

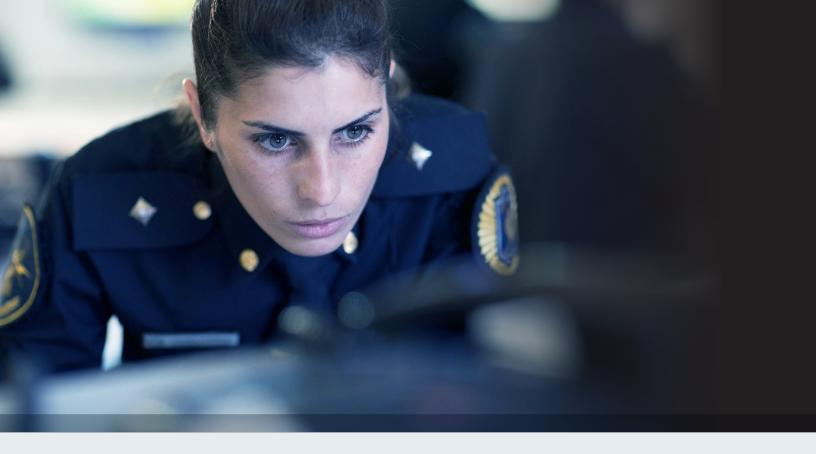
# Focus on What Matters Most

**AI-Powered Security Solutions** 

Our video surveillance, cloud and access control solutions are integrated with Al to help provide the right information at the right time—so you can take decisive action.

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# Artificial Intelligence & Video Analytics

Designed to solve real-world challenges and change the way you interact with your surveillance system, our solutions help you detect, verify and act on critical events.





# Self-Learning Video Analytics

#### **Focus Your Attention Where It Matters Most**

You can't be everywhere all the time—our self-learning video analytics solutions can monitor an area 24/7/365. They are designed to accurately recognize the movement of people and vehicles, differentiating it from motion that is not relevant to a scene. Their ability to constantly learn helps reduce false positives and ensure meaningful alerts.

#### **INSTANT MOBILE NOTIFICATIONS**

Alerts can be sent directly to you and your team within seconds, on mobile devices with the Avigilon Control Center (ACC) Mobile app installed.

# Avigilon Appearance Search

#### **Search Made Simple**

Leverage the power of our Al-powered video search engine, which can dramatically improve incident response time. Sort through hours of video with ease to quickly locate a specific person or vehicle of interest across an entire campus, shopping center or facility.

Avigilon Appearance Search™ technology works with Avigilon video analytics cameras to generate, record and classify video data for effective searches. Appearance Search technology provides advanced video search capabilities to enhance the user experience of the complete Avigilon solution.



**ENABLED WITH** 

**ACC SOFTWARE** 

AI APPLIANCE

NVR4

# **Unusual Motion Detection**

#### **Turn Unknowns into Insights**

Comb through hours of video with ease to find what you're looking for and reveal events that may have otherwise been missed. Without any predefined rules or setup, Unusual Motion Detection (UMD) technology uses artificial intelligence to continuously learn what typical activity in a scene looks like and then detect and flag unusual motion for your review.



**EMBEDDED IN** 

**H4A CAMERA LINE** 

**H4 SL CAMERA LINE** 

P13

**H4 MINI DOME CAMERA** 

# License Plate Recognition Analytics

## **Highly Accurate Capture, Recognition & Search**

Our license plate recognition (LPR) analytics technology automatically reads license plate information from vehicles, linking it to both live and recorded video. Create and import multiple vehicle license plate watch lists for instant alarm notification when a license plate match is detected, or search and quickly find specific captured license plate video for verification and investigation.

**WORKS WITH** 

**H4 LICENSE PLATE CAPTURE CAMERA** 





# Video Management Software

## **Avigilon Control Center™ Software**

Powerful software doesn't have to be complicated. ACC™ software leverages the power of AI technology to give you control over your video surveillance and focus your attention on what matters most.



#### Powered by AI for Fast & Efficient Search

ACC software leverages AI and video analytics, including Appearance Search and UMD technologies, to help you quickly detect, verify and act on events. The bookmark, event, alarm and thumbnail search options in ACC software are designed to enhance the way you interact with your systems, dramatically improve event response times and help make video actionable.

