AVIGILON™

HD Video Appliance 3XL

Reduce your installation time and the overall complexity of your security portfolio with the Avigilon HD Video Appliances (HDVA3XL), an all-in-one security solution with wall or 1U rack mounting options. It integrates Avigilon Unity Video 8 software 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 HDVA3XL product line features improved performance with pre-installed updated Windows 11 IoT Enterprise LTSC 24H2 (8-port models only) and offers enterprise infrastructure management with the new upgrade kits for Windows Server 2022 LTSC and out-of-band management module. Furthermore, the HDVA3XL 24-port model features RAID protection, up to 48 TB of storage, increased throughput, and advanced analytics support[1].

AI-Powered Analytics Support
Security teams can respond faster to critical events with the HD Video Appliance 3XL 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 3XL is pre-configured with Unity Video 8 software 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 Unity Video 8 to Avigilon Cloud Services. Enhanced cybersecurity with Windows 11 IoT Enterprise LTSC 24H2 (8-port models only) or Windows Server 2022 LTSC (optional AS3XL-S22-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 HDVA3XL 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.

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.

UNITY8-ENT or ACC7-ENT 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 or UNITY8-FACE license required

License Plate Recognition (LPR)
Works with Unity Video 8 software for accurate license plate capture at a range of distances and speeds.

ABC-123

ACC7-LPR or UNITY8-LPR license required

No Face Mask Detection
Determines whether a person is not wearing a face mask to help prevent community transmission.

UNITY8-ENT or ACC7-ENT 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)
HDVA3XL 8-Port	–	–	–	–	–	–	–
HDVA3XL Pro 24-Port	–	–	–	2	2	1	–
	VMA-AS3-ANK	38	16	2	2	1	–

[1] Assumes each channel consists of a H.264/H.265 2MP 30FPS primary stream and a low resolution 30FPS secondary stream with moderate ONVIF Profile S motion metadata as well as appliance-wide average per camera rates of classified objects leaving field of view:
- H6A/H5A Cameras - One every second.
- H4A Cameras - One every two seconds.
- Non-analytics cameras running COD - One every second.
Each multisensor camera with 3-4 sensors is considered equivalent to 3-4 cameras.

[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 Avigilon Analytic 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 3XL 8-Port	HD Video Appliance 3XL Pro 24-Port
Capacity		2TB, 4TB, 8TB, 16TB	6TB, 12TB, 18TB, 24TB, 48TB
Avigilon Unity Video / Avigilon Control Center™ Edition		Pre-installed with Unity Video 8 or ACC7 from chooser menu (compatible with Core, Standard, or Enterprise* licenses sold separately)	
Network Video Streaming Performance[1]	Network Connection	1GbE Networking	
	Recording / Livestream Rate	Up to 104 Mbps (2/4/8 TB), 143 Mbps (16 TB)	Up to 208 Mbps (6/12/18/24 TB), 247 Mbps (48 TB)
	Recording / Livestream Channels	Up to 16 (2/4/8 TB), 22 (16 TB)	Up to 32 (6/12/18/24 TB), 38 (48 TB)
	Playback Rate	Up to 104 Mbps	Up to 104 Mbps
	Playback Channels	Up to 16	Up to 16
	Recording Image Rate	Up to 30 images per second per channel	
Client Video Playback and Live Streaming Performance[2]		Up to 9 Primary Streams while recording 16 channels	Up to 9 Primary Streams while recording 30 channels
Operating System		Microsoft Windows 11 IoT Enterprise LTSC 24H2.	Windows 10 IoT Enterprise LTSC v21H2
Hard Disk Drive Configuration	Video Data	1 × 3.5" SATA	RAID 5 — Up to 4 × 3.5" SATA
	OS	256 GB M.2 SATA SSD	
Recording Storage Capacity		Up to 16 TB	Up to 48 TB
Memory		16 GB DDR4	16 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)	24 × 10/100 Mbps (IEEE 802.3at)
PoE Output		Up to 30W/Port (120W 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 UNITY8/ACC7 software.

[1]Assumes each channel consists of a H.264/H.265 2MP 30FPS primary stream and a low resolution 30FPS secondary stream with moderate ONVIF Profile S motion metadata.

[2]Assumes each H.264/H.265 2MP 30FPS primary stream is displayed at high-resolution within a Unity Video client on one of two 4K monitors..

