

AI NVR

The Artificial Intelligence (AI) Network Video Recorder (NVR) is a purpose-built security-hardened NVR, with built-in server-side analytics that unlocks Avigilon's advanced AI capabilities on any connected video stream. This cost-effective, plug-and-play appliance combines high-performance recording with video analytics in an easy-to-deploy turnkey solution. An IT-friendly solution, the AI NVR is built on a hardened embedded OS, which can be remotely managed with Avigilon Cloud Services (ACS). Avigilon regularly provides a single firmware package that not only updates the AI NVR, but also any connected cameras, and clients. Add the power of Avigilon's advanced neural-network-based analytics to your video streams with AI NVR.



Features



SERVER-SIDE ANALYTICS FOR NON-ANALYTIC CAMERAS

Bring Object Detection, Appearance Search, Face Recognition, and No Face Mask Detection to your existing non-analytic cameras



CLOUD REMOTE SITE UPDATE

Avigilon Al NVR, Cameras, and Clients can all be remotely upgraded together with a single signed and encrypted firmware package



HIGH PERFORMANCE

Up to 1700mbps of total throughput, while simultaneously running analytics



SIMPLIFIED NETWORKING

Full recording throughput can be run on a single network port with additional ports used for failover



REMOTE MANAGEMENT

Use ACS to manage multiple AI NVRs in a single building or globally from a central location



REMOTE NOTIFICATIONS ON MOBILE

Receive instant notifications to any mobile device with full support for remote alerts. Out-of-the-box built-in web endpoint technology optimizes the AI NVR for mobile connections



ENHANCED SECURITY

All Al NVRs run Avigilon Hardened OS on an encrypted solid state drive to minimize attack vectors



ALL-IN-ONE DEVICE

Achieve lower deployment costs with a single device that performs as an NVR and an analytics server

Analytics



Object Detection[™]

Detects and classifies people or vehicles to help operators verify and respond faster. Next-generation analytics provide improved object classification.

ACC7-VAC license required



Avigilon Appearance Search[™]

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



Face Recognition

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

ACC7-FACE license required

No Face Mask Detection

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



Occupancy Counting

ACC Enterprise required

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

ACC Enterprise required

48 TB

ACS Required

	MAXIMUM SUPPORTED CAMERAS BY FEATURE ¹			
MODEL	OBJECT DETECTION ON NON-ANALYTICS CAMERAS ²	APPEARANCE SEARCH ONLY ³	FACE RECOGNITION + APPEARANCE SEARCH ³	FACE MASK DETECTION + APPEARANCE SEARCH ³
AI NVR STANDARD	10	200	100	200
AI NVR VALUE	5	200	50	200

¹These performance figures are based on validation testing by Avigilon, using Avigilon Control Center software. For more information, contact Avigilon Sales.

Specifications

AI NVR Standard

32 TB

24 TB

AI NVR Value

STORAGE

12 TB

6 TB

SYSTEM	Avigilon Control Center™ Edition		Core, Standard, and Enterprise* compatible (ACC camera licenses are sold separately)	Core, Standard, and Enterprise* compatible (ACC camera licenses are sold separately)	
Video Strean	Network Video Streaming	Network Connection	1GbE Networking	1GbE Networking	
		Recording Rate ¹	Up to 900 Mbps	Up to 900 Mbps	
	Performance	Playback Rate	Up to 800 Mbps	Up to 800 Mbps	
	Operating System		Avigilon Hardened OS, supports secure remote upgrades	Avigilon Hardened OS, supports secure remote upgrades	
	Drive	OS boot	2 × M.2 Solid State drives, RAID 1	2 × M.2 Solid State drives, RAID 1	
	Configuration	Video Data	RAID 6 — Up to 8 \times 3.5", hot-swappable	RAID 5 $-$ 4 \times 3.5", hot-swappable	
	Recording Storage Capacity		Up to 64 TB raw, 48 TB effective (RAID 6)	Up to 16 TB raw, 12 TB effective (RAID 5)	
Network In	Network Interfa	ce	4 × 1 GbE RJ-45 ports (1000Base-T)	2 × 1 GbE RJ-45 ports (1000Base-T)	
Memory			2 × 8 GB	2 × 8 GB	
	Processor		Intel® Xeon®	Intel® Xeon®	
Local Viewing Out-of-band Manageme		No video outputs — Web-based administration only	No video outputs — Web-based administration only		
	anagement	iDRAC9 Express	iDRAC9 Express		
Warranty			5-year Next Business Day (NBD) with onsite parts delivery service. 4-hour mission critical warranty upgrade available.	5-year Next Business Day (NBD) with onsite parts delivery service. 4-hour mission critical warranty upgrade available.	
ELECTRICAL	LECTRICAL Power Input		100 to 240 VAC, 50/60 Hz, auto-switching	100 to 240 VAC, 50/60 Hz, auto-switching	
Power Supply			Single 1100W (80 PLUS Platinum), maximum 750 W (2559.1 BTU/h) — optional 2nd power supply available	Single 350W (80 PLUS Platinum), maximum 350 W (1340 BTU/hr) — optional 2nd power supply available	
SUPPLIED ACCESSORIES	Rack Rail System		Sliding rail system with cable management arm. Supports: • Tool-less mounting in 19"-wide EIA-310-E compliant square hole and unthreaded round-hole 4-post racks • Tooled mounting in threaded hole 4-post racks		
CERTIFICATIONS	Certifications/Directives		NDAA Compliant, TAA Compliant, UL, cUL, CE, RCM, BSMI, CCC, EAC, KC, NOM, NRCS, VCCI, RoHS, Reach (SVHC), WEEE, BIS		
	Safety		UL/CSA/EN/IEC 60950-1		
	Electromagneti	c Emissions	CFR Title 47, FCC Part 2, 15 Class A, ICES-003(A), EN 55032 Class A, EN 61000-3-2, EN 61000-3-3		
	Electromagnetic Immunity Energy		EN 55024		
			Commission Regulation (EU) No. 617/2013 , ENERGY STAR 2.0		
ROHS			EN 50581:2012		

