

IQ-Infinity

iOmniScient's IQ-Infinity includes the full range of iOmniScient's intelligent video analysis modules, providing the surveillance system with a huge array of abilities, each of which can be activated or deactivated as required. The IQ-Infinity includes the most comprehensive variety of video analysis capabilities, including both motion based analysis, as well as iOmniScient internationally patented *Non-Motion Detection* technology which *ignores* motion to analyse stationary changes to an environment.

iOmniScient's IQ-Infinity includes the full range of IQ modules:

§ IQ-100

- Indoor intrusion detection
- Outdoor perimeter protection
- Loitering detection
- Running detection
- Directional based alarms for people / vehicles traveling in the wrong direction

§ IQ-110

- People Counting
- Vehicle Counting

§ IQ-115

- Slip & fall detection
- "man-down" detection

§ IQ-120

- Crowd management with alarms for overcrowding or congestion
- Traffic management with alarms for overcrowding or congestion
- Queue management with alarms for high queue times

§ IQ-140

- Left object detection
- Theft detection
- Graffiti and vandalism detection
- Parking violation detection

The IQ-Infinity overcomes many of the nuisance alarm issues traditionally associated with VMD and does so while maintaining a very high detection rate. The software will understand perspective and is able to ignore objects that aren't of interest like small animals and rubbish as well as complex light changes or swaying trees. The software is designed to cope in difficult varied outdoor environments as well as stable indoor scenes.

IQ-100 Intrusion Detection Module

The IQ-100 uses a highly sophisticated form of Video Motion Analysis technology to protect an area from intrusion: a virtual tripwire or region is drawn on the screen and anytime this perimeter is breached the event is recorded and an alarm raised. The user is able to generate alarms based on single or multiple directions. In multiple area of the camera's field of view. In addition, the IQ-100 is able to detect suspicious behaviours such as loitering and running. The IQ-100 overcomes many of the nuisance alarm issues traditionally associated with VMD and does so while maintaining a very high detection rate. The software will understand perspective and is able to ignore objects that aren't of interest like small animals and rubbish as well as light changes or swaying trees.

Video Analysis Capabilities

§ *Indoor Intrusion Detection*

§ *Outdoor Perimeter Protection (aka "trip-wire")*

- *Detect humans on motorways / freeways and ignore vehicular traffic*
- *Detect humans on railway tracks / in railway tunnels and ignore trains*

§ *Loitering Detection (time-configurable)*

§ *Running Detection (speed configurable)*

§ *Directional Alarms (aka walk-back detection, etc)*

§ *Detect Left Objects (in relatively empty scenes – for crowded or busy environments IQ-140 is required)*

IQ-110 Counting Module

The IQ-110 will count and give a cumulative total of the number of objects that have passed through an area at any given time. Multiple regions of interest can be drawn on the screen and the software will count traffic that passes through the region in any direction that is specified. The IQ-110 can be configured to distinguish between people and cars, or even between cars and trucks. Using overhead camera angles the software is able to achieve accuracies of up to 90-95%+. The user is able to pull reports directly from the software, export the results to excel, and interface the data with other systems in real-time.

Video Analysis Capabilities

- § *People Counting*
- § *Vehicle Counting*

IQ-115 Slip & Fall Module

The IQ-115 can instantly detect if a person slips or falls and can raise an alarm to alert security personnel, which is very important in public liability situation. It also can be used in 'Man-Down' situation where a guard or soldier falling over and will instantly raise an alarm if such a situation occurs. This can be used to monitor the safety and status of guards who are critical to security. Because staff are alerted in real-time it allows

Video Analysis Capabilities

- § *Slip and fall detection*
- § *Man-down detection*

IQ-120 Crowd Management Module

The IQ-120 has the unique capability to count the number of people within a crowd, in real-time. The software will give a live count of the number of people within a region of interest that has been drawn on the screen, and has the ability to raise an alarm if the figure reaches a pre-defined limit so that staff can monitor and manage crowds and congestion within an area. [N.B. This is very different from our standard counting software which provides a cumulative total of the number of objects (people/vehicles/etc) that pass through a 'virtual gate'.] The IQ-120 also includes the ability to determine the average waiting time of a queue, based on the number of people in the queue and the rate at which they are being served. This can be used to alert a staff member if the queue waiting time exceeds a particular target threshold.

Video Analysis Capabilities

- § *Crowd Management*
- § *Traffic Management*
- § *Queue Management*

IQ-140 Non-Motion Detection Module

The IQ-140 uses iOmniscient's internationally patented *Non-Motion Detection* (NMD) technology which is capable of *ignoring motion* in order to detect stationary security threats, even in busy and crowded scenes, despite constant heavy movement in front of and around an object and even though it may be fully obscured for periods of time. This is a unique capability. The detection time is fully user-configurable from seconds to minutes or even hours, to suit any environment and situation. Because of the nature of the technology it is extremely robust: false alarms are very rare, while maintaining extremely high accuracy, even in scenes of high movement and large crowds.

Video Analysis Capabilities (all fully time-configurable)

- § *Left Object Detection*
- § *Moved Object Detection*
- § *Theft (object removal) Detection*
- § *Graffiti/Vandalism Detection*
- § *Parking Violation Detection*
- § *Accident/Breakdown Detection*