HD Video Appliance 3X

8 Port Pro 16 Port Pro 24 Port

The new generation of Avigilon HD Video Appliances (HDVA3X) provides an all-in-one security solution with wall or 1U rack mounting options that help reduce your installation time and the overall complexity of your security portfolio. The Video Appliance line integrates Motorola Solutions' Avigilon Control Center™ (ACC) with a high-powered PoE switch and a client workstation to provide a recording and video management solution that is capable of supporting multi-megapixel IP cameras, supporting up to Avigilon's 10K (61 MP) H5 Pro camera line. The new HDVA3X product line features improved performance with pre-installed updated Windows 10 IoT Enterprise (v21H2 LTSC) and offers enterprise infrastructure management with the new upgrade kits for Windows Server 2019 LTSC and out-of-band management module. Furthermore, the HDVA3X Pro 16-port and 24-port models feature RAID protection, up to 24 TB of storage, increased throughput, and advanced analytics support[1].
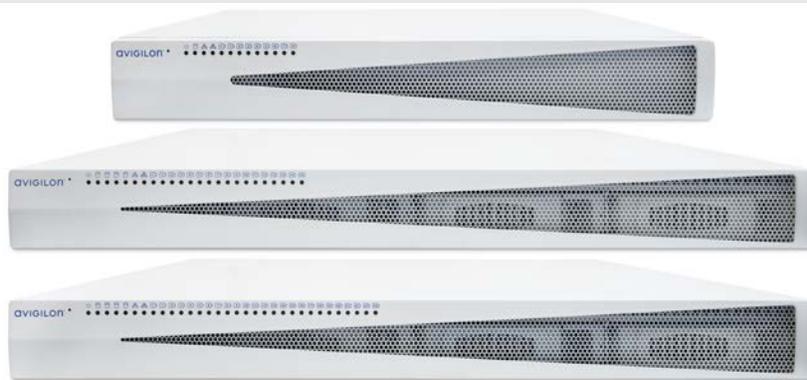
Features

AI-Powered Analytics Support
Security teams can respond faster to critical events with the HD Video Appliance 3X Pro's seamless support for Avigilon Appearance Search[1], Facial Recognition[1] and license plate recognition (LPR) technologies.

Optimal WAN Usage
Reduce playback bandwidth using HDSM when viewing video feeds and only transmit what you need and when you need it. Bring the recording closer to the camera, thereby reducing video feed latency and increasing the stability of camera stream networking.

All-in-One Support
In addition to lifetime 24/7 Avigilon telephone technical support for the Avigilon end-to-end solution, a three-year hardware warranty[2] is also included.

Lower Total Cost of Ownership
The HD Video Appliance 3X is pre-configured with ACC™ software for secure network video recording and management of Avigilon cameras, with up to 61 MP resolution.

Improve Scale, Speed and Security
Hybrid architecture enables appliances and devices to run multiple analytics services concurrently and on-demand, share resources within the site using on-premise hardware or cloud-connect ACC to Avigilon Cloud Services. Enhanced cybersecurity with Windows 10 IoT Enterprise V21H2 or Windows Server 2019 LTSC (optional AS3X-S19-UPG kit).

Remote Out-Of-Band Management
Monitor, control, recover and restart your appliances remotely over a dedicated out-of-band network using the IPMI module. Keep up-to-date with the remote health and status check of your HDVA3X with the optional IPMI module accessory.

[1] Requires the analytics kit (VMA-AS3-ANK).

[2] Please refer to avigilon.com/support/warranty/avigilon for more information.

MOTOROLA SOLUTIONS

AVIGILON™

Analytics

Avigilon Appearance Search™ (AS)

Quickly locates a specific person or vehicle of interest across an entire site using a sophisticated deep learning AI search engine.

ACC Enterprise required

Face Recognition (FR)

Detects matches from managed watchlists to alert operators of people of interest. Requires Appearance Search and an additional license.

ACC7-FACE license required

License Plate Recognition (LPR)

Works with ACC software for accurate license plate capture at a range of distances and speeds.

ACC7-LPR license required

No Face Mask Detection

Determines whether a person is not wearing a face mask to help prevent community transmission.

