Analytics Extreme SECURITY

Analytics Extreme SECURITY is the integrated video analytic solution which supports the human operator in its difficult task to monitor the environments so as to guarantee the safety of the citizens.

Analytics Extreme SECURITY includes three different intelligent modules:

AE-Intrusion: it is the video analytic module which allows to reveal intrusions in sterile zones and crossing of virtual lines.
AE-Intrusion can be installed both indoor and outdoor and can work combined with both thermal and traditional cameras.
Thanks to its advanced algorithm, AE-Intrusion can work with an accuracy higher than 95%, if combined with thermal cameras.

AE-Lost: it is the video analytic module which allows to detect abandoned and/or removed objects (for instance objects abandoned in public areas such as airports, train stations or metro stations). AE-Lost can be installed both indoor and outdoor, combined with both thermal and traditional cameras.
The time of permanence of the objects inside the scene can be set by the user in a range 1-30 minutes, depending on the application field.

AE-Loitering: it is the video analytic module which allows to detect suspicious behaviours of persons staying in a given area for a long time.
AE-Loitering can be installed both indoor and outdoor, combined with both thermal and traditional cameras.

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AE-Security: Minimizing false alarms

The intelligent video analysis is based on a powerful engine which uses advanced algorithms of Intelligence and Artificial Vision, which allow to drastically reduce the number of false alarm, by making the solutions robust with respect to the illumination changes and to the presence of shadows and reflections. They allow to well operate both in indoor and outdoor environments.

Objects filtering

Thanks to a simple calibration procedure, the modules of the AE-Security bundle allows to perform the filtering of the objects on the basis of the following parameters:

· Objects size in pixel (i.e. to reduce noise reduction)
· Objects size in centimetres (to distinguish the different typologies of objects at different distances from the camera)
· Aspect ratio (to distinguish for instance between vehicles and persons)

AE-Security is Multi-platform

AE-Security is available:

· As a server version (for Linux platforms)
· As an edge version (with Wisenet Samsung, Hikvision and Axis cameras)

AE-Security is Efficient

The engineering of the algorithms allows to elaborate in parallel a high number of video streams per single core with a full frame rate, so drastically reducing the cost of the hardware.

	Edge	Server
Scalability	High (you just need to add a new camera)	You may need a new server if the number of cameras grows up
Integrability in existing systems	High in presence of compatible cameras, Limited otherwise(you need to acquire new compatible cameras)	High
Possibility to simultaneously manage more video analytics	Average (for high quality cameras) Limited (for medium-low quality cameras)	High
Possibility to process to a higher resolution	Average (for high quality cameras) Limited (for medium-low quality cameras)	High
Large band required	No	Yes (the transmission of the video stream for each camera is required)

Minimum Requirements of AE-Security

· The Server version can be combined with network cameras providing an RTSP stream. The application processes up to 4 video streams CIF@25fps per core on a I7 Intel CPU.
· The Edge Version supports Samsung Wisenet III and X CPU cameras, Axis cameras based on ACAP (Axis Camera Application Platform) technology and Hikvision cameras based on HEOP (Hikvision Embedded Open Platform).