

H4 HD Indoor Dome Camera with Self-Learning Video Analytics

Avigilon offers a broad range of high definition cameras – from 1 – 5 MP and 4 – 7K (based on horizontal resolution) – and are available in a variety of formats, including dome, panoramic and fixed. Whether it’s a small storefront that requires a few cameras or a large complex system requiring complete coverage of numerous areas, you can trust that you’re getting an exceptional solution for your security needs.

The innovative H4 HD indoor dome cameras are just one way Avigilon can help provide effective monitoring and protection.



The H4 HD indoor dome cameras are a great solution for monitoring both daytime and nighttime activities. Embedded with self-learning video analytics, the H4 HD cameras seamlessly integrate with Avigilon Control Center (ACC)™, allowing security personnel to respond proactively and mitigate an incident before damage is done. They feature an integrated lens for remote focus and zoom control and are ONVIF compliant for easy integration.

Avigilon’s indoor dome cameras are equipped with new Triple Exposure Ultra-Wide Dynamic Range (WDR) and patented LightCatcher™ technology, ensuring you receive excellent image detail. P-Iris control also allows the cameras to automatically set their iris position to enhance image quality in all lighting conditions, while onboard storage capabilities let you manage storage directly on the cameras using a standard SD memory card. Avigilon HDSM SmartCodec technology™ H4 platform optimizes the video stream in real time using automatic ROI encoding to save bandwidth and storage requirements while maintaining image quality.

KEY FEATURES

1-5 megapixel and 4K Ultra HD (8 MP) resolution
Patented Advanced Video Pattern Detection and Teach by Example Technology
Self-learning video analytics
Patented High Definition Stream Management (HDSM)™ Technology
Wi-Fi camera configuration support
Available with 3-9 mm F1.3, 4.3-8 mm F1.8, or 9-22 mm F1.6 P-Iris lens with remote focus and zoom
Zoom and content adaptive integrated IR (Infrared) LEDs provide uniform illumination in the dark, even at 0 lux, up to a maximum of 30 m (98 ft) away
Avigilon LightCatcher technology provides exceptional image quality in low light environments (1-5 MP models)
Triple Exposure Ultra Wide Dynamic Range (1-3 MP models)
ONVIF compliant with version 2.2.0 of the Analytics Service Specification
Avigilon HDSM SmartCodec technology for reduce bandwidth and storage requirements
Idle Scene Mode lowers bandwidth and storage usage if there are no motion events detected in the scene
Full Feature or High Framerate camera operating modes (4K Ultra HD model)
Vandal resistant construction

Specifications

		1.0 MP	2.0 MP	3.0 MP	5.0 MP	4K ULTRA HD (8.0 MP)	
IMAGE PERFORMANCE	Image Sensor	1/2.8" progressive scan CMOS			1/1.8" progressive scan CMOS	1/2.3" progressive scan CMOS	
	Aspect Ratio	16:9		4:3		16:9	
	Active Pixels (H x V)	1280 x 720	1920 x 1080	2048 x 1536	2592 x 1944	3840 x 2160	
	Imaging Area (H x V)	4.8 mm x 2.7mm; 0.189" x 0.106"		5.12 mm x 3.84 mm; 0.202" x 0.151"	6.22 mm x 4.66 mm 0.245" x 0.183	5.95 mm x 3.35 mm 0.234" x 0.132"	
	IR Illumination (option) (High Power 850 nm LEDs)	30 m (98 ft) max. distance at 0 lux				15 m (50 ft) max distance at 0 lux	
	Minimum Illumination	3 - 9 mm lens:	0.04 lux (F1.3) in color mode; 0.008 lux (F1.3) in monochrome mode			N/A	N/A
		4.3 - 8 mm lens:	N/A			0.033 lux (F1.8) in color mode; 0.0066 lux (F1.8) in monochrome mode	0.29 lux (F1.8) in color mode; 0.058 lux (F1.8) in monochrome mode
		9 - 22 mm lens:	0.08 lux (F1.6) in color mode; 0.016 lux (F1.6) in monochrome mode			0.026 lux (F1.6) in color mode; 0.005 lux (F1.6) in monochrome mode	N/A
	Image Rate (full resolution)	30 fps		30 fps (20 fps with WDR enabled)	30 fps	20 fps (30 fps in High Framerate mode)	
	Dynamic Range	67 dB			83 dB	91 dB	
	Dynamic Range (WDR enabled)	120 dB triple exposure (20 fps or less); 100 dB dual exposure (30 fps)			N/A	N/A	
	Resolution Scaling	Down to 768 x 432			Down to 1792 x 1344	Down to 3072 x 1728	
	Camera Operating Mode	N/A				Full Feature or High Framerate mode (HDSM 2.0 and analytics disabled in High Framerate mode)	
3D Noise Reduction Filter	Yes						