LEARN MORE

AI AND ANALYTICS



#### **Access Control Unification**

ACC software works together with the Access Control Manager (ACM) system to receive and act on ACM™ door events, hardware input events and access grants, enabling operators to unlock access doors directly from a camera view.

**Identity Verification** dynamically displays ACM credentials with ACC camera views.

Identity Search can help find a person of interest using their ACM cardholder information.

**LEARN MORE** 

**ACM SYSTEM** 

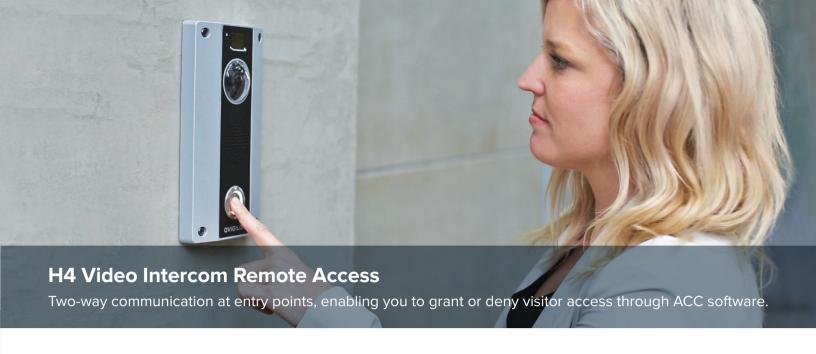
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#### **Cybersecurity & Privacy Protection**

ACC security measures include strong password enforcement, connection authentication and data encryption, as well as strict user permissions to access search functionality that uses personally-identifiable information.

Blurred Export supports compliance with new data protection and privacy requirements of GDPR1 by allowing you to export Appearance Search results in ACC software while blurring the background of the camera view to feature only the person of interest in the video.



#### **All Edition Features**

- Automatic device discovery
- Support for 3rd-party ONVIF®-conformant cameras and encoders
- Support for H.265, H.264, MPEG4, MJPEG and JPEG2000 video compression
- ACC Mobile application
- · Recording schedules
- Video analytics overlays
- · UMD timeline filtering with Skip Play
- Intelligent Motion, thumbnail and event search
- Two-factor authentication
- Two-person authenticated recorded video viewing

#### **ACC Software Edition Feature Comparison**

Feature	Core	Standard	Enterprise	
Cameras per Server	24 75		Unlimited	
Servers per Site	1	1	Unlimited	
Client Licenses per Server	2	10	Unlimited	
Al Appliance Support	No Ye			
H4 Pro Camera Support	No		Yes	
Rule Triggers	0 51		Unlimited	
Avigilon Presence Detector <sup>™</sup> Event Trigger	No Ye		es es	
Self-Learning Video Analytics Event Configuration	No Yes		es	
Alarm Search	No		Yes	
Appearance Search	No		Yes	
License Plate Event Search	No Ye		Yes	
Blurred Export	No		Yes	
ACM Identity Verification	No Yes		es	
ACM Identity Search	No Yes		es	
ACM Remote Door Access Grants	No Yes		es	
Failover Connections	No Yes		Yes	

# Integration with Third-Party Systems

As an ONVIF member, Avigilon continues to demonstrate commitment to open architecture and offering products that support interoperability with other ONVIF-conformant solutions.





# Cameras & Sensors

Providing the image detail or extravisual data you need, and built with the intelligence to help you make sense of the activity they capture, Avigilon cameras and sensors are equipped with features and industry standards designed to accommodate a wide range of security applications.





#### **LightCatcher™ Technology**

Produces significantly more color detail from a low-light scene by increasing the amount of light and detail captured via the camera and decreasing the noise in the image. This combination results in the ability to identify objects of interest more effectively.



#### **IR Illumination Options**

Many Avigilon cameras include **content adaptive IR** technology, an effective and flexible way to capture visual detail without a visible light source. Cameras with a zoom lens offer **zoom adaptive IR** to help ensure uniform illumination over the entire imaging area at a wide range of zoom distances.

## Bandwidth Management



# High Definition Stream Management (HDSM)™ Technology

Reduces bandwidth from the server to the ACC Client by dynamically sending the optimal image detail for the user's viewing requirements.



