

AVIGILON™

AI Appliance

Enhance your security with Server-side Analytics and Generative AI



Upgrade your existing security system with the **Avigilon AI Appliance** to enhance site security and accelerate incident response. This server-side solution adds powerful video analytics to detect people, vehicles, and faces across your site. The **AI Appliance 2X CG3** model further unlocks Generative AI capabilities, allowing you to monitor for environmental hazards and create highly specific alerts—like "car on fire in the parkade"—using simple natural language. It's a cost-effective way to address critical security gaps without replacing your current hardware.



On-premise Generative AI

The AIA2X-CG3 features Visual Alerts - Beyond people and vehicle detection: Identify specific events, from spills to complex object relationships, to enhance operational awareness.



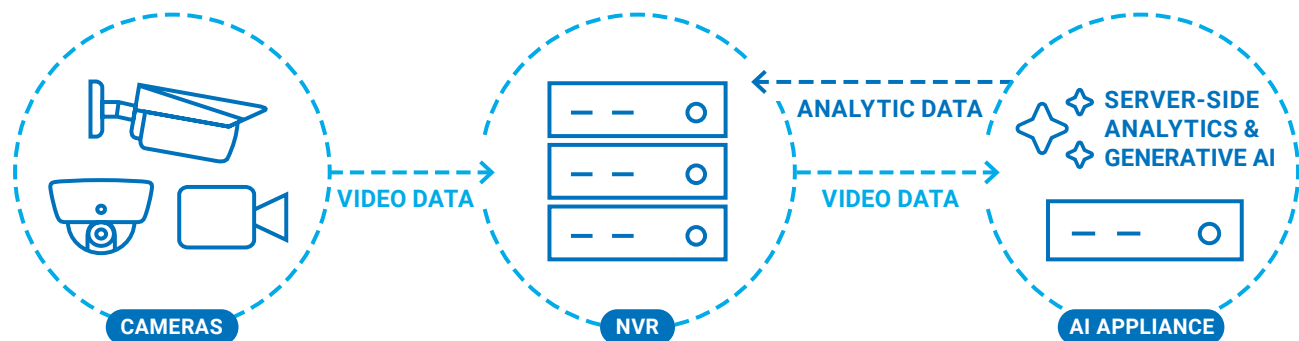
Turnkey and secure deployment

A managed solution purpose-built for security and IT teams with easy setup and secure operation.



AdaptAI 5 server-side analytics and Generative AI

Enable Classified Object Detection, Appearance Search, Facial Recognition, Visual Alerts, and Occupancy Counting to existing cameras.



AdaptAI 5 Server-side Analytics and Generative AI



Classified Object Detection™ (COD)

Detects and classifies people and vehicles to help operators respond faster. Unusual Activity Detection (UAD) automatically detects atypical behavior of learned objects.
UNITY8-ENT required



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 required



Facial Recognition (FR)

Detects matches from managed face watchlists to alert operators of people of interest. Requires Appearance Search and an additional license.
UNITY8-ENT and UNITY8-FACE required



Visual Alerts

Use natural language to setup alerts for custom objects and scenarios, beyond just people and vehicles.
AIA2X-CG3 model required



Occupancy Counting

With cameras at entrances and exits, a running total of occupancy can be monitored in real time.
Unity Video Cloud Services required

Non-Analytic Camera Channel Capacity

| Model ¹ | Visual Alerts Enabled (CG3 Only) | | | Visual Alerts Disabled | | |
|--------------------|----------------------------------|---------------------|------------------------|------------------------|---------------------|------------------------|
| | COD | COD+AS ² | COD+AS+FR ² | COD | COD+AS ² | COD+AS+FR ² |
| CG2 | - | - | - | 80 | 80 | 57 |
| CG3 | 80 | 80 | 58 | 160 | 160 | 116 |

¹ Must be connected to an NVR, AI NVR, or another recorder running Unity Video 8.7.0 Enterprise software or later. These performance figures are based on validation testing by Avigilon, using Unity Video 8.7.0 Enterprise software, and cameras at 2MP and 30 images per second (ips).

