Pelco Software and Analytics

Analytic Suites

Pelco Cameras typically come equipped with one of the following Analytic suites. Each suite offers a different selection of video surveillance analytics, ranging from the 3 'Basic' behaviours, to the wide variety of 'Enhanced' and 'Smart' analytic suites.

Pelco Basic Analytics

The Basic Analytics suite consists of 3 analytic behaviours. Each of these can be considered an essential capability in any surveillance system setup.

The Suite includes:

- **Simple Motion Detection -** Allowing the camera to record or send out alarms when motion is detected in the scene or within a selected zone.

- **Camera Tampering Alarm / Camera Sabotage -** Detects and triggers an alarm if the lens becomes obstructed or if the camera is repositioned without authorisation.

- **Audio Detection Alarm -** Sends out an alarm if a rise or fall of volume (that exceeds set limits) is detected, or when input volume reaches a set threshold.

   Note - Some cameras feature some but not all of the 3 Basic Analytics (for instance Spectra Professional IR cameras only include Camera Sabotage and Simple Motion Detection)

Basic Analytics can also be available alongside Professional and Enhanced analytics (which are also sometimes referred to as **Advanced** behaviours)

Pelco Professional Analytics

This suite typically includes 2 or 3 Basic behaviours, and up to 5 Professional behaviours - though this can vary (as noted below the Professional suite for Sarix Pro 3 cameras is slightly different from the one available with Spectra Pro 2 PTZs)

Professional Analytics (for Sarix Pro 3)

- **Included Basic Analytics -** Simple Motion Detection, Camera Tampering Alarm, Audio Detection Alarm

- **Object Counting -** Allows the camera to count the number of moving objects that cross a user-defined virtual line.

- **Adaptive Motion -** Detects moving objects as they cross defined virtual lines and/or enter a defined target area.

- **Object Removal -** Used to detect moving objects that leave the target area.

- **Directional Motion -** Used to detect objects that move in a disallowed direction, against the usual flow of traffic.

Professional Analytics (for Spectra Pro 2)
- **Included Basic Analytics -** Simple Motion Detection, Camera Sabotage, Audio Detection Alarm

- **Loitering Detection -** Used to alert users when a vehicle or people remain in a defined zone for too long. Effective in the monitoring of suspicious behaviour with real-time notifications.

- **Object Counting -** Allows the camera to count the number of moving objects that cross a user-defined virtual line.

Pelco Enhanced Analytics
This is the Analytic suite included in Pelco's most advanced cameras - Including; Sarix Enhanced 3, Spectra Enhanced 7, and Esprit Enhanced.
It offers Basic and Professional Analytic behaviours alongside Enhanced only capabilities.

The Pelco Enhanced Analytics suite includes:
- **Basic Analytics -** Simple Motion Detection, Camera Tampering Alarm

- **Professional Analytics -** Loitering Detection, Object Counting, Object Removal, Adaptive Motion, Directional Motion

- **Abandoned Object Detection -** Detects objects placed within a defined zone, triggering an alarm if the object remains there for longer than the user-defined time allows.

- **Stopped Vehicle Detection -** Used to detect vehicles that have stopped near sensitive locations for longer than the user-defined time allows.

- **AutoTracker (Only in PTZs) -** Detects and Tracks movement within the camera's field of view. Once AutoTracker has been configured the camera can automatically pan and tilt to follow a detected moving object until it leaves the monitored area.

Note - Behaviours in the Enhanced Analytics suite can also sometimes be referred to as '**Advanced**'

Pelco Smart Analytics

Pelco's most recent selection of Analytics, seen across a wide range of different camera series - Including; Sarix Professional 4, Sarix Modular, Sarix Corner 3, Esprit Compact, Sarix Multi Enhanced, Pelco Fisheye, and Exsite explosion proof cameras.

Pelco Smart Analytics includes:

- **Objects in Area -** Triggers an event when a selected object type moves into the region of interest.

- **Object Loitering -** Detects selected object types that move into the region of interest, and triggers an event when it remains there for an extended amount of time.

- **Objects Crossing Beam -** Detects objects that cross a user-configured directional beam (can be unidirectional or bidirectional) and triggers an event once the specified number of objects have crossed.

- **Object Appears or Enters Area -** Triggered by each object that enters the region of interest. Objects can appear from the ROI or enter from outside.