LENS	Lens	3 - 9 mm lens: F1.3, P-Iris, remote focus and zoom				
		4.3 - 8 mm lens: F1.8, P-Iris, remote focus and zoom				
		9 - 22 mm lens: F1.6, P-Iris, remote focus and zoom				
	Angle of View	3 - 9 mm lens:	30° – 91°	32° – 98°	N/A	
		4.3 - 8 mm lens:	N/A	N/A	46° – 86°	44° – 81°
9 - 22 mm lens:		14° – 29°	15° – 31°	18° – 41°	N/A	

IMAGE CONTROL	Image Compression Method	H.264 (MPEG-4 Part 10/AVC), Motion JPEG				
	Streaming	Multi-stream H.264 and Motion JPEG				
	Bandwidth Management	(1.0 - 3.0 MP) HDSM; (5.0 MP and 4K Ultra HD) HDSM 2.0; (ALL) Idle Scene Mode				
	Motion Detection	Pixel and Classified Objects				
	Camera Tampering Detection	Yes				
	Electronic Shutter Control	Automatic, Manual (1/6 to 1/8000 sec)				
	Iris Control	Automatic, Manual				
	Day/Night Control	Automatic, Manual				
	Flicker Control	50 Hz, 60 Hz				
	White Balance	Automatic, Manual				
	Backlight Compensation	Adjustable				
	Privacy Zones	Up to 64 zones				
	Audio Compression Method	G.711 PCM 8 kHz				
	Audio Input/Output	Line level input/output, A/V mini-jack (3.5 mm)				
	Video Output	(1.0 - 2.0 MP only) NTSC/PAL, A/V mini-jack (3.5 mm)				
	External I/O Terminals	Alarm In, Alarm Out				
	USB Port	USB 2.0				

NETWORK	Network	100BASE-TX
	Cabling Type	CAT5
	Connector	RJ-45
	ONVIF	ONVIF compliant with version 1.02, 2.00, Profile S and 2.2.0 of the Analytics Service Specification (bounding boxes and scene descriptions not available with third-party VMS)
	Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication
	Protocol	IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTP, TCP,UDP, IGMP, ICMP, DHCP, Zeroconf, ARP
	Streaming Protocols	RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP
	Device Management Protocols	SNMP v2c, SNMP v3

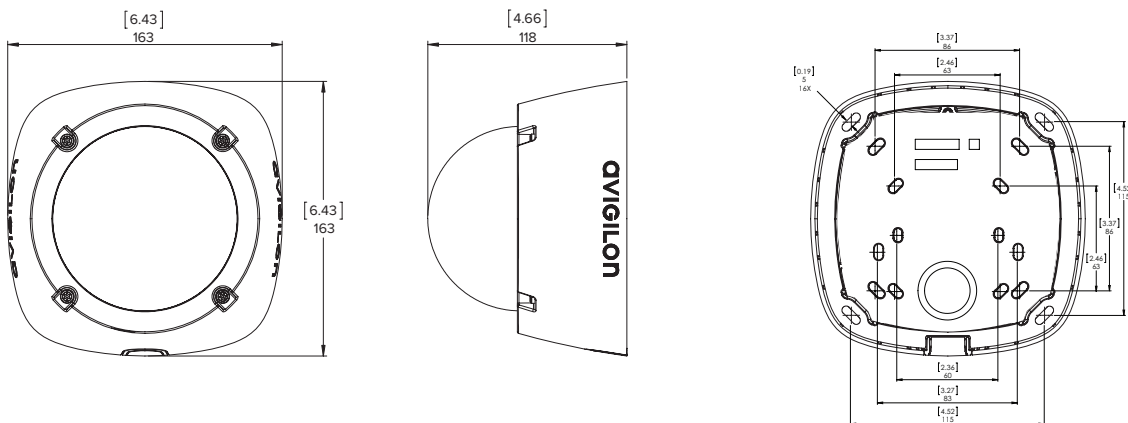
MECHANICAL		SURFACE MOUNT INDOOR DOME CAMERA	IN-CEILING DOME CAMERA
	Dimensions (LxWxH)	163 mm x 163 mm x 118 mm (6.4" x 6.4" x 4.7")	181 mm x 181 mm x 164 mm (7.1" x 7.1" x 6.5")
Weight	0.95 kg (2.09 lbs)	1.6 kg (3.5 lbs)	
Dome Bubble	Polycarbonate, clear		
Body	Plastic, Aluminum	Plastic, Aluminum	
Housing	Surface mount, tamper resistant	Recessed mount, tamper resistant	
Finish	Plastic, gray	Plastic, gray; Aluminum, powder coat, black	
Adjustment Range	360° pan, 9° - 95° tilt (30° - 95° tilt with -IR option), ±180° azimuth		
Onboard Storage	SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended		