² AS and FR are only available for cameras with server-side COD enabled.

Visual Alerts Channel Sizing/Analysis Period

While multiple AIA2X appliances can be part of a Unity Site, only one AIA2X-CG3 can be supported per site when using Visual Alerts.

| Number of Visual Alerts | Number of Channels per Visual Alert | | | | | | | | | | | | |
|-------------------------|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 88 | 96 | 100 |
| 5 | 5s | 10s | 15s | 20s | 25s | 30s | 35s | 40s | 45s | 50s | 55s | 57s | 60s |
| 10 | 10s | 20s | 30s | 40s | 50s | 60s | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ |
| 15 | 15s | 30s | 45s | 60s | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ |
| 20 | 20s | 40s | 60s | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ |
| 25 | 25s | 50s | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ |
| 30 | 30s | 60s | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ |
| 35 | 35s | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ | ∞ |

∞ The GPU load factor will prevent addition of additional cameras or prompts. Analysis rate is based on load factors using 2MP H264 camera resolution at 1 key frame per second.

Device Types Supported for AdaptAI 5 Server-side Analytics

H6A/H6X, H6M, H6SL, and H5DH cameras with analytics disabled

Avigilon H5Pro, H5 and H4 Multisensor cameras in high frame-rate mode

Avigilon H4A cameras in Unusual Motion Detection mode

Avigilon H5M, H5SL, and H4SL cameras

Avigilon HD H.264, H3, H3 Multisensor, H4 Mini dome, H4 Box, H4 Bullet, H4 Dome, and H4 Pro cameras

Avigilon H.264 Analog Encoders

ONVIF® Profile S and T cameras, and ONVIF® Encoder (onvif.org)

Third-party devices (MJPEG, MPEG4, H.264, H.265/HEVC) supported by Unity Video. For more information, see avigilon.com/vms/on-premise/supported-devices.

Specifications

| System | AIA2X CG2 | AIA2X CG3 |
|--|--|--|
| Avigilon Unity Video™ Edition | Pre-installed with Unity Video 8 Enterprise, incompatible with ACC7 Enterprise | |
| Operating System | Avigilon Hardened OS | |
| Processor | 1 × Intel® Xeon® | 2 × Intel® Xeon® |
| Memory | 4 × 16GB DDR5 | 8 × 16 GB DDR5 |
| Drive Configuration | Mirrored OS - 2 × 480GB M2 drives, RAID 1 | |
| Recording Storage Capacity | None | |
| Graphics Processor | 1 × NVIDIA Data Center Class GPU | 2 × NVIDIA Data Center Class GenAI-ready GPU |
| Network Interface | 6 × 1 GbE RJ-45 ports | 2 × 10 GbE SFP+ ports, 6 × 1 GbE RJ-45 ports |
| Network Connection (10 GbE or 1 GbE Teamed - Multiple Connections) | Up to 1500 Mbps ¹ | Up to 1500 Mbps |
| Network Connection (1 GbE - Non-Teamed - Multiple Connections) | Up to 800 Mbps | Up to 800 Mbps |
| Video Outputs | None | |
| Local Viewing | No - Web-based administration only | |
| Out-of-band Management | iDRAC9 Express (factory installed), Enterprise upgrade available | |
| TPM | TPM 2.0 V3 | |
| Warranty | 3-Year Next Business Day | |

¹10 GbE optional, with 10 GbE Kit (NVR6-AINVR2-FORM-D-10GBE) sold separately.

| Mechanical | AIA2X CG2 | AIA2X CG3 |
|-------------|--|------------------|
| Form Factor | 2U Rack Mount Form D Analytics Class Chassis | |
| Dimensions | 772.1 mm × 482.0 mm × 86.8 mm 30.39" × 18.98" × 3.42" | |
| Weight | 22.5 kg (50 lbs) | 22.8 kg (50 lbs) |

| Electrical | AIA2X CG2 | AIA2X CG3 |
|-------------------|--|-----------------------------|
| Power Input | 100 to 240 VAC, 50/60 Hz, auto-switching | |
| Power Supply | Dual redundant (1+1) 2400 W, reduces to 1400W @ 100 to 120 VAC | |
| Power Consumption | Maximum 701 W (2392 BTU/h) | Maximum 1013 W (3456 BTU/h) |
| Power Efficiency | Platinum | |