ACC Enterprise required

Occupancy Counting

With cameras at entrances and exits, a running total of occupancy can be monitored in real time.

ACS Required

| Model | Analytics Kit | Maximum Supported Cameras By Feature[1] | | Number of LPR Lanes[2] | | | |
		Appearance Search Only[3]	Face Recognition + Appearance Search[3]	5 FPS (<16 KM/H)	10 FPS (<48 KM/H)	20 FPS (<100 KM/H)	30 FPS (<150 KM/H)
HDVA3X 8-Port	–	–	–	–	–	–	–
HDVA3X Pro 16-Port	–	–	–	2	2	1	–
	VMA-AS3-ANK	50	12	2	2	1	–
HDVA3X Pro 24-Port	–	–	–	2	2	1	–
	VMA-AS3-ANK	50	12	2	2	1	–

[1] These performance figures are based on validation testing by Avigilon. Assumes appliance-wide average per camera rates of classified objects leaving field of view:
- H5A Cameras - One every second;
- H4A Cameras - One every two seconds.
Additional licenses may be required. For more information, contact Avigilon Sales.

[2] Assumes a 3 MP camera with 1 MP license plate scan area and Frames Per Second (FPS) to recognize license plates up to vehicle speeds in Kilometers Per Hour (KM/H) . Results may vary according to camera mounting parameters. ACC 7.14.10 or later is required.

[3] Requires H5A or H4A cameras. The Avigilon Appearance Search camera support limit does not affect any appliance throughputs for simultaneous recording, playback and live streaming.

Specifications

System	HD Video Appliance 3X 8-Port	HD Video Appliance 3X Pro 16-Port	HD Video Appliance 3X Pro 24-Port
Capacity	2 TB 4 TB 8 TB	6 TB 9 TB 12 TB	12 TB 18 TB 24 TB
Avigilon Control Center™ Edition	Core, Standard, and Enterprise* compatible (ACC licenses are sold separately)		

Network Video Streaming Performance	Network Connection	1GbE Networking		
	Recording Rate	Up to 100 Mbps	Up to 300 Mbps	
	Playback Rate	Up to 100 Mbps	Up to 100 Mbps	
	Recording Image Rate	Up to 30 images per second per channel		

Operating System		Microsoft Windows 10 IoT Enterprise v21H2 LTSC. Optional Microsoft Windows Server 2019 LTSC Upgrade Kit (AS3X-S19-UPG) available.		
Hard Disk Drive Configuration	Video Data	1 × 3.5" SATA	RAID 5 — Up to 4 × 3.5" SATA	RAID 5 — Up to 4 × 3.5" SATA
	OS	128 GB M.2 SATA SSD		
Recording Storage Capacity		Up to 8 TB	Up to 12 TB	Up to 24 TB
Memory		8 GB DDR4	8 GB DDR4	
Local Viewing		Yes, 2 × HDMI ports		
Out-of-band Management		Optional IPMI Module (VMA-AS3X-IPMI) available		
PoE+ Ports		8 × 10/100 Mbps (IEEE 802.3at)	16 × 10/100 Mbps (IEEE 802.3at)	24 × 10/100 Mbps (IEEE 802.3at)
PoE Output		Up to 30W/Port (120W Total)	Up to 30W/Port (240W Total)	Up to 30W/Port (360W Total)
Camera Network Uplink		10/100/1000 Mbps		
Corporate Network Uplink		10/100/1000 Mbps		
External I/O Terminals		4 × Digital Inputs (Wet contact: 5-30 VDC, or Dry contact) and 4 × Relay Outputs (24 VDC/1A max)		
Switch Control		Managed Switch with Web-based UI		
USB		2 × USB 3.0		

* Avigilon Appearance Search and facial recognition requires Enterprise version of the ACC software.

