BOSCH
Invented for life

Radio frequency detection

Closing the gaps in your mid- to long-range security solution

The challenge

There has been a breach to your perimeter security and someone is heading for your facility at high speed. Using only manual cameras without built-in analytics, it's up to your security operator to spot the event and track the target themselves.

Similarly, without direct integration between detection systems like cameras and RF panels, operators must work via the video management system connecting the two before they can review the video. These actions are time-consuming and limit the effectiveness of the automated systems, resulting in delayed notification to local authorities and slower response times.

Security gaps also contribute to slow downs. Because traditional video security cameras only point in one direction at a time, their field of view is limited which can create gaps in your security. If cameras lag when tracking, targets can easily escape the field of view Alternatively, when cameras are zoomed out to ensure the target remains in view, updates are slow and details are difficult to distinguish.

Without a way to assess the situation early and take immediate action, the safety and security of your critical infrastructure could be compromised.

The solution

By integrating RF detection panels, like those from SpotterRF, with our security system, our "slew to cue" solution acts as one intelligent system, enhancing situational awareness and covering longer distances than a camera could detect alone. That means fewer cameras are needed to cover larger areas, which makes it a highly cost-effective solution that requires less installation and maintenance. Furthermore, because of the seamless integration, the RF detection system can directly communicate with our moving cameras to drive detection and tracking of objects or targets as they move. This can be done faster than most other cameras via our high speed location updates at least every 1.5 seconds. And because they focus close up on the target, you are still able to see every detail.

The automatic choice for fast, effective detection

With an RF detection system directly integrated into Bosch MIC IP and AUTODOME IP cameras, we can ensure quicker and smoother detection of potential security incidents. Automated tracking is faster and more accurate than manual alternatives and the "slew to cue" feature enabled by the cameras also provides automated, Intelligent Tracking analytics to extend the system's capabilities even further. The integration benefits from analytics provided by partners like SpotterRF extends the effective detection even further. When integrating with a partner's automated tracking classification technology, a more specific classification type and confidence level can be automatically assigned for each target detected. Making use of such AI and machine learning technologies helps to reduce false alerts and enables improved system performance. All this information comes together to provide true situational awareness for the most reliable security solution possible.

Act fast with analytics at the edge

All Bosch moving cameras have built-in Video Analytics to enable them to interpret scenes so that they can detect and alert automatically, enabling operators to respond to potential threats quickly and more efficiently. And because each camera operates independently your security infrastructure is more resilient and reliable.

Respond in real time with Intelligent Tracking

Once an alarm is triggered, moving targets are tracked automatically by the camera closest to the incident. At the same time, operators receive an alert making it faster for them to track the source via the camera that is already capturing the event. Dynamically adjusting the field of view while the camera pans, tilts or zooms ensures that all images are captured with optimal clarity.

Direct drive motor for accuracy

Furthermore, Bosch MIC IP cameras feature an industry-leading robust gear design with a corrective feedback position system to ensure the solution stays calibrated over the life of the installation.
This ruggedized system makes them far superior at retaining an accurate home position than belt-driven alternatives, which often wear down over time and lose their positioning, or break and result in total failure of the drive mechanism.

Rugged camera options

Specifically designed for high security applications like energy and utility facilities, Bosch MIC IP cameras are extremely robust and resistant to shock, vibrations and

RF panel from SpotterRF with Bosch MIC IP fusion 9000i

corrosive atmospheres. The solid metal bodies of the MIC IP cameras can withstand severe weather conditions. That includes high winds, rain, fog, dust and 100% humidity (UL Type 6P and IP68), temperatures from -40°C to +65°C, extreme vibrations (IEC60068) and high impacts (IK10).

Image stabilization

All Bosch MIC IP cameras have an image stabilization feature to minimize movement caused by external forces that could shift the field of view and render images unusable. The algorithm enables the cameras to detect continuous vibration and correct a shaky video in both the vertical and horizontal axis. This results in exceptional image clarity and a stable field of view on the operator's monitor.

Highest levels of data security

Bosch solutions also meet the highest standards in end-to-end data security. These include network authentication keys for individual network components, managed user access rights, and encryption at the hardware level with a cryptographic key stored in a unique Trusted Platform Module.

Seamless integration

Our technology partners, like SpotterRF, can integrate RF panels with Bosch MIC IP and AUTODOME IP moving security cameras. Our Video Management System partners such as IEnet, Siemens, G4S, and Genetec can integrate a wide range of compatible systems. This enables you to benefit from our advanced integrated solutions with just a few simple upgrades to your existing system, and for a relatively low cost.