ELECTRICAL	Power Consumption	7 W (9 W for -IR option)										
	Power Source	VDC: 12 V +/- 10%, 7 W min (9 W min with -IR option) VAC: 24 V +/- 10%, 10 VA min (13 VA min with -IR option)				PoE: IEEE802.3af Class 3 compliant						
	Power Connector	2-pin terminal block										
	RTC Backup Battery	3V manganese lithium										
ENVIRONMENTAL	Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F) (8.0 MP only) -40 °C to +50 °C (-40 °F to 122 °F)										
	Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)										
	Humidity	0 - 95% non-condensing										
CERTIFICATIONS	Certifications	UL	cUL	CE	ROHS	WEEE	RCM	KC	EAC			
	Safety	UL 60950-1		CSA 60950-1		IEC/EN 60950-1		IEC 62471 (for -IR option)				
	Environmental	IK10 Impact Rating										
	Electromagnetic Emissions	FCC Part 15 Subpart B Class B		IC ICES-003 Class B		EN 55032 Class B		EN 61000-6-3		EN 61000-3-2	EN 61000-3-3	KN 32
	Electromagnetic Immunity	EN 55024				EN 61000-6-1			KN 35			
SUPPORTED VIDEO ANALYTICS EVENTS	Objects in Area	The event is triggered when the selected object type moves into the region of interest.										
	Object Loitering	The event is triggered when the selected object type stays within the region of interest for an extended amount of time.										
	Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view. The beam can be unidirectional or bidirectional.										
	Object Appears or Enters Area	The event is triggered by each object that enters the region of interest. This event can be used to count objects.										
	Object Not Present in Area	The event is triggered when no objects are present in the region of interest.										
	Objects Enter Area	The event is triggered when the specified number of objects have entered the region of interest.										
	Objects Leave Area	The event is triggered when the specified number of objects have left the region of interest.										
	Object Stops in Area	The event is triggered when an object in a region of interest stops moving for the specified threshold time.										
	Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.										
	Tamper Detection	The event is triggered when the scene unexpectedly changes.										

Outline Dimensions

Surface Mount Dome Camera

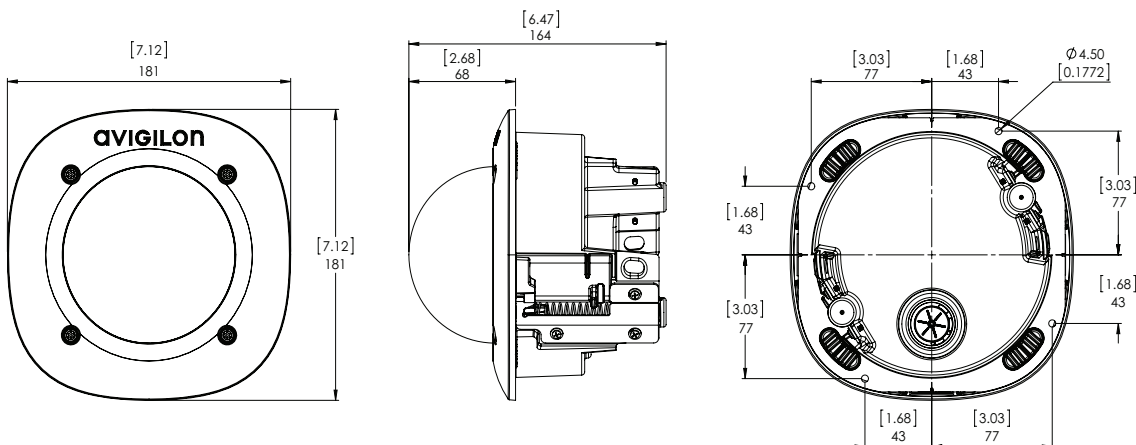
(H4A-D)