#### **HDSM SmartCodec**<sup>™</sup> **Technology**

Enables cameras to enhance compression levels for regions in a scene to reduce bandwidth by up to 50% compared to standard H.264 compression.



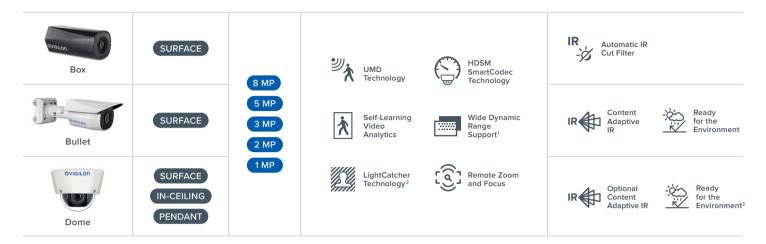
#### **H.265 Compression**

Offers about double the data compression ratio at the same level of quality compared to H.264 compression and supports resolutions up to 35 MP (8K).

## H4A Camera Line

### **Exceptional Image Quality, Video Analytics & Artificial Intelligence**

H4A cameras offer great coverage and high image detail in a range of lighting environments and settings such as offices, hallways and building entrances.



## H4 SL Camera Line

#### **Modular Design for Flexible Installation**

Designed to decrease installation time by up to 50%, the modular design of the H4 SL camera line easily switches between mounting options—even when installation requirements are unknown.



# H4 Mini Dome Camera

### Small & Discreet with a Modular Design

Ideal for your most space-constrained areas, the H4 Mini Dome camera provides exceptional features and image quality at an entry-level price point. The innovative, modular design allows it to snap into various mount adapters for fast and easy installations.















For H4 Box and H4 Bullet cameras, wide dynamic range technology is available on 1 MP to 3 MP models only.

<sup>&</sup>lt;sup>2</sup> LightCatcher technology available on 1 MP to 5 MP models.

<sup>&</sup>lt;sup>3</sup> Outdoor model only.



# H4 Pro Camera Line

### Security Industry's First Single-Sensor 30 MP (7K) Camera

H4 Pro cameras capture high-quality, detailed images over vast areas, making them ideal for stadiums, ports and critical infrastructure. They're built on the H4 platform to deliver greater processing power, increased frame rates and improved image quality, while intelligently managing storage and bandwidth.



# H4 PTZ Camera

### Powerful, High-Speed Tracking with 360° Coverage

1 MP model offers 45x zoom and 2 MP model offers 30x zoom for high-quality, detailed images.



# H4 Fisheye Camera

### Capture a Complete Panoramic Scene Without Blind Spots

Cost-effective, easy-to-install solution that's designed to provide high-resolution 360° coverage with fewer cameras.









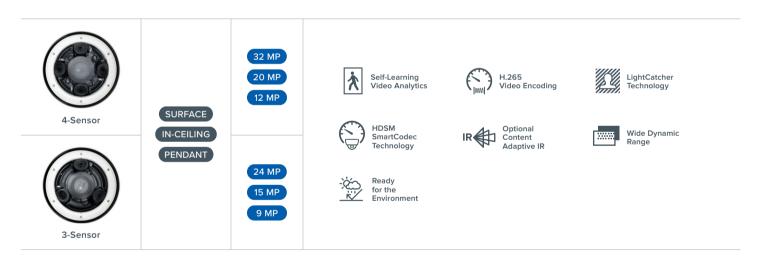








Provides exceptional scene coverage and high image detail with 3 or 4 individually configurable camera sensors that can be positioned to monitor virtually any area. Delivers broad scene coverage with high image detail up to 32 MP total resolution and uses H.265 compression technology to significantly reduce bandwidth and storage requirements.



## H4 Thermal Camera Line

### See Beyond the Visible Spectrum

Detect the movement of people and vehicles even in areas with poor visibility, challenging lighting conditions, absolute darkness and partly camouflaged scenes—without the need for additional light sources.

















Zoomable IR technology—with a 250-meter (820-foot) illumination range—provides broad coverage and exceptional image quality in a range of lighting conditions and environments, including the rain. 1 MP model offers 45x zoom and 2 MP model offers 30x zoom.



