



**Our focus is** innovating security  
where you need it most

Cameras which trigger alarms and alert you when needed



**BOSCH**

Invented for life

## Cameras which trigger alarms and alert you when needed

As an airport security professional, you appreciate the importance of reliable video surveillance. It is essential to monitor the vast off-limit areas, the extensive airfield perimeters, and the continuous flow of people and objects. But even the best video surveillance systems rely on the security staff watching the on-screen images, and we know that it is impossible to stay 100% concentrated all of the time.

In fact, recent studies reported in Security Oz magazine claim that after just 12 minutes of continuous video monitoring, the average operator will miss up to 45% of screen activity. And after 22 minutes, up to 95% is overlooked. So additional video analysis support to minimize possible human error is vital, especially for modern airport video surveillance. That's why we offer cameras with built-in video content

analysis; commonly called Intelligent Video Analysis (IVA). Cameras with IVA recognize relevant events and alert the security operator the moment they are needed. This minimizes the risk that events go unnoticed due to human error or fatigue.



## Three keys to maximize video surveillance robustness

### ► 1: Professional human operators

Your personnel must be trained to work with advanced equipment so they fully understand how it works and what their role is. Human interpretation is still needed to define if actions are needed.

### ► 2: Excellent IP video cameras

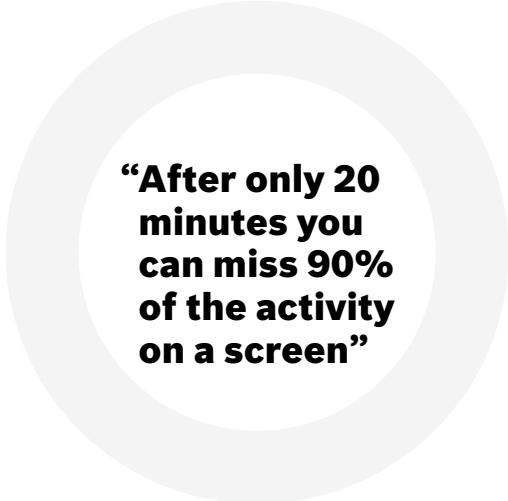
Your IP video cameras must overcome challenging lighting conditions with high contrast scenes, low light levels and extreme conditions (punishing winds, relentless rain, huge temperature fluctuations, dust clouds, or high impacts). Depending on the application, cameras must capture fast-moving objects, and locate, track and zoom-in on details. To identify people, the correct resolution needs to be chosen. And, since video storage is one of the highest costs of any video surveillance system, our IP cameras provide high quality images when necessary, and low bitrates where possible.

### ► 3: Intelligent Video Analysis

IVA helps an operator by focusing their attention on one of the following events:

- Someone enters a restricted area
- Someone loitering
- A crowded corridor
- A safety exit is obstructed
- A car or person moves against the general flow
- A camera is tampered with
- An object is left unattended

**Fortunately, Bosch can provide excellent IP cameras and superior intelligence.**



**“After only 20 minutes you can miss 90% of the activity on a screen”**

## Superior intelligence or Intelligent Video Analysis helps to:

### Reduce false alarms

False alarms are time-consuming and costly, but Intelligent Video Analysis can help reduce this by combining alarm rules. This means that alarms can be set in parallel, and can be fine-tuned with object filters at any time. Also use the “forensic search” feature to validate the settings of your alarm tasks with recorded video footage to improve alarm accuracy. By using the scripting feature, you gain even more advanced fine-tuning and scenario management (if, then, else...). Scripting lets you customize your video analytics solution and design your own alarm triggers based on your rules. This further reduces false alarms and enables you to fine-tune your surveillance system to fit your needs precisely.

With forensic search you can systematically search through video using entirely new criteria that was not considered during initial set-up.

### Enable your staff to be more effective

By helping your staff to monitor video images, IVA enables them to focus more on other, additional duties.

### Provide additional operational support

IVA can send messages to security personnel or send information to other security or management systems that combine the camera findings with other data (such as required procedures in case of an emergency). For example, the Bosch Video Management System (BVMS) fully supports Intelligent Video Analysis technology to detect abnormal events and send out alerts as they happen. If an alarm is triggered, BVMS can display working instructions to relevant personnel to ensure emergency situations are handled according to protocol. With the BVMS app, guards can click just once on their mobile devices to access camera controls, view live streams, and broadcast video in emergency situations. BVMS helps control your security operation at all times, ensuring maximum safety and security.



## Up-and-running (and perfected) in half the time

Usually a video analytics configuration needs to be tuned several times for best results. This is because settings are tuned at the location the cameras are needed using live video. And this live video will not include all relevant scenarios during the tuning sessions. But with Bosch cameras you can use recorded video in your office, which means you can select the exact scenes you want the camera to trigger alarms on. And you can repeatedly test the detection performance. Once happy with the set-up, simply upload the configuration to the camera on-site to use the correct IVA settings for live analytics.



This approach is faster, more convenient and more accurate. By using the extensive recorded test video data to validate the analytics settings, you are much more likely to get the results you want first time, saving you the trouble of repeated analytics configuration tweaking. For an airport with hundreds of cameras, this can save many man-weeks. Time that can now be spent on other security issues.