[X.X]	INCHES
X	MM

In-Ceiling Dome Camera

(H4A-DC)



Ordering Information

SURFACE MOUNT INDOOR DOME CAMERAS	MP	WDR	LightCatcher Technology	Analytics	Lens	IR	HDSM SmartCodec
1.0C-H4A-D1	1.0	✓	✓	✓	3 - 9 mm		✓
1.0C-H4A-D1-IR	1.0	✓	✓	✓	3 - 9 mm	✓	✓
1.0C-H4A-D2	1.0	✓	✓	✓	9 - 22 mm		✓
2.0C-H4A-D1	2.0	✓	✓	✓	3 - 9 mm		✓
2.0C-H4A-D1-IR	2.0	✓	✓	✓	3 - 9 mm	✓	✓
2.0C-H4A-D2	2.0	✓	✓	✓	9 - 22 mm		✓
3.0C-H4A-D1	3.0	✓	✓	✓	3 - 9 mm		✓
3.0C-H4A-D1-IR	3.0	✓	✓	✓	3 - 9 mm	✓	✓
3.0C-H4A-D2	3.0	✓	✓	✓	9 - 22 mm		✓
5.0L-H4A-D1	5.0		✓	✓	4.3 - 8 mm		✓
5.0L-H4A-D2	5.0		✓	✓	9 - 22 mm		✓
5.0L-H4A-D1-IR	5.0		✓	✓	4.3 - 8 mm	✓	✓
8.0-H4A-D1	8.0			✓	4.3 - 8 mm		✓
8.0-H4A-D1-IR	8.0			✓	4.3 - 8 mm	✓	✓
H4A-DD-SMOK1	Indoor Dome Camera Cover with Smoked Bubble						
H4A-DD-CLER1	Indoor Dome Camera Cover with Clear Bubble						
H4A-DD-SMOK1-BL	Black Indoor Dome Camera Cover with Smoked Bubble						
H4A-DD-CLER1-BL	Black Indoor Dome Camera Cover with Clear Bubble						
H4A-DD-SDWL1	Indoor Dome Camera Sidewall Knockout Plug, Pack of 5						
H4A-DD-SDWL1-BL	Indoor Black Dome Camera Sidewall Knockout Plug, Pack of 5						
H4A-AC-GROM1	Camera Sealing Grommet, Pack of 10						
H4-AC-WIFI1-NA	USB Wi-Fi Adapter						
H4-AC-WIFI2-EU	USB Wi-Fi Adapter						
CM-AC-AVIO1	3.5 mm Jack with 1.8 m Fly Wires						
IN-CEILING DOME CAMERAS	MP	WDR	LightCatcher Technology	Analytics	Lens		HDSM SmartCodec
1.0C-H4A-DC1	1.0	✓	✓	✓	3 - 9 mm		✓
1.0C-H4A-DC2	1.0	✓	✓	✓	9 - 22 mm		✓
2.0C-H4A-DC1	2.0	✓	✓	✓	3 - 9 mm		✓
2.0C-H4A-DC2	2.0	✓	✓	✓	9 - 22 mm		✓
3.0C-H4A-DC1	3.0	✓	✓	✓	3 - 9 mm		✓
3.0C-H4A-DC2	3.0	✓	✓	✓	9 - 22 mm		✓
5.0L-H4A-DC1	5.0		✓	✓	4.3 - 8 mm		✓
5.0L-H4A-DC2	5.0		✓	✓	9 - 22 mm		✓
8.0-H4A-DC1	8.0			✓	4.3 - 8 mm		✓
H4A-DC-SMOK1	In-Ceiling Dome Camera Cover with Smoked Bubble						
H4A-DC-CLER1	In-Ceiling Dome Camera Cover with Clear Bubble						
H4A-DC-SMOK1-BL	Black In-Ceiling Dome Camera Cover with Smoked Bubble						
H4A-DC-CLER1-BL	Black In-Ceiling Dome Camera Cover with Clear Bubble						
H4-DC-CPNL1	Metal Ceiling Panel						
H4A-AC-GROM1	Camera Sealing Grommet, Pack of 10						
H4-AC-WIFI1-NA	USB Wi-Fi Adapter						
H4-AC-WIFI2-EU	USB Wi-Fi Adapter						
CM-AC-AVIO1	3.5 mm Jack with 1.8 m Fly Wires						

H4 HD Outdoor Dome Camera with Self-Learning Video Analytics

Avigilon offers a broad range of high definition cameras – from 1 – 5 MP and 4 – 7K (based on horizontal resolution) – and are available in a variety of formats, including dome, panoramic and fixed. Whether it’s a small storefront that requires a few cameras or a large complex system requiring complete coverage of numerous areas, you can trust that you’re getting an exceptional solution for your security needs.

