



# HD ANALYTICS

AVIGILON

Leveraging advancements in video pattern detection, Avigilon adaptive video analytics technology has comprehensively evolved video surveillance from being a strictly forensic tool into a powerful proactive solution. Paired with high-definition video surveillance, Avigilon's adaptive video analytics provides security operators with highly accurate alerts and clear image detail, enhancing their ability to effectively intervene and take action before an incident occurs.



# The Roles of Video Surveillance and Analytics

“A wealth of information creates a poverty of attention.”

– *Herb Simon,*  
*the father of artificial intelligence*



Historically, the notion of video surveillance has meant recorded, or forensic, evidence, allowing users of a system to review recorded footage to identify an incident that has previously occurred. But what if instead of just recording the incident, users could prevent it before it even happens?

## ***The barrier of attention spans***

As the content and information we consume has grown increasingly abundant and immediately available, our attention spans have become challenged to maintain focus on the task at hand. Similarly, when faced with an environment where scene changes or movement are minimal, our propensity to tune out increases significantly. In the security space, studies have shown that after 20 minutes, personnel watching a video scene on a monitor will miss up to 95 percent of all activity happening on screen. So how can we combat our innate inability to focus and catch repetitive, uninteresting stimuli?

## ***Enter video analytics***

The role of video analytics solutions should be to dramatically enhance the capacity of a user to detect an event and enable them to employ intelligence to prevent an undesired outcome, such as a break-in or perimeter breach.

But not all video analytics technologies are created equal. The typical experience with analytics technology has resulted in over-promised capabilities and a high degree of false positive notifications. That's because most traditional analytics solutions rely on pixel movement detection to notify users of changes in scenes. And because events can be triggered by the movement of trees, animals and other non-suspicious activities, the instances of false positives – and frustrated surveillance system users – increases significantly.

And that's where Avigilon's high-definition video analytics solutions can help.

# Avigilon High Definition Analytics technology

## **Pattern-based detection**



*Instead of notifying users on all movement in the scene,*



*pattern-based learning detects only the person.*

With a backbone built on high-definition video, Avigilon offers an analytics solution that is unparalleled in the industry. Video analytics with high-definition imaging ensures a higher degree of object detection accuracy, while providing superior image detail that delivers the evidence required to take appropriate action. Through the use of high-definition video analytics, pattern-based analytics algorithms and teach by example capabilities, Avigilon is leading the industry in providing preventative protection through superior video analytics technology.

## **Avigilon high-definition analytics**

Unlike standard industry analytics solutions, that analyze in standard definition, Avigilon utilizes its knowledge in managing high-definition video to analyze in full HD resolution, without any encoding or loss of quality – resulting in far greater accuracy and a higher level of protection to keep your assets safe and secure.

## **Greater identification accuracy**

Avigilon's analytics solutions provide a higher degree of accuracy in object notification, due to two revolutionary technologies. Avigilon's *pattern-based* technology is able to accurately recognize the movements and characteristics of people and vehicles while ignoring any activity that isn't relevant to a scene. *Teach by example* technology allows

users to provide feedback about the accuracy of alarms to refine the device's self-learning capabilities. These two technologies, combined with the HD quality of video footage, results in far greater accuracy and fewer false alarms, ensuring users are only getting alerts that are relevant to them, with minimal ongoing maintenance costs.

## **Fast and easy to install**

Underpinned by the self-learning capabilities of Avigilon's analytics technology, our HD cameras and Rialto analytics appliances are able to instantly detect and learn the surrounding scene upon initial set up, adapting to changes without manual calibration – resulting in a whole new level of installation ease not before seen with analytics solutions.

## **Detailed pre and post-incident protection**

The combination of instant and accurate object detection and classification alerts, with the identification performance of high-definition video, provides users with an unmatched level of perimeter protection to keep both personnel and assets safe. Avigilon analytics, paired with 1 MP and 2 MP high-definition cameras, provide unmatched perimeter protection, while our high resolution HD Pro cameras (from 8 MP to 29 MP) provide the coverage and detail needed for identification and verification of irrefutable evidence.

# Avigilon Control Center



Avigilon Control Center is the industry's most powerful video management software, enabling users to view and search through their high-definition footage to find scene changes, missing objects and events – all through a simplified and easy-to-use interface. Built from the ground up to specifically manage high-definition video, Avigilon Control Center delivers superior image detail and gives you full control over your high definition video surveillance playback, allowing you to quickly retrieve evidence to speed up response times and investigations.