### **Forensic searching, also with third party systems**

A growing number of our Integration Partners, such as Genetec and Axxonsoft, have built-in support for receiving live Bosch IVA events and can perform forensic searches on recorded video. For a comprehensive overview of Integration Partners leveraging Bosch video analytics, please refer to our Integration Partner Program portal: <http://ipp.boschsecurity.com>.

## At the edge for...

► **Unlimited scalability**

Importantly, Bosch Intelligent Video Analysis (IVA) is performed inside the camera “at the edge”, not in a central analytics server. Hence, the number of cameras in your installation will never be limited by your central server capacity - you will always have unlimited scalability, and your video surveillance system can grow and adapt to fit your needs perfectly. Always.

► **Optimized robustness**

Implementing IVA at the edge also makes the system less vulnerable, because you don't have one single point of failure.

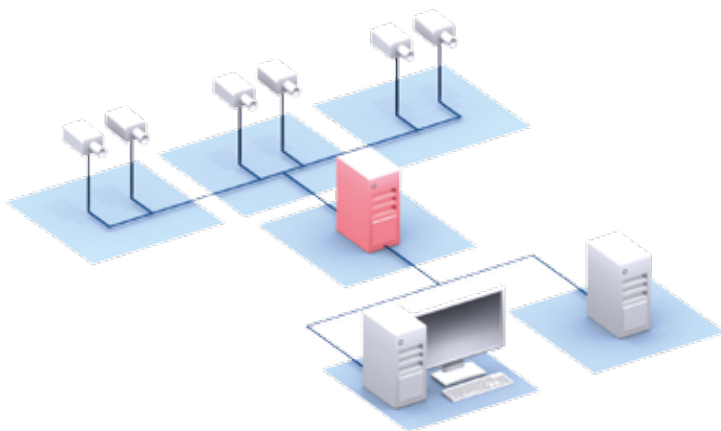
► **Optimized image quality**

Bosch cameras with IVA can use the analytics information to dynamically adjust their own settings. This ensures perfect exposure of objects of interest, and intelligent tracking of objects.

► **Reduced storage needs and network strain**

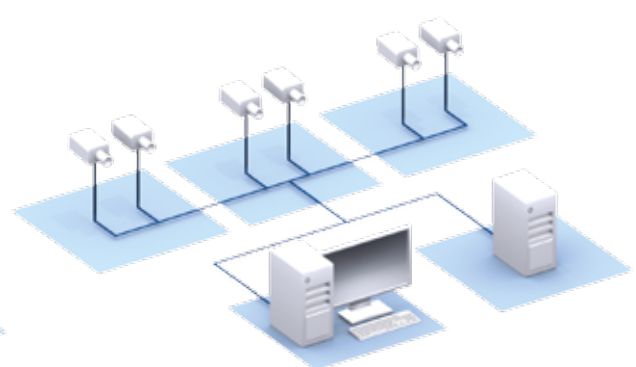
With IVA the camera can decide what to stream or what not to stream. This reduces the necessary storage capacity and helps avoid network strain.

### Centralized intelligence



Video analytics with a central analytics server

### Decentralized intelligence



Intelligence at the edge with IVA cameras from Bosch

## Which products do you need?

### Products

Starting with the IP 7000 series, Bosch offers video analytics in its comprehensive portfolio of fixed box and dome cameras, panoramic cameras, moving cameras, and specialty cameras like thermal or explosion proof.

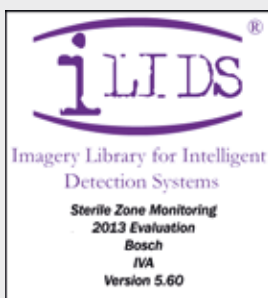
### Software

For IVA configuration, forensic search, IVA metadata display:

- ▶ Bosch Video Client (free up to 32 channels)
- ▶ Bosch Video Security Client (free up to 16 channels)
- ▶ Bosch Video Management System (BVMS)

### For simple IVA searches:

- ▶ iOS and Android client



Underlining our robustness, IVA V5.60 is listed in the CSE<sup>1</sup>.  
 “i-LIDS® approved **primary detection system** for **operational alert** use in **sterile zone monitoring** applications” and “i-LIDS® approved **event based recording system** for **sterile zone monitoring** applications”

<sup>1</sup>Catalogue of Security Equipment (CSE)

### **Security all round**

In addition to our video surveillance systems, we offer a full line of security products and accessories, plus a variety of tools to help specify and design the optimum system for your operation. You can rely on our renowned quality and reliability, backed by our three-year warranty, and our world-class training and technical support. Compatibility with third-party products is also assured, thanks to ONVIF\* and our Integration Partner Program.

For additional information please refer to our website or contact one of our sales representatives.

### **A tradition of quality and innovation**

For over 125 years, the Bosch name has stood for quality and reliability.

Bosch is the global supplier of choice for innovative technology, backed by the highest standards for service and support.

Bosch Security Systems proudly offers a wide range of security, safety, communications and sound solutions that are relied upon every day in applications around the world, from government facilities and public venues to businesses, schools and homes.

\*ONVIF (Open Network Video Information Forum) ensures interoperability between different products, regardless of manufacturer.

### **Bosch Security Systems**

To learn more about Video Systems please visit [www.boschsecurity.com/hdsecurity](http://www.boschsecurity.com/hdsecurity)

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