

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 AI 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



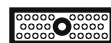
REMOTE NOTIFICATIONS ON MOBILE

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 AI 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.
 ACC Enterprise required



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.
 ACC Enterprise required



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

MAXIMUM SUPPORTED CAMERAS BY FEATURE¹

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

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

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

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

Specifications

AI NVR Standard

AI NVR Value

48 TB

32 TB

24 TB

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)
Network Video Streaming Performance	Network Connection	1GbE Networking	1GbE Networking
	Recording Rate ¹	Up to 900 Mbps	Up to 900 Mbps
	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 Configuration	OS boot	2 × M.2 Solid State drives, RAID 1	2 × M.2 Solid State drives, RAID 1
	Video Data	RAID 6 — Up to 8 × 3.5", hot-swappable	RAID 5 — 4 × 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 Interface		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		No video outputs — Web-based administration only	No video outputs — Web-based administration only
Out-of-band Management		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.
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
Rack Rail System		Sliding rail system with cable management arm. Supports: <ul style="list-style-type: none"> • Tool-less mounting in 19"-wide EIA-310-E compliant square hole and unthreaded round-hole 4-post racks • Toolled mounting in threaded hole 4-post racks 	
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 62368-1	
Electromagnetic 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		EN 55024	
Energy		Commission Regulation (EU) No. 617/2013, ENERGY STAR 2.0	
ROHS		EN 50581:2012	

¹ Peak recording throughput measured using 80 × 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 × 3MP non-analytic cameras were running Classified Object Detection, Appearance Search, Face Recognition, and No Face Mask Detection on the AI NVR Standard, while on AI NVR Value the same analytics were run on 5 × 3MP non-analytic cameras. All recording and playback traffic was run from the switch to the AI NVR over one CAT-5 cable connected to a single 1GbE network port on the AI NVR.

OPERATING

STORAGE

ENVIRONMENTAL

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)

Outline Dimensions

AI NVR Standard

Form Factor

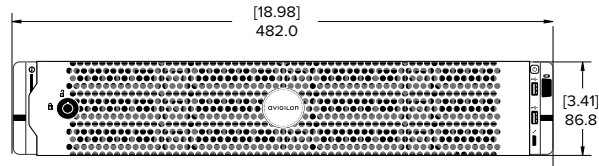
2U rack mount chassis

Dimensions (LxWxH)

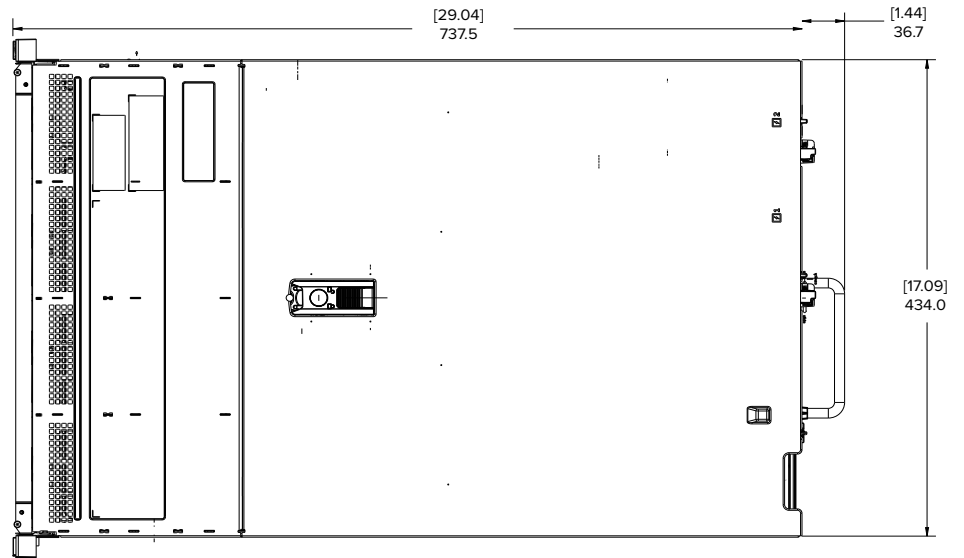
751 mm × 482.0 mm × 86.8 mm; 29½" × 19" × 3½"

Weight

34.5 kg (76 lbs)



[X.X]	INCHES
X	MM



AI NVR Value

Form Factor

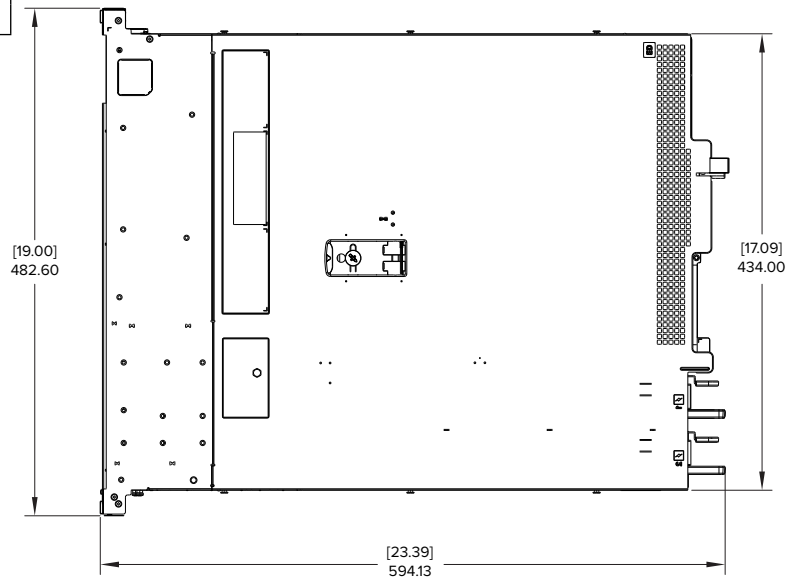
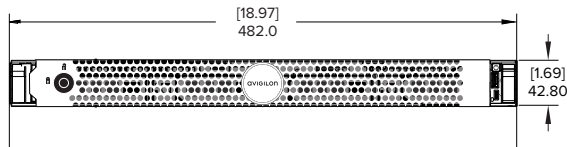
1U rack mount chassis

Dimensions (LxWxH)

594.13 mm × 482.6 mm × 42.8 mm; 23½" × 19" × 1¾"

Weight

13.6 kg (30 lbs)



Ordering Information

AI NVR Standard

AINVR-STD-48TB	AI NVR Standard 48 TB (64 TB Raw) with Avigilon Control Center
AINVR-STD-32TB	AI NVR Standard 32 TB (48 TB Raw) with Avigilon Control Center
AINVR-STD-24TB	AI 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.

AI NVR Value

AINVR-VAL-12TB	AI NVR Value 12 TB (16 TB Raw) with Avigilon Control Center
AINVR-VAL-6TB	AI 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 =