Mechanical	8-Port	24-Port
Form Factor	Small form factor	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	24-Port
Power Input	100 to 240 VAC, 50/60 Hz	
Power Supply	270 W	920 W
Power Consumption	80 W min; 200 W max	200 W min; 420 W max

Environmental	8-Port	24-Port
Operating Temperature (2TB/4TB/6TB/8TB/12TB/18TB/24TB)	0°C to 40°C (32°F to 104°F)	
(16TB/48TB)	10°C to 40°C (50°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	24-Port
Certifications/Approvals	UL, cUL, CE, RoHS, RCM, UKCA, ANATEL, BIS, 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

NOM is coming soon in Q4 2025. The HDVA3XL 8-port power supply is NOM certified with appliance itself but PS-270W-AS3-8P is not NOM certified as a standalone accessory sold seperately for Mexico.

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.

| Supported Analytics Events	
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

[X.XX]	INCHES
X.X	MM

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]
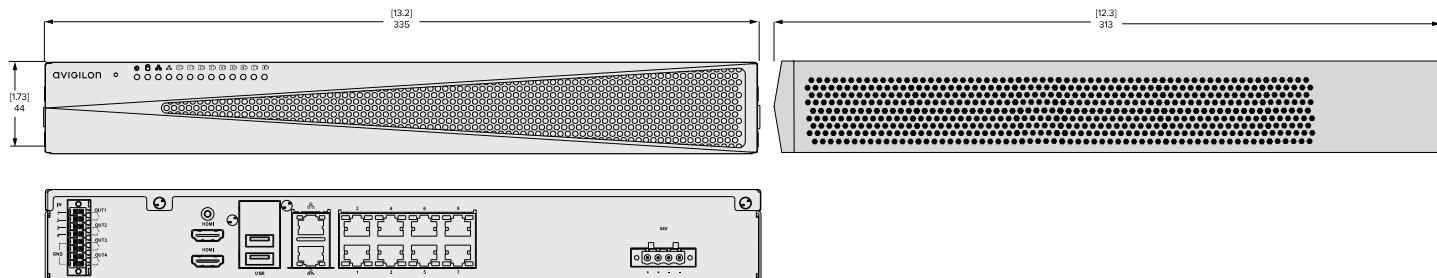
[X.XX]	INCHES
X.X	MM

24-Port Pro Video Appliance

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]
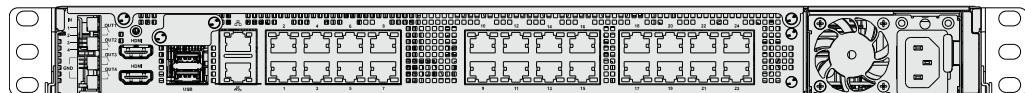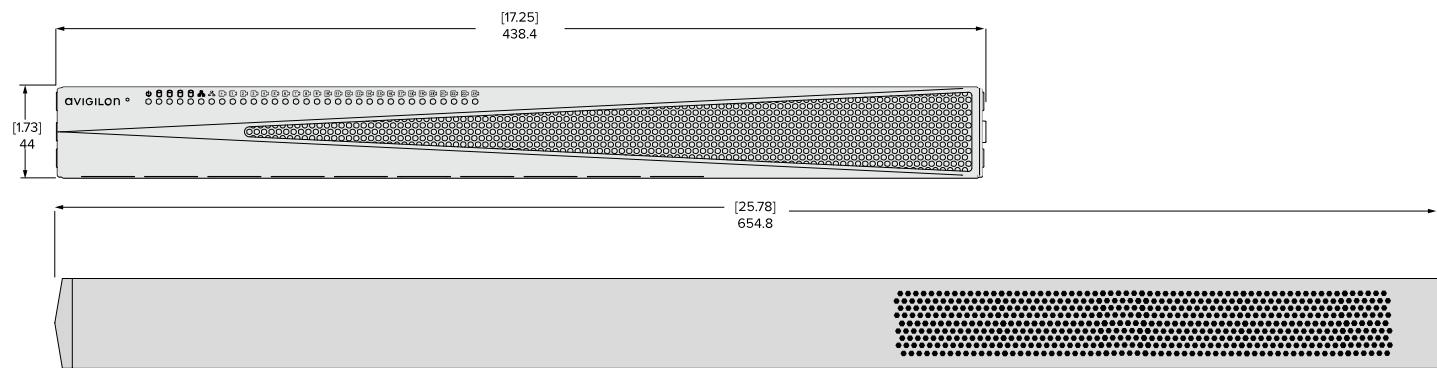
Ordering Information

