

Securing the perimeter of mission-critical sites such as energy and utility plants is extremely challenging. Operators need to know what's happening in every area around the facility as early as possible, day or night, to confirm that assets are secure. They also need reliable, detailed information from their video system regardless of weather, temperature, vibration, or shock so they can assess any situation and respond quickly to incidents.

The solution

The MIC IP fusion 9000i camera family from Bosch presents an ideal solution for perimeter detection along a fence line at an energy or utility facility, data center, or other mission-critical sites. The cameras employ a unique technology, metadata fusion, to blend object detection data from thermal and optical video analytics streams and display them in one view. As with all MIC cameras, the MIC IP fusion 9000i cameras are rugged by nature and offer built-in Intelligent Video Analytics, specifically designed to withstand the harshest environments. Even in the most extreme conditions, video data can be interpreted directly at the source to improve the security level further and enable video data to do more than security alone.

The new 9mm lens delivers maximum situational awareness

Most critical infrastructure applications need cameras to detect activity in and around a fenced perimeter. Cameras are typically mounted on a fence line or just inside to detect short-range objects. Thanks to the new 9mm lens, the MIC IP fusion 9000i 9mm camera captures a wide scene quickly. With its wider thermal field of view (70° x 52°), the camera requires only six prepositions to provide 360 degree coverage in approximately 30 seconds. Because the camera covers a wide area, the number of cameras needed can be reduced, lowering total costs.

Choosing a lens option

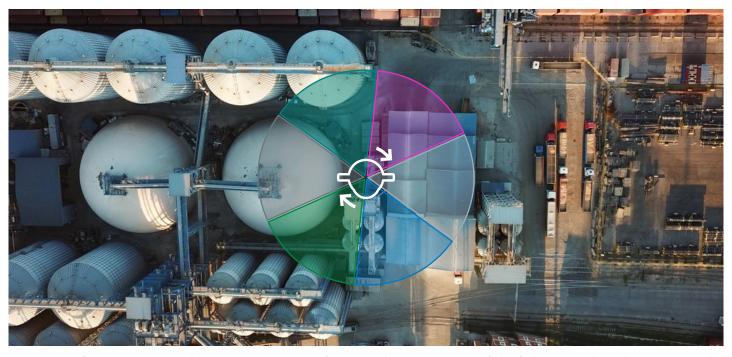
Long, short or medium range perimeter detection applications require different lenses to detect activity in and around the fenced perimeter. For short range applications in which a wide scene (360 degree) must be fully captured swiftly, the new 9mm lens is the ideal option. For medium range applications, the 19mm lens is the right pick. A longer range lens (50mm) is used in applications where long-range detection/early warning is important. For example monitoring activity along borders, in shipping channels or on airport runways.

Rugged design

The lifespan for a MIC camera typically exceeds 10 years even when exposed to constant vibrations or for example road debris impacts. Designed to perform in any environment, the solid metal body withstands:

- ► High wind
- ► Rain and snow
- ▶ 100% humidity
- ► Temperatures from 40° to 65° C (-40° to 149° F)

The superior metallurgy and finish provide exceptional protection against corrosion. With MIC cameras, your investment is protected against the harshest conditions.



New MIC IP fusion 9000i 9mm lens: six pre-positions for a 360 degree coverage of the full scene in less than 30 seconds

Metadata fusion

All MIC IP fusion 9000i cameras combine a thermal imager with an optical camera in a single housing. It employs a unique technology, metadata fusion, to blend object detection data from both thermal and optical video analytics streams and display them in one view. Metadata fusion focuses on the invisible things that need attention and provides operators with overall awareness of their environment regardless of which video stream they are watching.

Analytics for perimeter security

Like all MIC cameras, MIC IP fusion 9000i cameras offer built-in Intelligent Video Analytics, specifically designed to withstand the harshest environments. MIC IP cameras use all-metal gears to provide greater resistance to shock and vibration and contribute to a longer operational life than cameras with plastic gears and rubber belts. Even in the most extreme conditions, video data can be interpreted directly at the source to improve the security level further or enable the video data to do more than security alone. The range of analytic functions for perimeter security includes line crossing, object left behind, loitering, and more. Operators can configure built-in camera analytics to ignore wildlife approaching the perimeter in remote, unstaffed locations. This setup can significantly reduce false alarms and the time and expense of security operators investigating the problem.

Reliable performance in perimeter detection applications

MIC cameras are a smart investment for perimeter detection applications for mission critical applications. They offer innovative features that ensure reliability and durability with minimal maintenance – lowering the total cost of ownership and improving sustainability.

All metal gears and brushless positioning motors

All-metal intermeshing gears provide:

- ▶ Greater resistance to shock and vibration
- ► Longer operational life compared to cameras with plastic gears and rubber belts

A high-efficiency solid-state motor with brushless positioning motors also ensures continuous operation without significant wear and tear or troublesome camera positioning slip.

Closed loop positioning

The cameras never need recalibration. If exposed to a heavy shock or external force, like gale force winds, the positional encoders:

- ► Send feedback to the control software to correct any errors
- Steer the camera back to the exact preprogrammed positions

The camera never loses positioning, returning to presets with unprecedented accuracy