The innovative H4 HD outdoor dome cameras are just one way Avigilon can help provide effective monitoring and protection.



The H4 HD outdoor dome cameras are a great solution for monitoring both daytime and nighttime activities, with peace of mind due to their vandal resistant construction. Embedded with self-learning video analytics, the H4 HD cameras seamlessly integrate with Avigilon Control Center (ACC)[™], allowing security personnel to respond proactively and mitigate an incident before damage is done. They feature an integrated lens for remote focus and zoom control and are ONVIF compliant for easy integration.

Avigilon outdoor dome cameras are equipped with new Triple Exposure Ultra-Wide Dynamic Range (WDR) and patented LightCatcher[™] technology, ensuring you receive the excellent image detail. P-Iris control also allows the cameras to automatically set their iris position to enhance image quality in all lighting conditions, while onboard storage capabilities let you manage storage directly on the cameras using a standard SD memory card. Avigilon HDSM SmartCodec technology[™] H4 platform optimizes the video stream in real time using automatic ROI encoding to save bandwidth and storage requirements while maintaining image quality.

KEY FEATURES

1-5 megapixel and 4K Ultra HD (8 MP) resolution
Patented Advanced Video Pattern Detection and Teach by Example Technology
Self-learning video analytics
Patented High Definition Stream Management (HDSM) [™] Technology
Available with 3-9 mm F1.3, 4.3-8 mm F1.8, or 9-22 mm F1.6 P-Iris lens with remote focus and zoom
Wifi camera configuration support
Zoom and content adaptive integrated IR (Infrared) LEDs provide uniform illumination in the dark, even at 0 lux, up to a maximum of 30 m (98 ft) away
Avigilon LightCatcher technology provides exceptional image quality in low light environments
Triple Exposure Ultra Wide Dynamic Range (1-3 MP models)
ONVIF compliant with version 2.2.0 of the Analytics Service Specification
Vandal resistant construction and IP66 compliant
Avigilon HDSM SmartCodec technology for reduce bandwidth and storage requirements
Idle Scene Mode lowers bandwidth and storage usage if there are no motion events detected in the scene
Full Feature or High Framerate camera operating modes (4K Ultra HD model)