- **Object Not Present in Area -** Triggers an event when there are no objects detected within the region of interest (works similar to Object Removal)

- **Objects Enter Area -** Detects objects that enter the region of interest and triggers an event once the specified number have entered.

- **Objects Leave Area -** Detects objects that leave the region of interest and triggers an event once the specified number have left.

- **Object Stops in Area -** An event is triggered for each object detected in the region of interest that stops moving for a specified threshold time.

- **Direction Violated -** Detects when an object moves in the prohibited direction of travel (works similar to Directional Motion)

- **Tamper Detection -** Triggers an event when the scene unexpectedly changes (works same as Camera Tampering Alarm / Sabotage Detection)

Pelco Calipsa

A Cloud-based service for additional video surveillance Analytics
Users pay a subscription fee, and Pelco offers a 30-day free trial.

Comes available as one of 4 editions, each offering more features / analytics than the last
Basic, Basic+, Core, and Pro

Calipsa Basic

The cost effective option, allowing for additional camera analytics that are easy to set up and can be used for all cameras in a system, and requires no additional hardware.
Includes; **Object Detection**, **Camera Masking**, **Scheduling**, **Site Sharing**, use of the **Mobile App**, and **Reports**

Calipsa Basic+

Includes all the features of Calipsa Basic plus **Camera Health Checks**, and **Daily Reports**, to help ensure the efficient running of operations, and to reduce maintenance costs - removing the need to manually check the view, positioning, and status of every camera.

Calipsa Core

Includes all the features of Calipsa Basic and Basic+ with additional analytic capabilities.
These include; **Watchlists**, **Loitering Detection**, **Crowd Forming Detection**, **Count-based Alerts**, and **Region of Interest**

Calipsa Pro

Includes all the features of Calipsa Basic, Basic+, and Core, plus even more additional analytics. Includes; **Meta-based Video Search**, **Video Summarization**, and **Forensic Reports**

Included Analytics / Features:

- **Object Detection -** Recognises the causes of an alarm and filters out any that were not caused by the movement of a human or vehicle. This allows for improved surveillance efficiency with reduced false alarms.

- **Camera Masking -** Allows users to draw masks on the camera's field of view to outline areas of disinterest (such as roads), helping Calipsa to filter these areas out and focus on important areas / activity instead.

- **Scheduling -** Allows users to set custom schedules on a site-by-site basis, so camera systems can deliver focused monitoring efforts.

- **Site Sharing -** Allows for selected sites to be shared with operators and security personnel.

- **Mobile App -** Offers users the use of the Calipsa Mobile App to receive notifications, view alarm history, and arm / disarm sites, remotely from a mobile device.

- **Reports -** Details Calipsa Basic's activity over specific time periods, with snapshots, and sends automatic reports to the user's inbox.

- **Scene Change -** Allows users to catch significant changes in the camera's field of view before situations become critical with daily Camera Checks. This allows surveillance systems to work more effectively, and for operators to see and react to situations as fast as possible.

- **Idle Camera Checks -** Provides on-demand idle camera reports, allowing users to quickly determine if a camera has become unresponsive.

- **Watchlists -** Supports Inclusion and Exclusion lists, allowing users to upload photos of objects or select from a list of previously detected objects and decide which to watch or to ignore.

- **Loitering Detection -** Allows the camera to detect loitering activity. This helps to keep watch of suspicious activity and allows operators to react before it leads to crime.

- **Crowd Forming Detection -** Informs users of crowding situations that may indicate an event of concern. Allows for surveillance to work effectively, alerting users of possible events / issues as they occur.

- **Count-based Alerts -** Detects and sends out an alert when a certain count of objects appear in an alarm.

- **Regions of Interest -** Allows users to select important areas of the camera's field of view, so that alerts can be sent out when objects enter the region of interest (ROI)

- **Similarity Search -** Allows for the quick search of events containing similar objects (humans / vehicles of interest)

- **Meta-based Video Search -** Users can search for specific alarms using meta-based forensic search. Keeps evidence search quick and efficient.

- **Video Summarisation -** Presents the results of forensic search as a single summary video, combining all alarms returned by the search. Makes surveillance footage / evidence easy to review.

- **Forensic Reports -** Generates forensic reports for users to share with investigation stakeholders.