Mechanical	8-Port	16-Port	24-Port
Form Factor	Small form factor	1U	1U
Mounting	Wall mount (included), optional Rack mount kit available (RMS1U-B-AS3-8P)	Rack mount rails (included)	
Dimensions	313 mm × 335 mm × 44 mm; 12.3" × 13.2" × 1.73"	654.8 mm × 438.4 mm × 44 mm; 17.25" × 25.78" × 1.73"	
Weight	3 kg; 6.4 lb	10 kg; 22 lb	

Electrical	8-Port	16-Port	24-Port
Power Input	100 to 240 VAC, 50/60 Hz		
Power Supply	Single non-redundant		
Power Consumption	80 W min; 200 W max	200 W min; 420 W max	

Environmental	
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-40°C to 65°C (-40°F to 149°F)
Humidity	10 - 90% Relative humidity (non-condensing)

Certifications	8-Port	16-Port	24-Port
Certifications/Approvals	UL, cUL, CE, RoHS, RCM, UKCA, ANATEL, NOM		
Safety Standards	UL 62368-1, CSA 62368-1, IEC/EN 62368-1		
Electromagnetic Emissions	FCC Part 15 Subpart B (Class B), ICES-003 (Class B), EN 55032 (Class B), EN 55011 (Group 1, Class B), EN 61000-6-3, EN 61000-3-2, EN 61000-3-3	FCC Part 15 Subpart B (Class A), ICES-003 (Class A), EN 55032 (Class A), EN 55011 (Group 1, Class A), EN 61000-6-4, EN 61000-3-2, EN 61000-3-3	
Electromagnetic Immunity	EN 55035, EN 61000-6-1	EN 55035, EN 61000-6-2	

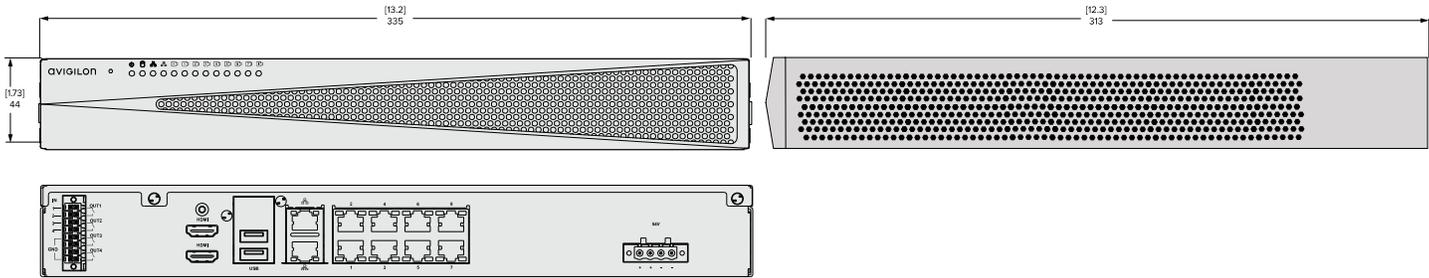| Supported Analytics Events	
Objects in Area	The event is triggered when the selected object type moves into the region of interest. This event can be used to count objects.
Object Loitering	The event is triggered when the selected object type moves into the region of interest and then stays for an extended amount of time.
Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view. The beam can be unidirectional or bidirectional.
Object Appears or Enters Area	The event is triggered by each object that enters the region of interest.
Object Not Present in Area	The event is triggered when no objects are present in the region of interest.
Objects Enter Area	The event is triggered when the specified number of objects have entered the region of interest.
Objects Leave Area	The event is triggered when the specified number of objects have left the region of interest.
Object Stops in Area	The event is triggered when an object moves into a region of interest and then stops moving for the specified threshold time.
Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.
Tamper Detection	The event is triggered when the scene unexpectedly changes.

Outline Dimensions

8-Port Video Appliance

Form Factor
1U small form factor

Dimensions (L × W × H)
313 mm × 335 mm × 44 mm
[12.3" × 13.2" × 1.73"]

Weight
3.0 kg [6.4 lbs]