Specifications

		1.0 MP	2.0 MP	3.0 MP	5.0 MP	4K ULTRA HD (8.0 MP)	
IMAGE PERFORMANCE	Image Sensor	1/2.8" progressive scan CMOS			1/1.8" progressive scan CMOS	1/2.3" progressive scan CMOS	
	Aspect Ratio	16:9			4:3	16:9	
	Active Pixels (H x V)	1280 x 720	1920 x 1080	2048 x 1536	2592 x 1944	3840 x 2160	
	Imaging Area (H x V)	4.8 mm x 2.7mm; 0.189" x 0.106"			5.12 mm x 3.84 mm; 0.202" x 0.151"	6.22 mm x 4.66 mm; 0.245" x 0.183"	5.95 mm x 3.35 mm; 0.234" x 0.132"
	IR Illumination Option (high power 850 nm LEDs)	30 m (98 ft) max. distance at 0 lux				15 m (50 ft) max distance at 0 lux	
	Minimum Illumination	3 - 9 mm lens:	0.04 lux (F1.3) in color mode; 0.008 lux (F1.3) in monochrome mode			N/A	N/A
		4.3 - 8 mm lens:	N/A			0.033 lux (F1.8) in color mode; 0.0066 lux (F1.8) in monochrome mode	0.29 lux (F1.8) in color mode; 0.058 lux (F1.8) in monochrome mode
		9 - 22 mm lens:	0.08 lux (F1.6) in color mode; 0.016 lux (F1.6) in monochrome mode			0.026 lux (F1.6) in color mode; 0.005 lux (F1.6) in monochrome mode	N/A
	Image Rate (Full Resolution)	30 fps		30 fps (20 fps with WDR enabled)		30 fps	20 fps (30 fps in High Framerate mode)
	Dynamic Range	67 dB				83 dB	91 dB
	Dynamic Range (WDR Enabled)	120 dB triple exposure (20 fps or less); 100 dB dual exposure (30 fps)				N/A	
	Resolution Scaling	Down to 768 x 432			Down to 1792 x 1344		Down to 3072 x 1728
	Camera Operating Mode	N/A				Full Feature or High Framerate mode (HDSM 2.0 and analytics disabled in High Framerate mode)	
	3D Noise Reduction Filter	Yes					
LENS	Lens	3 - 9 mm lens:	F1.3, P-Iris, remote focus and zoom				
		4.3 - 8 mm lens:	F1.8, P-Iris, remote focus and zoom				
		9 - 22 mm lens:	F1.6, P-Iris, remote focus and zoom				
	Angle of View	3 - 9 mm lens:	30° – 91°		32° – 98°	N/A	
4.3 - 8 mm lens:		N/A		N/A	46° – 86°	44° – 81°	
9 - 22 mm lens:		14° – 29°		15° – 31°	18° – 41°	N/A	
IMAGE CONTROL	Image Compression Method	H.264 (MPEG-4 Part 10/AVC), Motion JPEG					
	Streaming	Multi-stream H.264 and Motion JPEG					
	Bandwidth Management	(1.0 - 3.0 MP) HDSM; (5.0 MP and 4K Ultra HD) HDSM 2.0; (ALL) Idle Scene Mode					
	Motion Detection	Pixel and classified objects					
	Camera Tampering Detection	Yes					
	Electronic Shutter Control	Automatic, Manual (1/6 to 1/8000 sec)					
	Iris Control	Automatic, Manual					
	Day/Night Control	Automatic, Manual					
	Flicker Control	50 Hz, 60 Hz					
	White Balance	Automatic, Manual					
	Backlight Compensation	Adjustable					
	Privacy Zones	Up to 64 zones					
	Audio Compression Method	G.711 PCM 8 kHz					
	Audio Input/Output	Line level input and output, A/V mini-jack (3.5 mm)					
	Video Output	(1.0 - 2.0 MP only) NTSC/PAL, A/V mini-jack (3.5 mm)					
	External I/O Terminals	Alarm In, Alarm Out					
	NETWORK	USB Port	USB 2.0				
Network		100BASE-TX					
Cabling Type		CAT5					
Connector		RJ-45					
ONVIF		ONVIF compliant with version 1.02, 2.00, Profile S and 2.2.0 of the Analytics Service Specification (*bounding boxes and scene descriptions not available with third-party VMS)					
Security		Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication					
Protocol		IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf, ARP					
Streaming Protocols	RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP						
Device Management Protocols	SNMP v2c, SNMP v3						
MECHANICAL	Dimensions (LxWxH)	PENDANT DOME CAMERA			SURFACE MOUNT OUTDOOR DOME CAMERA		
		dome camera only:	172 mm x 172 mm x 124 mm; (6.8" x 6.8" x 4.9")		163 mm x 163 mm x 121 mm; (6.4" x 6.4" x 4.8")		
	Weight	with wall mount (H4-MT-WALL1):	275 mm x 172 mm x 152.1 mm (10.8" x 6.8" x 6.0")				
		with NPT mount (H4-MT-NPTA1):	172 mm x 172 mm x 172.3 mm (6.8" x 6.8" x 6.8")				
		dome camera only:	1.55 kg (3.42 lbs)		1.35 kg (2.97 lbs)		
	Housing	with wall mount (H4-MT-WALL1):	3.00 kg (6.62 lbs)				
		with NPT mount (H4-MT-NPTA1):	1.80 kg (3.98 lbs)				
		Dome Bubble	Polycarbonate, clear				
	Body	Aluminum					
	Finish	Powder coat, RAL 9003					
Adjustment Range	360° pan, 9° – 95° tilt (30° – 95° with -IR option), ±180° azimuth						
Onboard Storage	SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended						
ELECTRICAL	Power Consumption	7 W (9 W for -IR option)					
	Power Source	VDC: 12 V +/- 10%, 7 W min (9 W min with -IR option)			PoE: IEEE802.3af Class 3 compliant		
	Power Connector	2-pin terminal block					
	RTC Backup Battery	3V manganese lithium					
ENVIRONMENTAL	Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F) (8.0 MP only) -40 °C to +50 °C (-40 °F to 122 °F)					
	Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)					
	Humidity	0 - 95% non-condensing					