Peak recording throughput measured using 80 x 3MP-30fps cameras connected to a switch with a variable bit-rate per camera between 10 and 12 Mbps while simultaneously playing back 800 Mbps of recorded video. During the test, 10 x 3MP non-analytic cameras were running Classified Object Detection, Appearance Search, Face Recognition, and No Face Mask Detection on the Al NVR Standard, while on Al NVR Value the same analytics were run on 5 x 3MP non-analytic cameras. All recording and playback traffic was run from the switch to the Al NVR over one CAT-5 cable connected to a single 1GbE network port on the Al NVR.

OPERATING

ENVIRONMENTAL

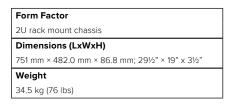
	OI ERAIIIO	STORAGE
Temperature	10° C to 35° C (50° F to 95° F)	-40° C to 65° C (-40° F to 149° F)
Humidity	10% to 80% relative humidity with 29°C (84.2°F) maximum dew point	5% to 95% RH with 33°C (91°F) maximum dew point. Atmosphere must be non-condensing at all times
Vibration	0.26 Grms at 5 Hz to 350 Hz	1.88 Grms at 10 Hz to 500 Hz for 15 min
Shock	One pulse on each side of the system of 71 G for up to 2 ms	Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 71 G for up to 2 ms
Altitude	3,048 m (10,000 ft)	12,000 m (39,370 ft)

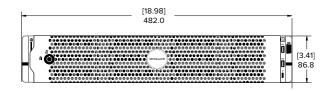
² For cameras at 2MP and 30 images per second (ips).

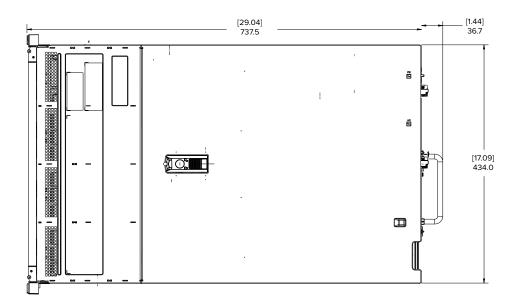
³ Requires H5A, H4A, or Classified Object Detection running on non-analytic cameras.

Outline Dimensions

AI NVR Standard

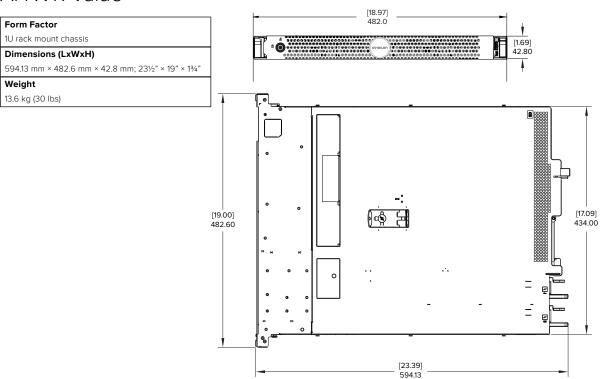






[X.X] INCHES

Al NVR Value



Ordering Information

AI NVR Standard

AINVR-STD-48TB	Al NVR Standard 48 TB (64 TB Raw) with Avigilon Control Center
AINVR-STD-32TB	Al NVR Standard 32 TB (48 TB Raw) with Avigilon Control Center
AINVR-STD-24TB	Al NVR Standard 24 TB (32 TB Raw) with Avigilon Control Center
Avigilon Control Center licenses must be purchased separately. Avigilon Appearance Search and facial recognition requires Enterprise version of the ACC software.	

Al NVR Value

AINVR-VAL-12TB	Al NVR Value 12 TB (16 TB Raw) with Avigilon Control Center	
AINVR-VAL-6TB	Al NVR Value 6 TB (8 TB Raw) with Avigilon Control Center	
Avigilon Control Center licenses must be purchased separately. Avigilon Appearance Search and facial recognition requires Enterprise version of the ACC software.		

Software

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

Accessories

AINVR-STD-2NDPS	Redundant, hot-swappable power supply for AINVR-STD
AINVR-VAL-2NDPS	Redundant, hot-swappable power supply for AINVR-VAL
AINVR-HDD-HOT-8TB	Spare hard drive, 8TB, for AINVR STD 48TB/32TB
AINVR-HDD-HOT-4TB	Spare hard drive, 4TB, for AINVR STD 24TB, AINVR VAL 12TB
AINVR-HDD-HOT-2TB	Spare hard drive, 2TB, for AINVR VAL 6TB
IDRAC9-ENT-UPG	iDRAC Enterprise upgrade
AINVR-STD-WARR-5Y4HMC	4-hour MC (mission critical response) service-level agreement upgrade for AINVR-STD
AINVR-VAL-WARR-5Y4HMC	4-hour MC (mission critical response) service-level agreement upgrade for AINVR-VAL
AINVR-KYD-WARR-5YR	Keep Your Drive warranty for AINVR-STD and AINVR-VAL

AI NVR-XXX-XXTB-**NA** =



AI NVR-XXX-XXTB-**UK** =



AI NVR-XXX-XXTB-**EU** =



AI NVR-XXX-XXTB-**AU** =