## ***Avigilon Control Center 5.4***

Our latest version of ACC, Avigilon Control Center 5.4, brings the power of Avigilon video analytics technology directly to our powerful VMS interface, enabling users to configure and manage a full-featured, end-to-end high-definition video analytics solution.

## ***Easy integration with Avigilon HD cameras and Rialto analytic appliances***

Avigilon Control Center integrates directly with our Rialto analytics appliances and HD cameras, enabling users to configure, stream and manage all analytics intelligence and notifications directly through the ACC interface.

## ***Audio talk down capabilities***

Avigilon Control Center allows you to connect to external speakers for remote talk-down functionality, to provide additional intrusion deterrence. This gives you the ability to accurately provide reliable protection for satellite locations that can't be monitored in person.

## ***Rules and alarms***

Avigilon Control Center allows you to apply analytics motion detection and analytics-based events as alarms and rule triggers, providing users with immediate notifications for suspicious activities that may be occurring.

Available in Standard and Enterprise. Learn more about our easy-to-use video management software at [avigilon.com/ACC](http://avigilon.com/ACC)

## HD Cameras



*HD Dome camera  
surface mount*



*HD Dome camera  
pendant mount*



*HD Bullet camera*

Avigilon's high-definition analytics technology is now available in our HD cameras, in 1 MP, 2 MP and 3 MP resolutions, and deliver superior image detail for high definition imaging and more accurate analytics performance. With industry-leading analytics technology, Avigilon's HD cameras analyze in full high-definition resolution to detect, track and classify suspicious objects, people and vehicles more accurately than ever before, providing a superior level of preventative protection of building perimeters, energy sites, car dealerships, construction facilities or any other area requiring a high degree of protection of high value assets.

### **HD Dome cameras**

Available in 1 MP, 2 MP and 3 MP resolutions

- Embedded video analytics technology
- Operates on Avigilon's H3 platform for superior image detail
- Remote zoom and focus
- Optional integrated Adaptive IR technology
- ONVIF compliant
- Available in outdoor dome and outdoor pendant mount options

### **HD Bullet cameras**

Available in 1 MP, 2 MP and 3 MP resolutions

- Embedded video analytics technology
- Delivers superior image detail in complete darkness using Adaptive IR technology
- Two lens options:
  - 3-9mm and 9-22mm
- Motorized P-Iris lenses with remote zoom and focus

### **Get maximum post-incident protection**

Avigilon's HD Pro cameras – available in 8 MP to 29 MP resolution – are the perfect compliment to our analytics-enabled devices. These cameras deliver maximum scene coverage and unparalleled image detail to provide users with a superior level of post-incident protection by accurately identifying and capturing suspects after our analytics technology has classified them.

# Avigilon Rialto™ Analytics Appliances



Rialto™ I4



Rialto™ A4



Rialto™ R-Series

Avigilon's Rialto™ appliances, are an all-in-one solution that allow users to add analytics capabilities to any existing IP or analog camera infrastructure. These appliances are easy to install and can provide superior analytics capabilities using your existing surveillance installation.

## **Rialto™ I4**

### *HD analytics for any IP camera*

The all-in-one Rialto™ I4 – inclusive of advanced video analytics, edge storage and event management software – enables users to easily and economically add advanced video analytics to any IP security camera without replacing the system. It's a 4-channel compact video analytics appliance that supports HD security cameras, and provides on-board storage options for days or weeks of storage.

## **Rialto™ A4**

### *Add analytics to any analog camera*

The A4 is an all-in-one device that provides a cost-effective way to easily add video analytics to existing analog video surveillance systems, allowing you to analyze and record up to 4 cameras per unit. The high density, small footprint of the A4 makes it easy to deploy and scale, and there are no complicated per camera license fees or registration processes.

## **Rialto™ R-Series**

### *IP and analog flexibility*

Get powerful prevention from virtually any new or existing analog or IP surveillance system with the R-Series. The R-Series is a rack-mounted appliance for higher density deployments that includes advanced video analytics, on-board storage and unified event management. Future proof deployments with the R-Series' flexible mix-and-match blade design which supports IP and analog cameras and is easily upgradable as technology and security requirements change.

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