# Self-Learning Video Analytics

Focus Your Attention Where It Matters Most

Through the use of advanced pattern-based analytics and teach-by-example technology, Avigilon video analytics are designed to increase the productivity of security personnel while making monitoring more affordable and efficient.

Avigilon's self-learning analytics extends the effectiveness of your security personnel by providing effective monitoring and enabling proactive, real-time response from your team. Built from the ground up to manage high-definition video, Avigilon offers analytics embedded in Avigilon cameras up to 5K (16 MP) resolution.

# ADVANCED PATTERN-BASED ANALYTICS

Avigilon's advanced video pattern detection technology is able to accurately recognize the movements of people and vehicles while ignoring motion not relevant to a scene. Embedded into cameras up to 5K (16 MP), the system's ability to constantly learn reduces false positives and helps ensure alerts are meaningful, which avoids wasted time and improves efficiencies.

## TEACH-BY-EXAMPLE TECHNOLOGY

Our teach-by-example object classifier technology enables users to provide feedback about the accuracy of alarm events generated by Avigilon devices. Rather than decreasing analytics sensitivity to reduce false alarms, the feedback trains the device, increasing the accuracy of the analytics used to determine which alarms are real and which are false to further improve a low false-positive alarm rate. Over time, the system learns the scene and is able to prioritize important events based on user feedback. This increases sensitivity to conditions that are of concern while reducing false alarms to keep the focus on what matters.

#### **KEY FEATURES AND BENEFITS**

#### Efficient installation and ongoing accuracy

Point-and-shoot system setup: self-learning video analytics works out-of-the-box without manual calibration.

#### Pattern-based classification and tracking technology

Object classification and tracking using pattern-based analytics algorithms are tuned to recognize people and vehicles, while ignoring nuisance motion.

#### Teach-by-example technology

Operator input teach-by-example technology enables users to provide feedback to the system about accuracy, which further enhances the pattern-based analytics database.

#### Lower false alarm rates

Self-learning analytics continuously adjust to increase detection and confidence levels.

#### **Broad variety of devices**

Avigilon devices embedded with self-learning video analytics include appliances and cameras with resolutions from 1 to 16 MP (5K).

#### Integrated with Avigilon Control Center (ACC)™

Fully integrated with ACC Client and ACC Mobile so that users can respond in real-time even from mobile devices. Analytic alarm notifications can be automatically sent to any authorized client based on configured rules.

#### Compatible with IP or analog cameras

Add self-learning video analytics to internet protocol (IP) or analog surveillance cameras with Avigilon analytics appliances.

#### Idle scene mode

Idle scene mode reduces bandwidth and storage, and is triggered by analytics specific objects rather than motion detection.

#### Powerful forensics

Forensic search capabilities of analytics events accelerate search times using a fully unified ACC Client.

#### Cost effective

No additional servers required.

#### No licensing required

Fully embedded edge analytics with no additional rulesbased licensing on cameras

### CAMERAS WITH INTEGRATED SELF-LEARNING VIDEO ANALYTICS







H4 PTZ Camera





H4 Thermal Camera



**H4ES Camera Line** 



