidents occur, so they can react quickly and appropriately.

If The safety of anyone passing through the tunnels is imperative. The ability to share and access video images is essential in those situations where immediate and urgent action is required.

Peter Houlis Managing Director, 2020 Vision Technology



#### Increasing highway safety in Colombia

Axis security cameras cover more than 1,000 kilometers on highways leading to Bogotá, Colombia. The system provides support to the national armed forces and police, helping them react faster to criminal acts and reduce accident rates.

Axis has been positive, allowing us to provide better security and react more effectively to events and incidents that happen on the highways. I

Jose Leónidas Narváez Director, National Institute of Roads (INVIAS)



#### Safer streets in North America

The city of Dubuque in lowa is giving the green light to safer streets with the help of Axis IP technology. 260 cameras have been installed at 80 intersections around the city.

If The system gives me a really good heartbeat on the city... Even when the lights are shining right on the camera, you can see the sidewalk in the dark behind it.!!

David Ness Professional Engineer, City of Dubuque



#### Improved traffic control in Czech Republic

The city of Ostrava uses a traffic camera system with nearly 300 network cameras to provide safety and smooth traffic flow at 59 key junctions. The system also serves the broader public by offering valuable traffic information over the internet.

system is a considerable improvement to the organization of the traffic in the city and to road safety.

Roman Cieśla Project Manager, Ovanet



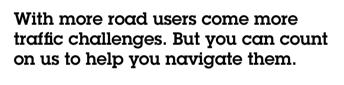
#### Live traffic updates in the Philippines

The Metro Manila Development Authority relies on Axis cameras to monitor and manage traffic remotely. It can share live footage with motorists via Twitter to avoid congestion and can react instantly to situations such as accidents, flooding and stalled vehicles. With high image quality, they can also identify persons or vehicles involved in accidents, and zoom in to identify license plates.

66 Our top priority was being able to access real-time information on traffic conditions. Timely information on situations such as obstructions or accidents that could lead to traffic jams can help tremendously in monitoring traffic effectively.

Yves P. Gonzalez Technology Evangelist, Metropolitan Manila Development Authority





Our traffic monitoring solutions meet every traffic challenge. They'll give you a clear, accurate overview of the traffic situation so you can keep the traffic flowing – no matter what the conditions. With the expertise of our extensive partner network, we can provide future-proof solutions that are tailored to your specific needs. So, no matter what happens on the roads, you'll always be prepared.



# **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 1,600 dedicated employees in more than 40 countries around the world, supported by a network of over 60,000 partners across 179 countries. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ OMX Stockholm under the ticker AXIS.

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

Find out more about Axis traffic monitoring solutions at www.axis.com/traffic

