

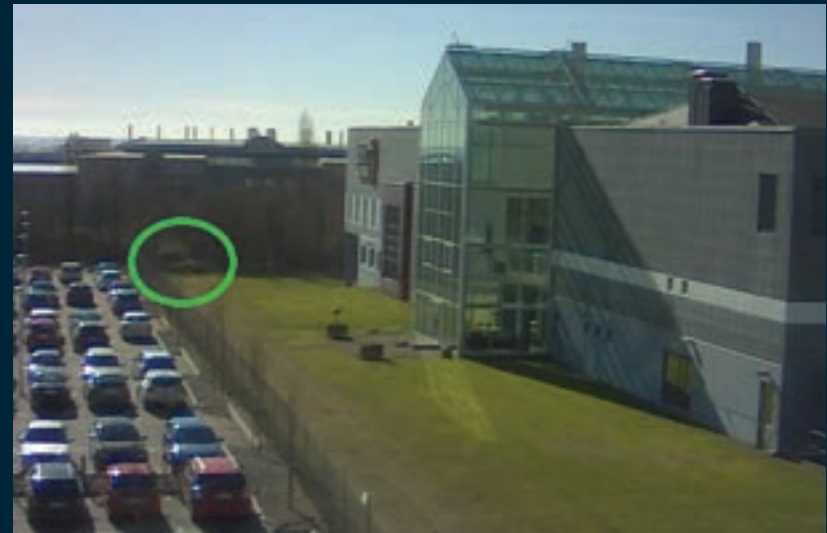
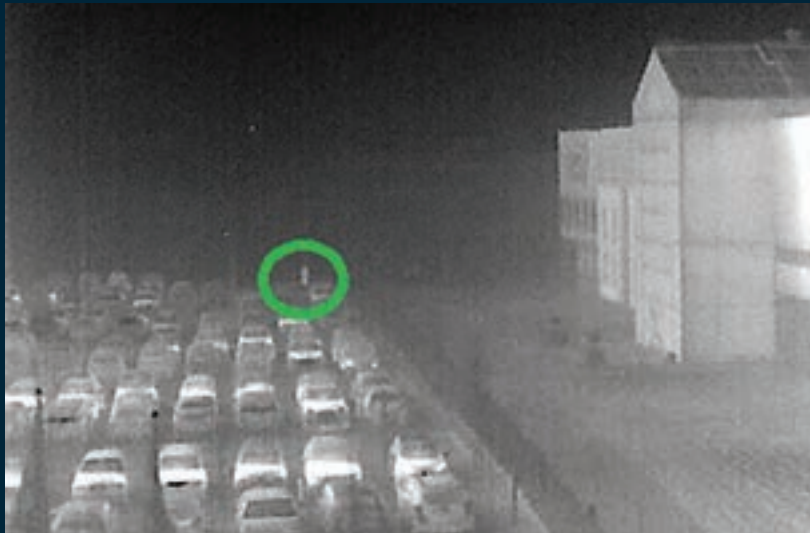
An aerial photograph of a large solar farm with rows of photovoltaic panels stretching across a field. A semi-transparent thermal image is overlaid on the scene, showing heat signatures in shades of yellow and orange. In the top-left corner, there is a close-up of a person's arm wearing a yellow protective sleeve and a black mesh glove, reaching towards the solar panels.

Axis thermal cameras

Reliable detection and verification,
without compromising privacy.



Picturing
the invisible.



The green circles indicate the presence of a person. In the visual images (on the right), the person is invisible. In the thermal images (on the left), the person is visible.

When you need reliable round-the-clock detection, Axis thermal cameras are an excellent – and cost-effective – solution.

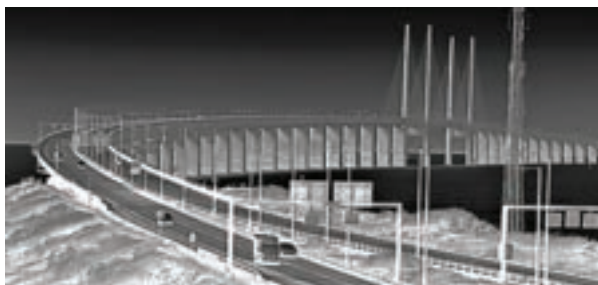
There's no hiding from them. Because they capture images based solely on the heat radiating from people and objects, they're unaffected by darkness or poor visibility. So they're as accurate in pitch black, fog, and camouflage as they are on a bright sunny day.

And just like our visual cameras, Axis thermal cameras support intelligent analytics. Together, they analyze detected incidents, automatically dismiss non-threatening ones, and immediately notify security personnel of critical situations. No need to worry about privacy issues; with Axis thermal cameras you'll remain safely in compliance.

It's clear: Axis thermal cameras give you the "sight" – and the insight – you need to protect property, perimeters, and people.

Cameras that see in the dark.

It used to be that only superheroes could see in the dark. But since thermal cameras don't depend on a light source, now you can too. Let Axis thermal cameras serve as your protector and defender. They'll strengthen your power to detect, verify, act, and protect privacy – while providing cost savings.