| Environmental | AIA2X CG2 | AIA2X CG3 |
|-----------------------|--|-----------|
| Operating Temperature | 10°C to 35°C (50°F to 95°F) | |
| Storage Temperature | -40° C to 65° C (-40° F to 149° F) | |
| Operating Humidity | 8% to 80% relative humidity with 21°C (69.8°F) max dew point | |
| Storage Humidity | 5% to 95% RH with 27°C (80.6°F) max dew point. Atmosphere must be non-condensing at all times. | |
| Operating Vibration | 0.21 Grms at 5 Hz to 500 Hz | |
| Storage Vibration | 1.88 Grms at 10 Hz to 500 Hz | |
| Operating Shock | 6 G | |
| Storage Shock | 71 G | |
| Operating Altitude | 3,050 m (10,000 ft) | |
| Storage Altitude | 12,000 m (39,370 ft) | |

| Certifications | AIA2X CG2 | AIA2X CG3 |
|-------------------------------------|---|-----------|
| Certifications/Approvals | UL, cUL, UKCA, CE, NRCS, NOM, RCM, VCCI, BSMI, CCC, KC, RoHS, CMIM, EAC, BIS | |
| Safety Standards | UL/CSA/IEC/EN 62368-1 | |
| Electromagnetic Emissions Standards | FCC Part 15 Subpart B (Class A), ICES-003 (Class A), EN 55032 (Class A), EN 61000-3-2, EN 61000-3-3 | |
| Electromagnetic Immunity Standards | EN 55035 | |

| Supplied Accessories | AIA2X CG2 | AIA2X CG3 |
|-------------------------|--|-----------|
| Rack Rail System | ReadyRails Sliding Rails with Cable Management Arm | |
| Bezel | 1, front | |
| Power Cord ¹ | 2 x C19 / C20 region-agnostic power cords | |

¹C19 regional power cords are sold separately (AIA-FORM-D-DUAL-POWERCORD-C19-XX where XX=NA/UK/EU/AU).



| | |
|--------|--------|
| [X.XX] | INCHES |
| X.X | MM |

Outline Dimensions

AI Appliance 2X, CG2 and CG3 models

Form Factor

2U Rack Mount Form D Analytics Class Chassis

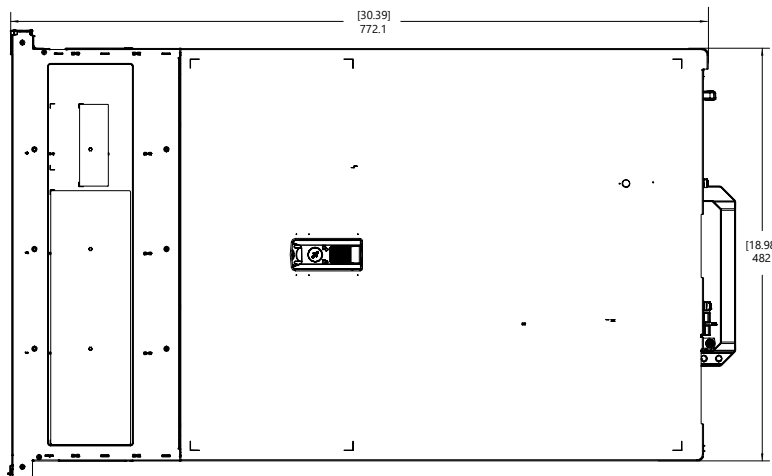
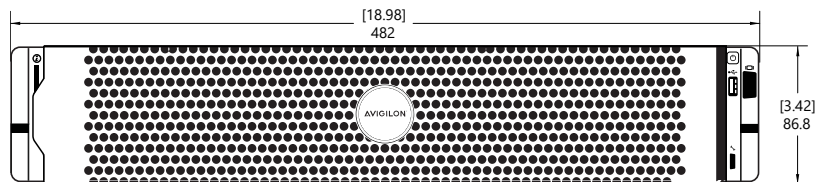
Dimensions (L x W x H)