16-Port Pro Video Appliance

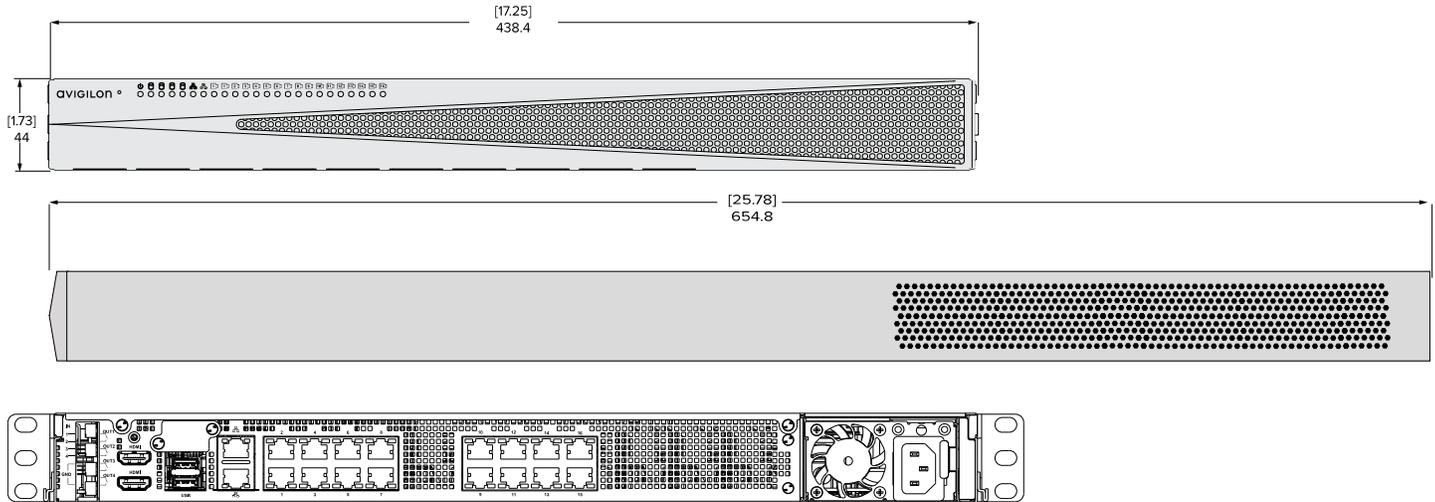| [X.XX]	INCHES
X.X	MM

Form Factor
1U chassis
Dimensions (L × W × H)
**654.8 mm × 438.4 mm × 44 mm
[25.78" × 17.25" × 1.73"]**

Weight
10.0 kg [22.0 lbs]

24-Port Pro Video Appliance

[X.XX]	INCHES
X.X	MM

Form Factor
1U chassis
Dimensions (L × W × H)
**654.8 mm × 438.4 mm × 44 mm
[25.78" × 17.25" × 1.73"]**

Weight
10.0 kg [22.0 lbs]
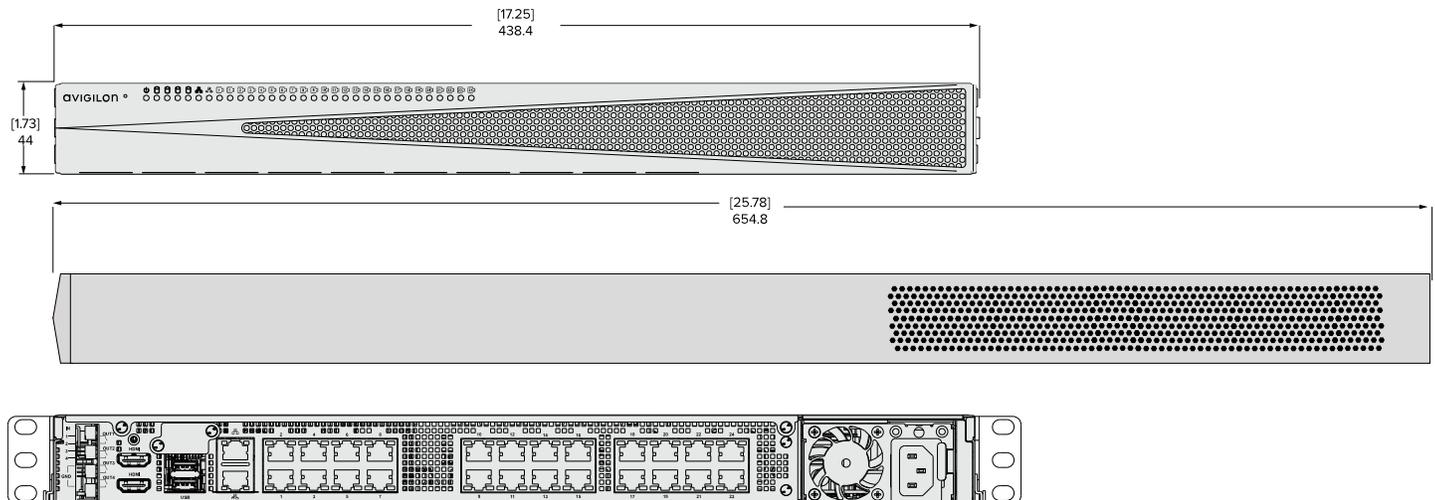
Ordering Information