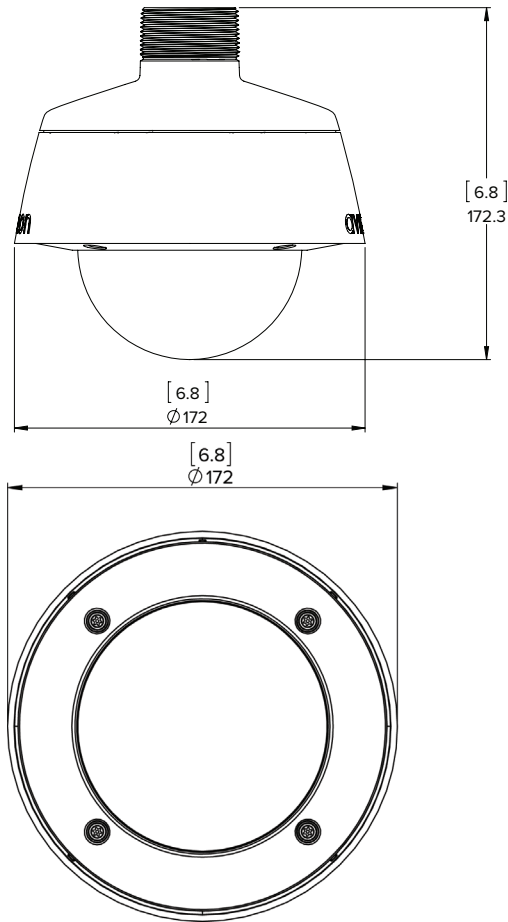
CERTIFICATIONS	Certifications/Directives	UL	cUL	CE	ROHS	WEEE	RCM	KC	EAC
Safety	UL 60950-1			CSA 60950-1		IEC/EN 60950-1		IEC 62471 (for -IR options only)	
Environmental	UL/CSA/IEC 60950-22			IEC 60529 IP66 Rating		IK10 Impact Rating			
Electromagnetic Emissions	FCC Part 15 Subpart B Class B			IC ICES-003 Class B		EN 55032 Class B		EN 61000-6-3	EN 61000-3-2 EN 61000-3-3 KN 32
Electromagnetic Immunity	EN 55024					EN 61000-6-1			KN 35