# Avigilon Presence Detector Sensor

### **Accurately Detect the Presence of a Person**

A small form-factor impulse radar device, with self-learning radar analytics, that helps to solve the challenge of human presence detection in indoor areas where traditional devices may be limited. Provides extremely high accuracy at distances up to 9 meters (30 feet) from the sensor, even if the person is hidden or obstructed by objects such as blankets, cardboard, wood and drywall.





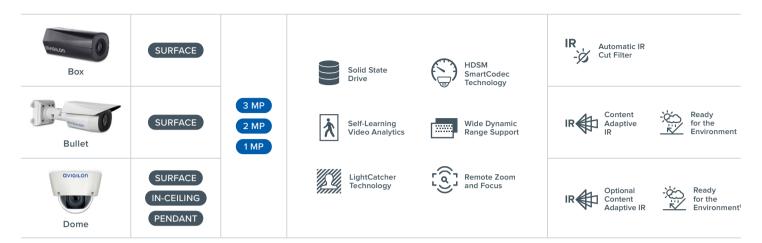




# H4 ES Camera Line

#### Camera, NVR & Video Management Software—All in One

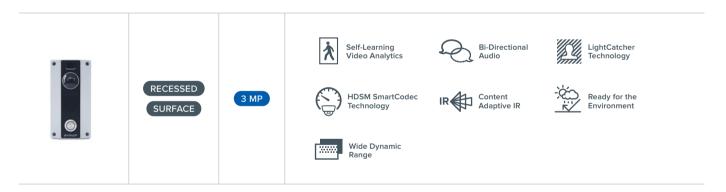
Combines high-definition imaging, self-learning video analytics, network video recorder functionality with up to 256 GB on-board solid-state drive and embedded ACC software to create an all-in-one Avigilon intelligent surveillance solution.



## H4 Video Intercom

#### Remotely Identify, Communicate & Authorize Access

Integrates a 3 MP camera for clear viewing and an intercom with echo-canceling technology for effective two-way communication with visitors. Combines with ACC and ACM software to create a secured entry system that enables operators to take action, whether they need to grant access, trigger a lockdown or initiate an Appearance Search for a visitor.



# H4 License Plate Capture Camera

### Accurate License Plate Capture at a Range of Distances & Speeds

For applications where it's critical to obtain character recognition at vehicle speeds up to 100 km/hr (62 mph), from a range of distances, even in challenging lighting conditions.



Outdoor model only.



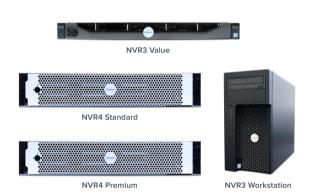
# Video Recorders

Store as much or as little as you need with our secure, reliable and scalable video recording solutions, purpose-built for 24/7/365 video surveillance performance.

#### **Network Video Recorders**

#### Pre-Loaded & Pre-Configured with ACC Server Software

Fourth-generation Avigilon Network Video Recorders (NVRs) offer our highest capacity, retention and throughput to provide secure, reliable, and scalable platforms for high-performance security solutions. NVR4s come standard with optimized recording technology, a three-year Avigilon limited warranty with dedicated support, and numerous additional features, including Appearance Search technology.



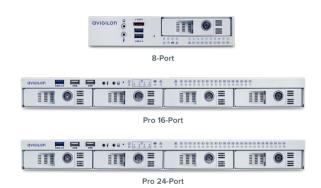
Family	Network Video Recorders			
Model	NVR4 Premium	NVR4 Standard	NVR3 Value	NVR3 Workstation
Self-Learning Video Analytics	No			
Appearance Search Support	Yes Yes¹			No
Built-In Network Switch	No			
Local Viewing	No Yes			Yes
PoE Ports	No			
Max. Throughput (Mbps)	1,800	1,150	384	120
Max. Record Rate (Mbps)	1,450	700	256	120
Storage Capacity (TB)	64–157	16–48	6–18	8
Max. Number of Video Data Hard Drives	18 (RAID 6)	8 (RAID 6)	4 (RAID 5)	2 (JBOD)

### **HD Video Appliances**

All-in-One Server, Storage Solution, **Workstation & Network Switch** 



Designed to help shorten installation time, reduce cost and simplify the deployment of surveillance systems, our HD Video Appliances come pre-loaded with ACC software and house the operating system on a separate solid state drive so you can be up and running in no time.

