Avigilon and Motorola Solutions — Evaluation Field Guide

An honest one-page profile of the appliance-and-ecosystem VMS: the two suites, the self-learning analytics, the openness boundary, the licensing fork, and where it fits.

Avigilon at a glance: one brand, two suites

Component	What it is	Deployment & cost
Avigilon Unity Video	On-prem recording & management (ex-ACC)	On-premises - CapEx per camera channel
Avigilon Unity Access	On-prem access control (ex-ACM)	On-premises - CapEx per door/reader
Avigilon Alta Video	Cloud-native video (ex-Ava Security)	Cloud - OpEx per-camera subscription
Avigilon Alta Access	Cloud-native access control (ex-Openpath)	Cloud - OpEx subscription
Self-learning analytics	UMD, UAD, Appearance Search, Focus of Attention	Edge AI - best on Avigilon cameras

Avigilon makes the cameras (H4/H5/H6), the recorder software, and the on-board AI as one matched set. Owned by Motorola Solutions since 2018 (~$1B); the video pillar of an $11.7B safety ecosystem. Unity and Alta share a brand and a sales channel, not a codebase.

The appliance bet - what 'open' really means

Avigilon owns the camera, the recorder, and the analytics and sells them as a matched set - so the AI 'just works' without a separate analytics server. Unity Video speaks ONVIF (the common camera language) and exposes a .NET API/SDK, so you can record third-party cameras and wire in access control and building systems. The catch: the self-learning analytics, the edge AI, and the tightest performance come from Avigilon's own cameras. An 'Avigilon system' on mostly third-party ONVIF cameras buys the recorder and leaves the best part - the analytics - on the shelf. Keep 'ONVIF-conformant' and 'fully featured on Avigilon hardware' as separate ideas.

Licensing and the cost shape - two suites, opposite models

Unity (on-prem) is a one-time capital expense, per camera channel, in three editions - Core (<=24 cameras/server), Standard (<=75), Enterprise (300+) - with self-learning analytics included on the Avigilon cameras you bought. Alta (cloud) flips to an operating expense - a per-camera subscription bundling recording, storage, updates, and remote access. Illustrative 200-camera, 5-year software only: Unity $150 x 200 = $30,000 (software only; you run the servers and storage); Alta $25 x 200 x 12 x 5 = $300,000 (the whole service, no infrastructure). They look wildly different because they buy different things. Compare the shapes on the same five-year footing - storage and servers included - before you sign. Figures illustrative; integrators discount real quotes.

Where Avigilon fits - and where it doesn't

Choose Avigilon when...	Look elsewhere when...
Self-learning analytics with minimal tuning are the job; you want cameras + software + edge AI from one NDAA-compliant, US-listed vendor; you already run Motorola radios / command center and want one situational-awareness fabric. Government, public safety, education, transit, utilities.	You have a large multi-vendor camera estate you refuse to replace - the open-platform camp (Milestone) fits better, because Avigilon's best features assume Avigilon cameras. You want one simple product, not a Unity-vs-Alta fork. You are wary of ecosystem lock-in.

The four questions to ask before you commit

- Suite - is this an on-prem Unity job (own servers, CapEx) or a server-less, multi-site Alta job (cloud, OpEx subscription)? Choosing the wrong suite is the #1 Avigilon scoping error.
- Cameras - are you committing to Avigilon cameras to get the self-learning analytics (UMD, UAD, Appearance Search), or recording third-party ONVIF cameras and forgoing them?
- Ecosystem - does the value case quietly assume Motorola radios or command-center integration? Price that adoption and its lock-in up front.
- Cost - did you put Unity's per-channel CapEx and Alta's per-camera subscription on the same five-year footing, storage and servers included, as any rival quote?

Engineering and procurement guidance, not legal advice. Appearance Search matches a person's appearance (clothing, shape) - not the same legal thing as biometric face recognition, which matches face geometry. Face templates are special-category data under GDPR Art. 9; biometric and plate features carry consent and retention duties (BIPA, local law). NDAA Sec. 889 is a procurement gate. Confirm specifics with qualified counsel.



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This guide profiles Avigilon Unity and Alta, the self-learning analytics, the ONVIF openness boundary and the licensing fork. Our seven-volume handbook covers the full video stack; start with Volume 6 for detection and appearance search, then Volume 7 for biometrics and regulation and Volume 1 for camera encoding.

WHAT YOU WILL FIND INSIDE

- Detection, tracking and appearance search (Vol. 6)
- Edge versus cloud analytics (Vol. 6)
- Biometrics, GDPR and EU AI Act (Vol. 7)
- Camera encoding and storage (Vol. 1)

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Weighing Avigilon against an open VMS or your own platform?

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