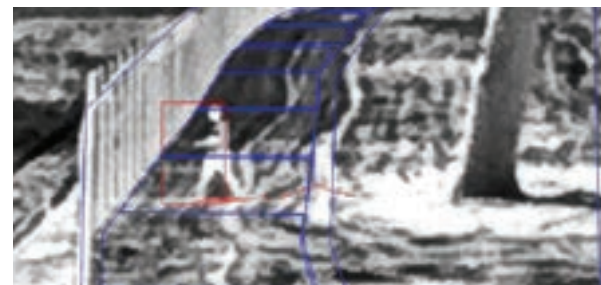
Thermal imaging is hot!

Axis thermal cameras are a great first line of defense. Every object – organic or inorganic – emits infrared radiation (heat) as a function of its temperature. Using thermal imaging technology, thermal cameras see this heat and convert it into visible images. Since the objects themselves emit heat that thermal cameras detect, thermal cameras are not dependent on light and can detect in all light conditions, 24/7. They also work under other challenging conditions, like smoke and dust. They can detect heat leaks in buildings and processes. And Axis thermometric cameras can monitor for dangerous temperature variances in processes and then trigger alarms.



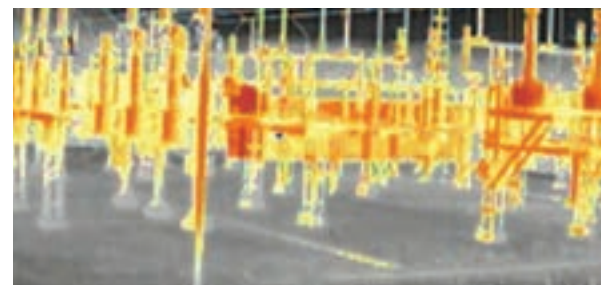
Scare them away!

What if there really is something out there? Not only can Axis thermal cameras detect incidents, they can deter unwanted activity. For example, built-in analytics can trigger preselected responses that deter intruders. A recorded warning can be set off or floodlights turned on. Or an operator can receive an alert and then deliver a live warning or dispatch a security guard immediately – or both. They also protect privacy, helping you conform with regulations when used for deterrence and verification.



What was that?

It's one thing to detect unwanted activity, another to know if it's really a problem. That's where verification and analytics from Axis and our partners come in. Axis thermal cameras detect suspicious activity and use analytics to analyze what's happening and send notifications to personnel. Analytics can also trigger a PTZ (pan, tilt, and zoom) camera to zoom in on a particular area or a fixed camera to begin recording, allowing personnel to evaluate situations and respond appropriately. In addition, there are analytics available that exclude certain response triggering things (such as small animals, for example).



Not too hot. Not too cold.

Sometimes a few degrees make all the difference. And not in a good way. Switches, gears, gas and water turbines, transformers and electrical substrates, coal piles, dump sites, silos, and more. All kinds of equipment and sites are prone to reaching excessive temperatures that can cause damage or put lives at risk. But Axis thermometric cameras can help. They can send alarms when temperatures rise or fall. Or operators can use isothermal palettes to keep an eye on temperatures and do spot checks by clicking on an image. If it's too hot or too cold, Axis thermometric cameras let you know before it's too late.

A full moon is visible in the upper right portion of the frame, partially obscured by dark, textured clouds. The sky is a deep, dark blue. Below the horizon line, which is roughly in the middle of the image, are rolling green hills. The hills are covered in grass and are illuminated from the right, creating a soft gradient of green. The overall scene is a serene night landscape.

All that, and save money too.

With so many benefits, can they really also be affordable? Yes. Because, together with intelligent analytics, Axis thermal cameras can detect incidents and objects from further away than visual cameras can, so you'll need fewer cameras to monitor an area. And since they provide more reliable detection and verification, you'll get fewer false alarms (so your personnel won't spend time chasing plastic bags in the wind).

Need more convincing? Axis Zipstream technology dramatically lowers bandwidth and storage requirements for many common surveillance situations. Our thermal cameras are out-of-the-box ready for quick and easy installation, and they're tough and durable – withstanding even the harshest weather conditions. Because they're readily integrated with other networks, this means less labor and lower cabling costs. Lots of benefits, and budget-friendly.



DETECT

Real-time incident
detection



VERIFY AND ACT

Automatic
notification



IDENTIFY



DETER



MANAGEMENT AND FORENSIC ANALYSIS

Remote monitoring

To prevent a crime...

What if you could stop a crime before it happens? Thankfully, Axis thermal cameras can help you do just that. They let you detect, deter, and act fast: with lights or audio, and by alerting personnel who can send a security guard. These steps will often be enough to scare the perpetrator away, so you can stop unwanted activity in its tracks.

Increasingly, businesses know that thermal cameras are a great option for detection and deterrence in many different situations. Whether you need to safeguard a plant's perimeter, secure a national border, or protect a schoolyard after hours, thermal cameras are up to it. Plus they can detect and classify objects even when a scene is dark and smoky and a visual camera would be "blind." And thermometric camera models can give early warnings in potentially dangerous situations like overheating or self-ignition.