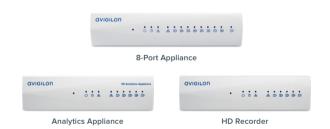


### **ACC ES Appliances**

Record Locally. View Centrally. Manage Remotely.



All-in-one appliances that bring edge intelligence to organizations with multiple sites and critical assets requiring protection and monitoring. ACC ES products help avoid bandwidth issues by storing 30+ days of HD video locally near the camera, so you can easily view it remotely from a central location.



HD Video Appliances		A	ACC ES Appliance	S	
Pro 24-Port	Pro 16-Port	8-Port	8-Port Appliance	Analytics Appliance	HD Recorder
	No		No	Yes	No
	No		No		
Yes		Yes			
	Yes		No		
24	16	8	8	4	4
400	356	200	210	13	30
300	256	100	130 80		0
24	12	4	4–8 2–4		-4
4 (RAID 5)	4 (RAID 5)	1	1	1	1

# Simplify Your Video Surveillance Deployment

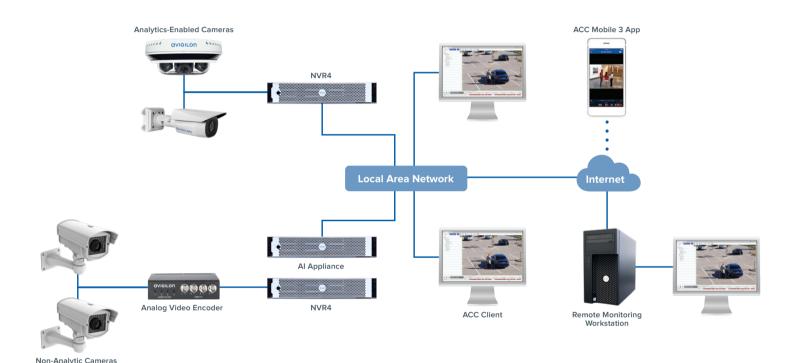
Whether you need a couple of cameras to monitor a store front or a thousand cameras to secure a large campus, using a complete Avigilon solution will help take the risk out of deployment and maintenance. Avigilon NVRs are pre-configured for enhanced system performance and to save you time during deployment.

#### **Performance**

Avigilon NVRs are designed specifically for the highthroughput workload required by video surveillance systems. They are designed to work in low-latency, high-consistency environments, providing a 15% increase in performance over comparable off-the-shelf servers.

#### Cybersecurity

You don't need to be an IT expert to deploy a system that meets the highest security standards. Avigilon NVRs are designed with high security site requirements in mind. Unused operating system services, ports and applications are all disabled to reduce attack vectors while also maximizing performance.





### **Analog Video Encoders**

A cost-effective way to migrate your legacy analog system to a network-based IP-system, while still using your analog cameras. You get benefits like sharper, clearer images, remote viewing and monitoring, and the ability to migrate to a full digital system when you're ready.



# Remote Monitoring Workstations

Pre-loaded with ACC software, Avigilon Remote Monitoring Workstations make it easy to install an additional high-resolution monitoring station to an existing system. Choose from 2-monitor or 4-monitor workstations with a maximum resolution of 3840x2160 (4K) per monitor, and up to a combined total of 144 streams of video.



The Avigilon Artificial Intelligence Appliance (Al Appliance) adds patented self-learning video analytics and Appearance Search technology to nearly any IP camera. Engineered for high performance, capacity and resiliency, the Al Appliance features leading-edge hardware and comes in two models to support up to sixty 2 MP cameras for enterprise scalability.

#### Video Analysis for **Non-Analytic Cameras**

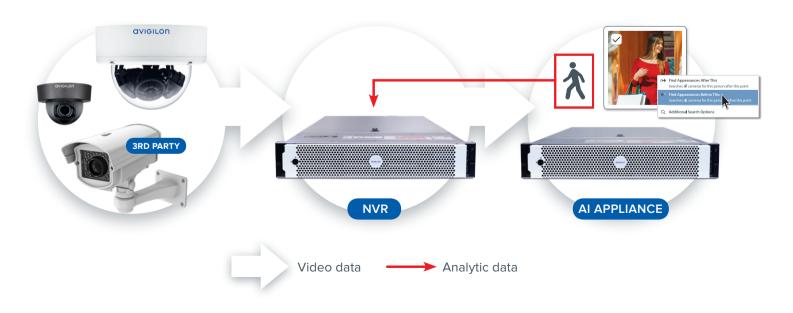
Bring the intelligence of Avigilon self-learning video analytics to any ONVIF-compliant thirdparty camera, allowing accurate recognition of the movement of people and vehicles.

