

# Adding Custom Analytical Intelligence to Intrusion Detection

Bosch tips and benefits

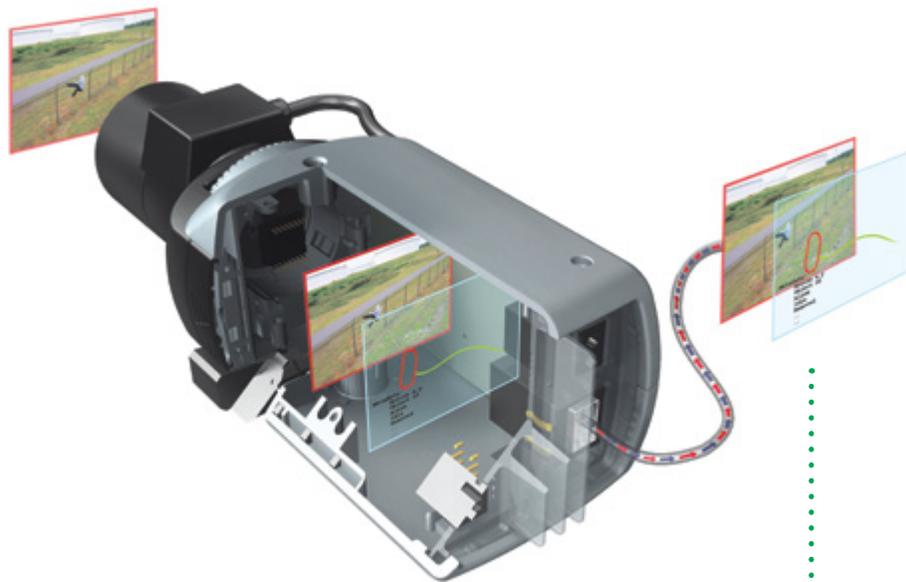


**BOSCH**  
Invented for life



# Detect anything with Bosch's Intelligent Video Analysis and Intrusion Integration

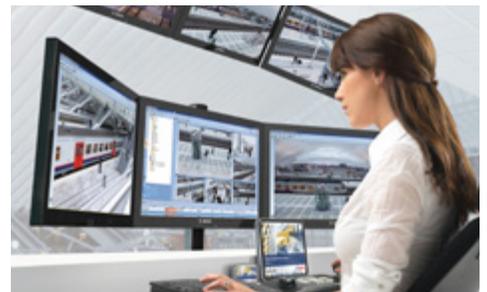
Bosch offers a unique level of intrusion detection by directly integrating Bosch IP cameras and their Intelligent Video Analysis (IVA) alerts to standard detection points to Bosch's B Series and G Series intrusion control panels. Each IVA enabled Bosch IP camera supports up to 8 built-in IVA alerts and can assign them to 8 unique detection points on the intrusion panels. IVA points are supervised, programmable, respond on the keypad and communicate to the monitoring station like any other intrusion detection point. The B Series and G Series control panel can even control each Bosch IP camera to start recording, control PTZ functions, and transmit images or video for professional or personal monitoring.



IVA technology in each Bosch IP camera scans each image and then triggers the intrusion points, based on rules that are stored in the camera, with no additional hardware or costs.

LAN/WAN Internet

Professional Monitoring Station



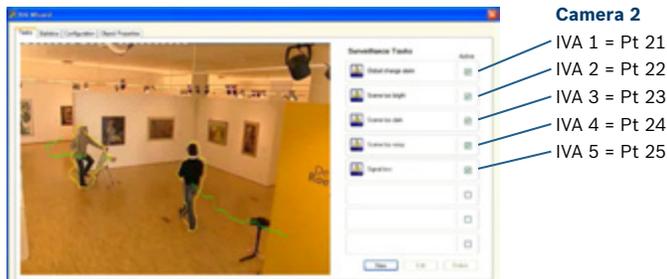
SMS/Email



Internet PTSN/GSM

## More powerful

B Series and G Series intrusion control panels support multiple Bosch IP cameras and each IP camera support up to 8 IVA alerts. Each camera's IVA is assigned to a unique detection point and is programmed like any other intrusion point. The Bosch B Series control panel also supports 4 outputs per IP camera that can trigger the IP camera to perform functions such as PTZ controls, recording profiles, or any other IP camera function.