Video Appliance

VMA-AS3X-8P2	HD Video Appliance 3X with Avigilon Control Center, 8 port, 2 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-8P4	HD Video Appliance 3X with Avigilon Control Center, 8 port, 4 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-8P8	HD Video Appliance 3X with Avigilon Control Center, 8 port, 8 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-16P06	HD Video Appliance 3X Pro with Avigilon Control Center, 16 port, 6 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-16P09	HD Video Appliance 3X Pro with Avigilon Control Center, 16 port, 9 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-16P12	HD Video Appliance 3X Pro with Avigilon Control Center, 16 port, 12 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-24P12	HD Video Appliance 3X Pro with Avigilon Control Center, 24 port, 12 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-24P18	HD Video Appliance 3X Pro with Avigilon Control Center, 24 port, 18 TB, Windows 10 IoT Enterprise v21H2 LTSC
VMA-AS3X-24P24	HD Video Appliance 3X Pro with Avigilon Control Center, 24 port, 24 TB, Windows 10 IoT Enterprise v21H2 LTSC

Avigilon Control Center licenses must be purchased separately.
Avigilon Appearance Search and facial recognition requires Enterprise version of the ACC software.

VMA-AS3X-xxPnn-NA   VMA-AS3X-xxPnn-UK   VMA-AS3X-xxPnn-EU   VMA-AS3X-xxPnn-AU

Software Licenses

ACC7-ENT	ACC 7 Enterprise Edition license
ACC7-STD	ACC 7 Standard Edition license
ACC7-COR	ACC 7 Core Edition license
ACC7-VAC	ACC 7 Video Analytics feature channel license — Required for Classified Object Detection
ACC7-FACE	ACC 7 Face feature channel license
ACC7-FACE-10C	ACC 7 Face feature 10 channel license
ACC7-LPR	ACC 7 LPR lane license

Optional Accessories

VMA-AS3X-IPMI	HDVA3X IPMI module for out of band management
AS3X-S19-UPG	Windows Server 2019 Upgrade Kit for HDVA3X
VMA-AS3-ANK	HDVA3/3X 16/24-port Analytics Kit for Appearance Search and Face Recognition
RMS1U-B-AS3-8P	1U Rack mountable shelf for HDVA3/3X 8-port
RAILS-B-AS3-16/24P	1U Rack rail mount installation kit for HDVA3/3X 16/24-port
PS-270W-AS3-8P	HDVA3/3X 8-port Power Supply, no power cord
PS-920W-AS3-16/24P	HDVA3/3X 16/24-port Power Supply, no power cord
VMA-AS3-HDD02	HDVA3/3X 2 TB Hard Drive, compatible with 8-port and 16-port
VMA-AS3-HDD03	HDVA3/3X 3 TB Hard Drive, compatible with 16-port
VMA-AS3-HDD04	HDVA3/3X 4 TB Hard Drive, compatible with 8-port, 16-port, and 24-port
VMA-AS3-HDD06	HDVA3/3X 6 TB Hard Drive, compatible with 24-port
VMA-AS3-HDD08	HDVA3/3X 8 TB Hard Drive, compatible with 8-port and 24-port

Support

Learn more and find additional documentation at avigilon.com or email sales@avigilon.com for specific product support.

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