#### Reliable & Easy to Install

Built on the same platform as the latest Avigilon NVR, includes onsite parts delivery, and works with ACC software out of the box with minimal configuration.

#### **Enables Appearance** Search Technology

On-board GPU supports Appearance Search technology when combined with ACC software, regardless of the network video recorder used.





# **Access Control**

Secure your perimeter to keep people, property and assets safe with an easy-to-use, role-based system that can grow with you.

### **ACM System**

Our 100% browser-based access control system enables you to grant or deny access to restricted areas while offering immediate facility lockdown capabilities via any browser or mobile device.

#### **Keep Critical Data Safe**

Optional hot standby-auto failover solution automatically saves policies, settings and identities from any one primary appliance to a standby appliance.



#### **Easy Synchronization & Role Management**

Integrate with external identity management solutions to map enterprise roles such as departments, locations and titles with physical access, enforce policy restrictions, and meet regulations.



### **ACM** Embedded **Controller™ System**

Secure your business with our entry-level access control platform—no server required. Automatic configuration and easy navigation provide an access system that is both effective and simple to use, with a straightforward interface, input/output linking and email notifications for critical events.



### **ACM Verify**<sup>™</sup> Browser

Allows any browser-enabled smart device to act as a virtual station by recording and confirming an individual's identity using a PIN code, extending the capability of your access system to locations where physical access doors are not feasible.

# **Open Access Control Hardware Support**

#### **Biometrics**

Wireless Locks

#### **Controllers & Credentials & Sub-Panels** Readers

#### Supplies & **Enclosures**











### **Integrations**

#### Video Surveillance



ACC software provides bi-directional alarm, video and event management directly from the ACM Client system.

#### **Intrusion Panels**



Monitor and control Bosch intrusion panels from the ACM system.

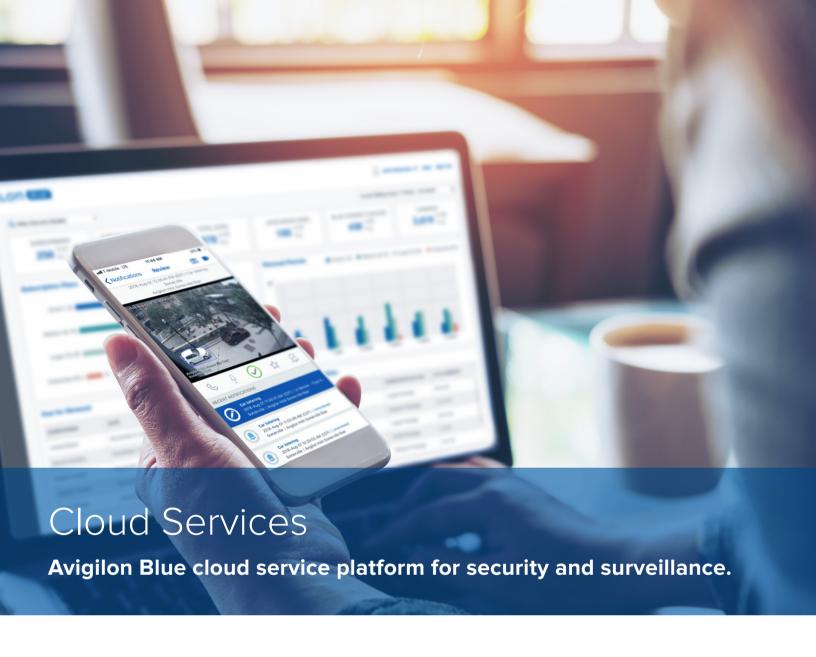
#### **Visitor Management**



Map custom fields and roles in the ACM system for easy visitor check-in using the EasyLobby software.