Video Appliance	
VMA-AS3XL-8P2	HD Video Appliance 3XL 8-Port with Unity Video 8, 2TB, Windows 11 IoT Enterprise 24H2 LTSC
VMA-AS3XL-8P4	HD Video Appliance 3XL 8-Port with Unity Video 8, 4TB, Windows 11 IoT Enterprise 24H2 LTSC
VMA-AS3XL-8P8	HD Video Appliance 3XL 8-Port with Unity Video 8, 8TB, Windows 11 IoT Enterprise 24H2 LTSC
VMA-AS3XL-8P16	HD Video Appliance 3XL 8-Port with Unity Video 8, 16TB, Windows 11 IoT Enterprise 24H2 LTSC
VMA-AS3XL-24P06	HD Video Appliance 3XL Pro 24-Port with Unity Video 8, 6TB, Windows 10 IoT Enterprise 21H2 LTSC
VMA-AS3XL-24P12	HD Video Appliance 3XL Pro 24-Port with Unity Video 8, 12TB, Windows 10 IoT Enterprise 21H2 LTSC
VMA-AS3XL-24P18	HD Video Appliance 3XL Pro 24-Port with Unity Video 8, 18TB, Windows 10 IoT Enterprise 21H2 LTSC
VMA-AS3XL-24P24	HD Video Appliance 3XL Pro 24-Port with Unity Video 8, 24TB, Windows 10 IoT Enterprise 21H2 LTSC
VMA-AS3XL-24P48	HD Video Appliance 3XL Pro 24-Port with Unity Video 8, 48TB, Windows 10 IoT Enterprise 21H2 LTSC

Unity Video 8 (UNITY8) or Avigilon Control Center 7 (ACC7) licenses must be purchased separately.
Avigilon Appearance Search and facial recognition requires Enterprise version of the UNITY8/ACC7 software.

VMA-AS3XL-xxPnn-NA ▢   VMA-AS3XL-xxPnn-UK ▢   VMA-AS3XL-xxPnn-EU ▢   VMA-AS3XL-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-FACE	ACC 7 Face feature channel license
ACC7-FACE-10C	ACC 7 Face feature 10 channel license
ACC7-LPR	ACC 7 LPR lane license
UNITY8-ENT	Unity Video 8 Enterprise Edition license
UNITY8-STD	Unity Video 8 Standard Edition license
UNITY8-COR	Unity Video 8 Core Edition license
UNITY8-FACE	Unity Video 8 Face feature channel license
UNITY8-FACE-10C	Unity Video 8 Face feature 10 channel license
UNITY8-LPR	Unity Video 8 lane license

Accessories	
VMA-AS3X-IPMI	HDVA3X/3XL IPMI module for out of band management
AS3XL-S22-UPG	Windows Server 2022 Upgrade Kit for HDVA3XL
VMA-AS3-ANK	HDVA3/3X/3XL 16/24-port Analytics Kit for Appearance Search and Face Recognition
RMS1U-B-AS3-8P	1U Rack mountable shelf for HDVA3/3X/3XL 8-port
RAILS-B-AS3-16/24P	1U Rack rail mount installation kit for HDVA3/3X/3XL 16/24-port
PS-270W-AS3-8P	HDVA3/3X/3XL 8-port Power Supply, no power cord
PS-920W-AS3-16/24P	HDVA3/3X/3XL 16/24-port Power Supply, no power cord
VMA-AS3-HDD02	HDVA3/3X/3XL 2 TB Hard Drive, compatible with 8-port 2TB and 16-port / 24-port 6TB

Accessories	
VMA-AS3-HDD04	HDVA3/3X/3XL 4 TB Hard Drive, compatible with 8-port 4TB and 16-port / 24-port 12TB
VMA-AS3-HDD06	HDVA3/3X/3XL 6 TB Hard Drive, compatible with 24-port 18TB
VMA-AS3-HDD08	HDVA3/3X/3XL 8 TB Hard Drive, compatible with 8-port 8TB and 24-port 24TB
VMA-AS3XL-HDD16	HDVA3XL 16TB Hard Drive, compatible with 8-port 16TB and 24-port 48TB

AS3XL-S22-UPG will be coming soon in Q4 2025.

Support

For product support, visit: avigilon.com or sales@avigilon.com

To learn more, visit: avigilon.com/nvr-systems/nvr6