## More reliable

To help ensure alarms are only triggered for real events, camera features such as camera calibration and perspective correction greatly enhance IVA accuracy and reliability. Statistical analysis of the captured images makes the system highly weather resilient. Rain and snow is filtered out and image stabilization ensures that only movement within the captured areas is detected, and not movement caused by the camera swaying in the wind. Special filters for size, speed, direction and aspect ratio minimize false alert rates while allowing for flexibility in IVA alert programming.

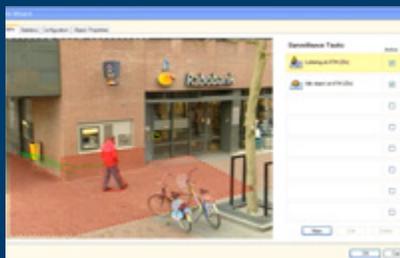
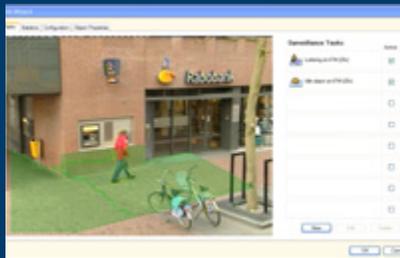
## More accurate

While offering a very high degree of sophistication, Bosch IVA is very easy to implement, set up and control. Fine-tuning of sensitive areas, detection fields, object shapes and movements lets you configure the system the way you want, quickly and accurately.

## More intelligent

Any IVA alert detected by the camera that fits the preprogrammed IVA criteria immediately faults the corresponding point on the B Series control panel until the IVA alert clears. IVA's intrusion port can be configured as:

- ▶ Interior Follower when the IVA alert is 'motion detection', 'crossed line', or 'object in field'
- ▶ 24 hour for critical IVA alerts such as 'object removed' or 'camera tamper'
- ▶ with point attributes such as cross zoning or monitor delay for alarm verification purposes.

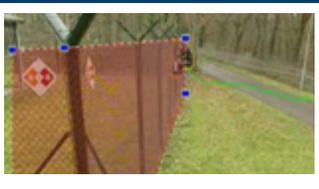
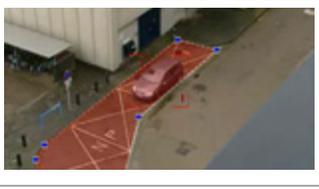
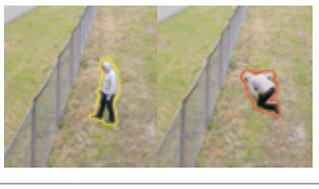


A loitering event starts the IVA loitering timer (e.g. 60 seconds) within the IP camera



The loitering continues within the "loitering" defined area

The IVA loitering timer expires which faults a (e.g. 24 hr) point on the control panel

IVA alert	Description	
<b>Line Crossing</b>	Someone has passed into a restricted area and crossed a defined IVA line. Multiple lines can be used to customize the detection alert.	
<b>Loitering</b>	The IVA alert faults a detection point when someone has lingered for too long in an area. This IVA can prevent crime in a parking area, lobby, or ATM vestibule.	
<b>Idle Object</b>	Whether it's a car parked illegally or an object left behind, IVA can fault a detection point and immediately notify a responder of the threat.	
<b>Object Removed</b>	Nothing escapes Bosch IVA—if an object disappears from its usual position, IVA automatically faults an intrusion point. Bosch's access control could immediately lock down the site's parameter, preventing the object from leaving the building.	
<b>Crowd Detection</b>	The IVA will generate an alarm if a number of objects are located within a certain area. Applications include vandalism, rioting, terrorism, and maximum occupancy.	
<b>Object in Field Entering Field Leaving Field</b>	IVA alerts can fault a point when an object enters a restricted area, leaves an area, or if an object is in an area. All IVA alerts can be used together to detect unique or specific sequence of IVA events.	
<b>Camera Tampering</b>	Trigger a point when the camera is being tampered such as if the camera has been moved, covered, masked, or tampered with.	
<b>Condition Change</b>	This person has triggered an IVA alert because he changed aspect ratio (crouching). The object's speed, size, direction and object color can all be included in the IVA alert.	
<b>Object Filters</b>	You can program IVA detection characteristics for an object such as aspect ratio, speed, size, direction, and object color. All object filters can be combined to provide fully customizable IVA alerts.	