But what if complying with privacy regulations is a consideration? Don't worry. With Axis thermal cameras you can protect people and businesses while also respecting privacy. Thermal cameras don't deliver images that allow reliable identification, so they're perfect anywhere privacy is important. For example, they're ideal for protecting patients in hospitals, the elderly in nursing homes, and students in schoolyards.



To catch a thief...

While in some situations protecting privacy is an advantage, there are of course times when you want to be able to identify individuals. So it's fortunate that Axis thermal cameras can be integrated with Axis visual cameras in a system that will help you identify suspected criminals. How? With the help of analytics, events detected by your thermal cameras can trigger visual cameras to start recording high-quality images. You can then use those images for identification and other forensic purposes.



What keeps you up at night?

Axis thermal cameras keep sight of what's important to you, by providing excellent, targeted surveillance solutions in many different areas. Axis can also offer easy integration with a wide range of third-party video analytics. Let us help make your surveillance as smart and strong as it can be.



How can we help you?

Fixed thermal cameras

Perimeter protection

Axis fixed thermal cameras "see" in the dark over long distances, triggering alerts when intruders enter predefined areas. They're perfect for protecting perimeters in applications that range from industry, government, critical infrastructure and transportation to residential. These thermal cameras come with AXIS Motion Guard, AXIS Fence Guard, and AXIS Loitering Guard preinstalled. You can also choose to add AXIS Perimeter Defender, which detects and classifies humans and vehicles.



Bispectral positioning cameras

Border control

With a powerful and cost-effective combination of visual and thermal video in one device, these cameras offer superior surveillance for borders (and other applications with similar requirements). You need only one camera and a single IP address to benefit from long-distance thermal detection, visual identification, and PTZ capabilities.



Thermal modular cameras

Protecting privacy while monitoring patients and seniors

When used in healthcare, senior living or similar, these thermal cameras with embedded motion-detection analytics protect personal privacy while quickly alerting staff to unexpected motion that might mean a patient has fallen or needs medical assistance. Highly discreet design also helps minimize the feeling of being watched so people can rest easier. And these modular thermal cameras come at a relatively low price point.



Thermal cameras that measure temperature

Process monitoring and safety

When materials processed in critical environments reach excessive temperatures it can threaten safety or your operations. Axis thermometric cameras alert you when temperatures go above or below a set limit or increase too rapidly. So you can keep your processes and installations safe, while ensuring operational efficiency.



Axis thermal cameras and AXIS Perimeter Defender: a perfect partnership

Together with intelligent analytics, like AXIS Perimeter Defender, thermal cameras detect and classify humans and vehicles in complete darkness or in other challenging conditions such as smoke and dust. The high level of contrast in thermal images makes for increased accuracy when thermal cameras and analytics are used together. False alerts are minimized because environmental conditions such as lighting changes, rain, snow, moving vegetation, insects, reflections, and shadows are much less likely to trigger false alarms.

Detection and classification of humans and vehicles

AXIS Perimeter Defender detects and classifies moving humans and vehicles. For selected thermal cameras, it also supports human and vehicle classifications based on AI (artificial intelligence). AXIS Perimeter Defender can trigger an alarm using multiple detection scenarios based on predefined intrusion zones, zone crossing, conditional zone crossing, and loitering.

Axis thermal cameras equipped with AXIS Perimeter Defender send accurate notifications to alert staff to situations where intervention is required. Or visual cameras can be triggered to start recording or to zoom in on an area when a thermal camera detects an intruder, allowing security staff to visually assess the situation and then act accordingly. And the optional PTZ autotracking app can cause a PTZ camera to automatically zoom-in on and track objects detected by AXIS Perimeter Defender analytics.





Why Axis thermal cameras are red hot

Companies around the world have already experienced the many benefits of Axis thermal cameras – and you should too. On their own, or as part of a complete surveillance solution, Axis thermal cameras let you detect and verify unwanted activity – and react appropriately.

Use them for:

- > Perimeter protection
- > Border control
- > Monitoring with privacy protection
- > Process monitoring and safety

For more information, visit:

www.axis.com/products/thermal-cameras

The Axis advantage

- > Over a decade of experience developing thermal cameras
- > Analytics and integration with other systems for cost-effective operations
- > Built-in cybersecurity features
- > Open platform
- > Edge-to-edge technology*
- > Electronic image stabilization
- > Shock detection
- > Minimal bandwidth and storage requirements, with Axis Zipstream technology
- > Remote monitoring and alerts for efficient personnel deployment
- > Scalable, future-proof solutions
- > Global partner network

*Easily pair Axis network audio products with cameras to add audio functionality

About Axis Communications

Axis enables a smarter and safer world by creating network solutions that provide insights for improving security and new ways of doing business. As the industry leader in network video, Axis offers products and services for video surveillance and analytics, access control, intercom and audio systems. Axis has more than 3,800 dedicated employees in over 50 countries and collaborates with partners worldwide to deliver customer solutions. Axis was founded in 1984 and has its headquarters in Lund, Sweden.

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