Analytics Sizing Guide
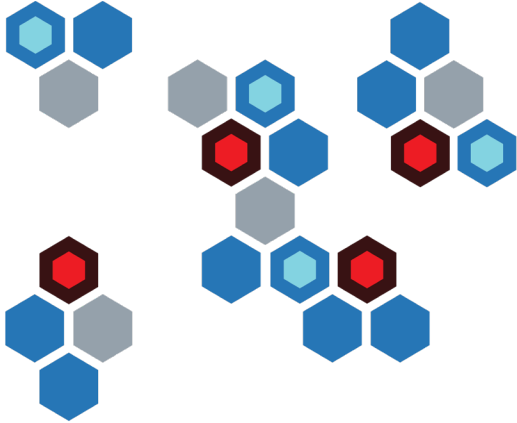## For Avigilon Hardware

AVIGILON™

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.
ACC Enterprise 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 license required

Visible Firearm Detection (VFD)
Detects visible handguns and long guns handled by humans. Requires an AI NVR with an additional license.
ACC7-VFD license required

License Plate Recognition (LPR)
Works with ACC software for accurate license plate capture at a range of distances and speeds. Requires an additional license.
ACC7-LPR license per channel required

Classified Object Detection (COD)
Detects and classifies people or vehicles to help operators verify and respond faster. Next-generation analytics provide increased object classification.
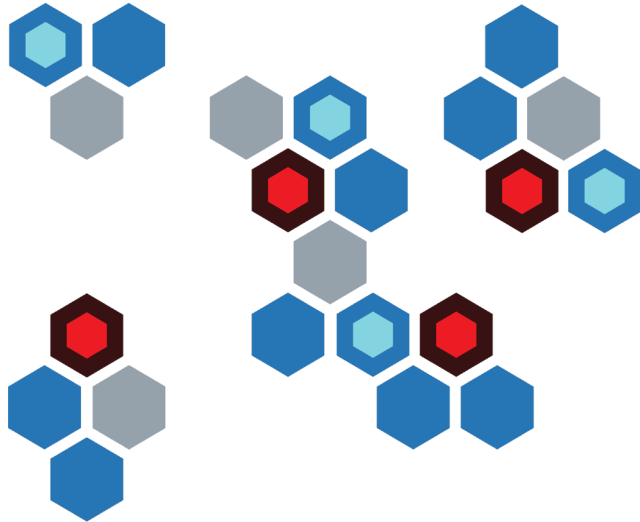*ACC7-VAC license required*

MODEL	ANALYTICS KIT	AVIGILON ANALYTICS CAMERAS[1]		NON-ANALYTICS CAMERAS[1]					NUMBER OF LPR LANES[3]							
									DEFAULT MODE				PERFORMANCE MODE[7]			
		AS ONLY[5]	FR + AS[5]	COD ONLY[4]	COD + AS[5]	COD + AS[5] + FR	COD + AS[5] + VFD[6]	COD + AS[5] + VFD[6] + FR	5 FPS (<16 KM/H)	10 FPS (<48 KM/H)	20 FPS (<100 KM/H)	30 FPS (<150KM/H)	5 FPS (<16 KM/H)	10 FPS (<48 KM/H)	20 FPS (<100 KM/H)	30 FPS (<150KM/H)
AI NVR Premium+	Built-In	200	100	55	55	50	30	29	24	12	6	4	106	53	26	17
AI NVR Premium	Built-In	200	100	30	30	27	15	14	17	8	4	2	56	28	14	9
AI NVR Standard	AINVR-STD-PRK	200	100	25	25	22	20	19	14	7	3	2	58	29	14	9
AI NVR Standard	Built-In	200	100	12	12	11	10	9	11	5	2	1	30	15	7	5
AI NVR 2 Value	None	–	–	–	–	–	–	–	17	8	4	2	–	–	–	–
AI NVR 2 Value	AINVR2-VAL-ANK	90	31	4	4	3	2	1	16	10	5	3	16	14	7	4
AI NVR 2 Value	AINVR2-VAL-ANK-PLUS	90	70	9	9	8	5	4	20	10	5	3	34	21	10	7
AI NVR Value	Built-In	200	50	6	6	5	5	4	9	4	2	1	16	8	4	2
NVR5 Premium (252-432 TB)[2]	Built-In	200	50	–	–	–	–	–	20	10	5	3	–	–	–	–
NVR5 Premium (192-224 TB)[2]	Built-In	200	50	–	–	–	–	–	25	12	6	4	–	–	–	–
NVR5 Premium (96-160 TB)[2]	Built-In	200	50	–	–	–	–	–	12	6	3	2	–	–	–	–
NVR5 Premium FIPS (96-160 TB)[2]	Built-In	200	50	–	–	–	–	–	8	4	2	1	–	–	–	–
NVR5 Standard[2]	Built-In	200	50	–	–	–	–	–	12	6	3	2	–	–	–	–
NVR5 Value	None	–	–	–	–	–	–	–	15	7	3	2	–	–	–	–
NVR5 Value	NVR5-VAL-ANK	46	31[8]	–	–	–	–	–	15	7	3	2	–	–	–	–
NVR5 Value	NVR5-VAL-ANK-PLUS	46	46	–	–	–	–	–	15	7	3	2	–	–	–	–
Video Appliance (Series 3X) 16/24-port	VMA-AS3-ANK	50	12	–	–	–	–	–	2	2	1	–	–	–	–	–
Video Appliance (Series 3X) 8-port	None	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
ENVR2 Plus Appliance	Built-In	20	11	8	8	4	3	2	4	2	1	–	12	6	3	2
ENVR1 Appliance[9]	Built-In	–	–	8[10]	–	–	–	–	–	–	–	–	–	–	–	–
ES 8-Port Rugged Appliance	Built-In	–	–	6[10]	–	–	–	–	–	–	–	–	–	–	–	–