772.1 mm x 482.0 mm x 86.8 mm

[30.4" x 18.98" x 3.42"]

Weight

22.54 kg [50 lbs]



Ordering Information

AI Appliance 2X

| | |
|---|---|
| AIA2X-FORM-D-CG2-HW-C19-C20 | AI Appliance 2X, CG2 model with Avigilon Hardened OS and Unity Video 8. Includes 3-Year Next Business Day Warranty. |
| AIA2X-FORM-D-CG3-HW-C19-C20 | AI Appliance 2X, CG3 model with Avigilon Hardened OS and Unity Video 8. Includes 3-Year Next Business Day Warranty. |
| Includes 2 x C19 / C20 power cords. Regional power cords sold separately (AIA-FORM-D-DUAL-POWERCORD-C19-XX where XX=NA/EU/UK/AU). | |

Regional Power Cords

| | |
|----------------------------------|--|
| AIA-FORM-D-DUAL-POWERCORD-C19-XX | 2 x C19 Power cord, regional variant from options below (XX=NA/EU/UK/AU) |
|----------------------------------|--|

| | | | |
|---|---|---|---|
| (NA) NEMA 5-15P / C13  | (UK) BS1363 / C13  | (EU) SCHUKO / C13  | (AU) AS3112 / C13  |
|---|---|---|---|

Software Licenses

| | |
|----------------|--|
| UNITY8-ENT | Avigilon Unity Video 8 Enterprise Edition camera channel license, includes Server-side Analytics for Classified Object Detection & Appearance Search (formerly requiring UNITY8-VAC), and Visual Alerts on the appropriate hardware. |
| UNITY8-FACE | Avigilon Unity Video 8 Facial Recognition feature channel license |
| UNITY8-FACE-10 | Avigilon Unity Video 8 Facial Recognition feature 10 channel license |

Warranty Options

| | |
|----------------------------------|--|
| AIA2X-FORM-D-CG2-WARR-EXTEND-2YR | 2-Year Next Business Day Warranty Extension for AI Appliance 2X CG2 model |
| AIA2X-FORM-D-CG2-WARR-5Y4HMC | 5-Year 4-Hour-Mission-Critical Warranty Upgrade for AI Appliance 2X CG2 model. Must be purchased together with AIA2X-FORM-D-CG2-WARR-EXTEND-2YR. |
| AIA2X-FORM-D-CG3-WARR-EXTEND-2YR | 2-Year Next Business Day Warranty Extension for AI Appliance 2X CG3 model |
| AIA2X-FORM-D-CG3-WARR-5Y4HMC | 5-Year 4-Hour-Mission-Critical Warranty Upgrade for AI Appliance 2X CG3 model. Must be purchased together with AIA2X-FORM-D-CG3-WARR-EXTEND-2YR. |

Accessories

| | |
|---------------------------------------|--|
| NVR6-AINVR2-FORM-D-SFPPLUS-SR | SFP+ Transceivers for Short Range (Multi-mode) on server side |
| IDRAC9-ENT-UPG-V2 | iDRAC Enterprise upgrade version 2 |
| NVR6-AINVR2-FORM-D-10GBE | Network Card, Dual Port 10 GbE SFP+. AI Appliance 2X CG2 model only. |
| NVR6-AINVR2-STDPRM-FORM-D-STATIC-RAIL | Static Rail Kit |

Support

Learn more and find additional documentation at [avigilon.com](https://www.avigilon.com) or email sales@avigilon.com for specific product support.



Oct 2025 | Rev 4

© 2025, Motorola Solutions, Inc. All rights reserved. MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. AVIGILON, the AVIGILON logo, AVIGILON CONTROL CENTER, ACC, HDSM SmartCodec and LIGHTCATCHER are trademarks of Avigilon Corporation. The absence of the symbols ™ and ® in proximity to each trademark in this document or at all is not a disclaimer of ownership of the related trademark. All other trademarks are the property of their respective owners.