# **ACM Solution Comparison**

Feature	ACM Embedded Controller	ACM Professional	ACM Enterprise	Enterprise Plus	Virtual
Maximum Reader Doors per System	16	32	400	2,048	2,048
Concurrent Client Connections	2	50	20	50	50
Maximum Operators	10	500,000	250,000	500,000	500,000
Maximum Identities	2,000	500,000	250,000	500,000	500,000
Custom Reports	No	Yes			
Software Integrations (video, intrusion, wireless locks and visitor management)	No	Yes			
Biometric Integration	No	Yes			
Alarm Management	No	Yes			
Identity Management & Badging	No	Yes			
Hot Standby Auto Failover	No	No Yes			
RAID Technology & Hot-Swappable Components	No			Yes	No



# Connect. Manage. Service. Grow.

The Avigilon Blue™ platform combines on-premise recording with cloud management for Avigilon partners and their customers¹.

This subscription-based solution enables small and medium-sized enterprises to easily manage all of their locations through a single intuitive interface, at the office or on the go.



# Connect

Easily set up, configure, and link the Avigilon Blue Connect device to the cloud in minutes with universal plug-and-play network protocols and an intuitive web-based user interface.



#### SIMPLE CONNECTIVITY

Start using the Avigilon Blue platform for new or existing sites with Avigilon and third-party ONVIF-compliant cameras.



#### **EASY ACCESS TO VIDEO**

The Avigilon Blue platform enables viewing of live and recorded video from all connected cameras.

#### **AVIGILON BLUE MOBILE APP**

- Save cloud-based video verification clips to your mobile device.
- Receive, view and act on analytics-based security notifications.
- Conveniently pause notification alerts directly from your mobile device during scheduled site activity.



#### **AVIGILON BLUE CONNECT DEVICES**

The Avigilon Blue platform integrates an on-premise, quick-to-deploy Avigilon Blue Connect device with 30-day onsite video retention and support for Avigilon cameras, third-party ONVIF-compliant cameras and analog video encoders.



Feature	16-Channel	8-Port	
Self-Learning Video Analytics	Yes		
Recording Rate	196 Mbps	120 Mbps	
On-Board Storage	12 TB	8 TB	
Maximum Camera Channels	16	8	
Stream-Out Rate	120 Mbps	50 Mbps	
PoE Ports	No	8	
Uplink Ports	2 x 1 Gbe		

# Manage

The Avigilon Blue platform makes it easy for integrators to manage subscriptions and for customers to manage their video surveillance system on the cloud.



#### **SUBSCRIPTION CENTER**

Offers a unified overview of your Avigilon Blue-based business, helping you and your sales team track and analyze customer subscription data to discover insights and opportunities to grow your recurring monthly revenue business.







# Service

Save time and help prevent potential hassle—monitor your customers' system health events remotely. Diagnose and respond to certain system issues without needing to dispatch technicians.

#### PARTNER SITE HEALTH MONITORING

Avigilon partners can remotely diagnose and troubleshoot certain issues by viewing the status of cameras and hardware and acting on reported health notifications.

#### MOBILE DEVICE ENABLED CAMERA DISARM / ARM

Conveniently pause notification alerts directly from your mobile device when you know scheduled activity on your site will be taking place. This helps eliminate nuisance alarms, but still ensures recording continues.





# Grow

Avigilon Blue offers subscription packages with an easy ordering and upgrade process. The system automatically notifies users when an upgrade is recommended, based on the number of deployed cameras for their subscription plan.



#### SUBSCRIPTION PLAN FEATURES

- High-definition video storage
- Cloud-based video verification clips from analytic events
- System health and security notifications
- Unlimited user accounts
- Mobile device app¹ and PC web browser² access
- One- to five-year subscription term options



<sup>&</sup>lt;sup>2</sup> Minimum requirements: Google Chrome or Firefox browser on PCs with Apple OSX, Linux® or Windows operating systems





### **North American** Manufacturing<sup>1</sup>

Avigilon is proud to manufacture trusted security solutions, with Canadian and American expertise and globally sourced materials, at our state-of-theart facilities in Richmond, British Columbia, and Plano, Texas. By manufacturing in North America<sup>1</sup>, we provide a level of quality our customers can trust, while being able to accelerate the speed at which we can go from innovation to providing products directly to global markets.



### **Exceptional Customer Service**

Avigilon provides extensive customer service and 24/7 technical support by phone or online chat for installed hardware and software. Advance replacement is available for products under warranty and we offer hassle-free returns under our return policy to ensure you are satisfied with your Avigilon solutions.



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