[1] These performance figures are based on validation testing by Avigilon, using Avigilon Control Center software version 7.14.16.
  Assumes appliance-wide average per camera rates of classified objects leaving the field of view:
  - H5A cameras – One every second
  - H4A cameras – One every two seconds
  - Non-analytics cameras running COD – One every second
  Additional licenses may be required. For more information, contact Avigilon Sales.
[2] License Plate Recognition performance figures on NVR5s requires ACC version 7.14.10 or later.
[3] Assumes a 3MP camera with 1MP 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.

[4] For cameras at 2MP and 30 images per second (ips).
[5] Requires H5A, H4A, or Classified Object Detection running on non-analytic cameras.
[6] When enabling VFD, Avigilon cameras must disable analytics on the camera, enable COD, and count the camera as a non-analytic camera.
[7] Requires ACC version 7.14.6 or later. LPR Performance mode will limit other analytics on your appliance. See the appliance's user guide for more information.
[8] Requires ACC 7.14.20 or later.
[9] Previously known as ACC ES 8-Port Appliance.
[10] H4A Equivalent Analytics.

Analytics Sizing Guide
For Previous Generation Avigilon Hardware

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.
ACC Enterprise 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 license required

Visible Firearm Detection (VFD)
Detects visible handguns and long guns handled by humans. Requires an AI NVR with an additional license.
ACC7-VFD license required

License Plate Recognition (LPR)
Works with ACC software for accurate license plate capture at a range of distances and speeds. Requires an additional license.
ACC7-LPR license per channel required

Classified Object Detection (COD)
Detects and classifies people or vehicles to help operators verify and respond faster. Next-generation analytics provide increased object classification.
ACC7-VAC license required

MODEL	ANALYTICS KIT	AVIGILON ANALYTICS CAMERAS[1]		NON-ANALYTICS CAMERAS[1]					NUMBER OF LPR LANES[2]							
									DEFAULT MODE				PERFORMANCE MODE[6]			
		AS ONLY[4]	FR + AS[4]	COD ONLY[3]	COD + AS[4]	COD + AS[4] + FR	COD + AS[4] + VFD[5]	COD + AS[4] + VFD[5] + FR	5 FPS (<16 KM/H)	10 FPS (<48 KM/H)	20 FPS (<100 KM/H)	30 FPS (<150KM/H)	5 FPS (<16 KM/H)	10 FPS (<48 KM/H)	20 FPS (<100 KM/H)	30 FPS (<150KM/H)
NVR4/4X Premium	Built-In	200	50	–	–	–	–	–	4	3	2	1	–	–	–	–
NVR4X Premium FIPS (64-157 TB)	Built-In	200	50	–	–	–	–	–	4	3	2	1	–	–	–	–
NVR4/4X Standard	Built-In	200	50	–	–	–	–	–	3	2	1	–	–	–	–	–
NVR4 Value	None	–	–	–	–	–	–	–	2	1	1	–	–	–	–	–
NVR4 Value	HD-NVR-ANK2-1	50	15	–	–	–	–	–	2	1	1	–	–	–	–	–
Video Appliance (Series 3) 16/24-port	VMA-AS3-ANK	50	12	–	–	–	–	–	2	2	1	–	–	–	–	–
Video Appliance (Series 3) 8-port	None	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
AI Appliance 2 CG1	Built-In	–	–	25	25	22	–	–	–	–	–	–	–	–	–	–
AI Appliance 2 CG2	Built-In	–	–	50	50	43	–	–	–	–	–	–	–	–	–	–

[1] These performance figures are based on validation testing by Avigilon, using Avigilon Control Center software version 7.14.16.
Assumes appliance-wide average per camera rates of classified objects leaving the field of view:
- H5A cameras – One every second
- H4A cameras – One every two seconds
- Non-analytics cameras running COD – One every second
Additional licenses may be required. For more information, contact Avigilon Sales.
[2] Assumes a 3MP camera with 1MP 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.

[3] For cameras at 2MP and 30 images per second (ips).
[4] Requires H5A, H4A, or Classified Object Detection running on non-analytic cameras.
[5] When enabling VFD, Avigilon cameras must disable analytics on the camera, enable COD, and count the camera as a non-analytic camera.
[6] Requires ACC version 7.14.6 or later. LPR Performance mode will limit other analytics on your appliance. See the appliance's user guide for more information.