SUPPORTED VIDEO ANALYTICS EVENTS

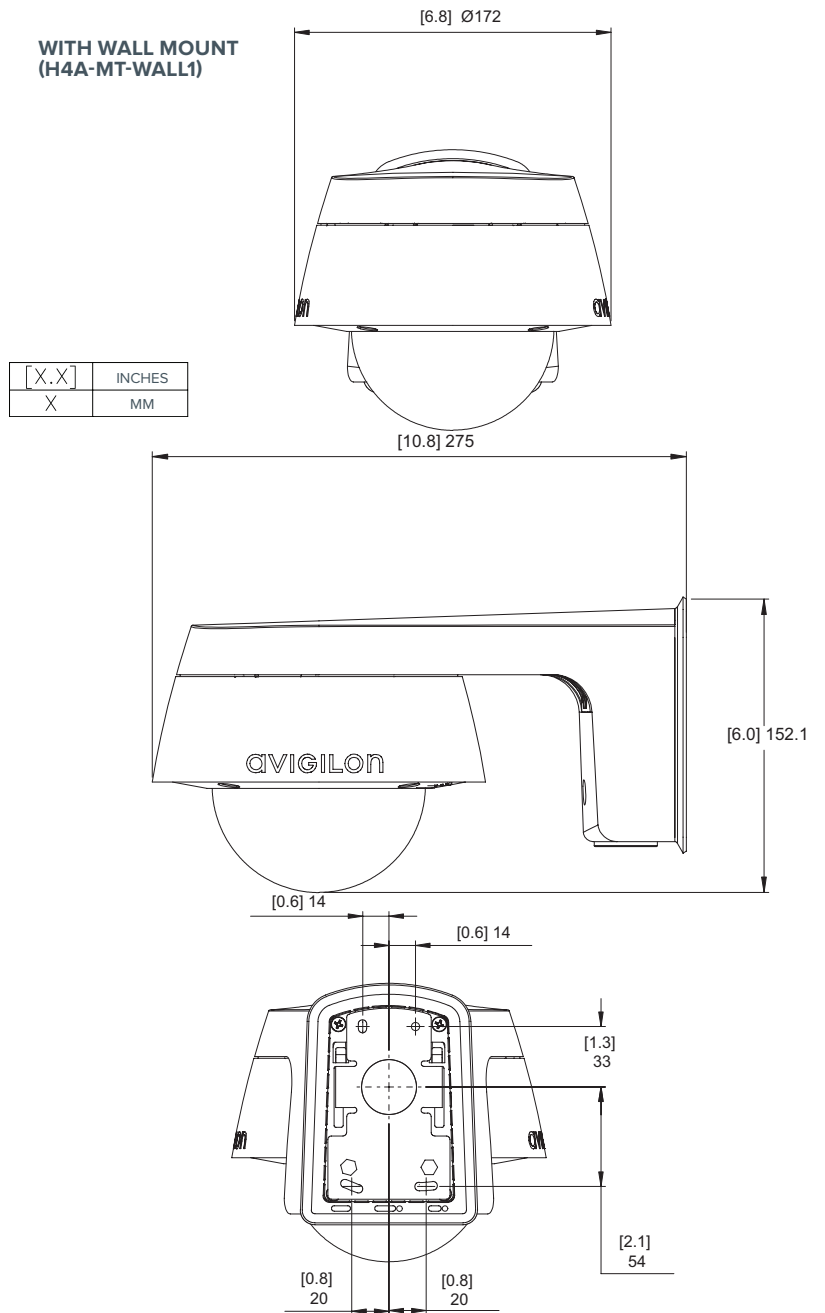
Objects in Area	The event is triggered when the selected object type moves into the region of interest.
Object Loitering	The event is triggered when the selected object type stays within the region of interest for an extended amount of time.
Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view. The beam can be unidirectional or bidirectional.
Object Appears or Enters Area	The event is triggered by each object that enters the region of interest. This event can be used to count objects.
Object Not Present in Area	The event is triggered when no objects are present in the region of interest.
Objects Enter Area	The event is triggered when the specified number of objects have entered the region of interest.
Objects Leave Area	The event is triggered when the specified number of objects have left the region of interest.
Object Stops in Area	The event is triggered when an object in a region of interest stops moving for the specified threshold time.
Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.
Tamper Detection	The event is triggered when the scene unexpectedly changes.

Outline Dimensions Pendant Dome Camera

**WITH NPT MOUNT
(H4A-MT-NPTA1)**



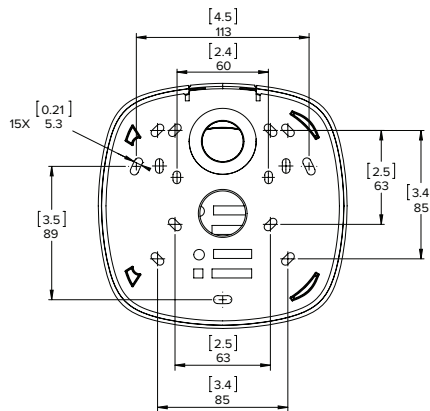
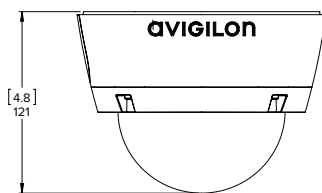
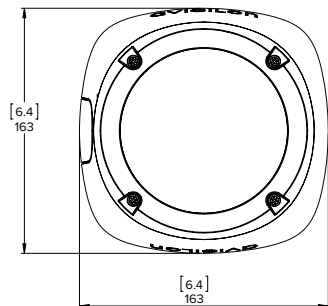
**WITH WALL MOUNT
(H4A-MT-WALL1)**



[X.X]	INCHES
X	MM

Surface Mount Outdoor Dome Camera

(H4A-DO)



Ordering Information

PENDANT DOME CAMERAS	MP	WDR	LightCatcher Technology	Analytics	Lens	IR	HDSM SmartCodec
1.0C-H4A-DP1	1.0	✓	✓	✓	3 - 9 mm		✓
1.0C-H4A-DP1-IR	1.0	✓	✓	✓	3 - 9 mm	✓	✓
1.0C-H4A-DP2	1.0	✓	✓	✓	9 - 22 mm		✓
2.0C-H4A-DP1	2.0	✓	✓	✓	3 - 9 mm		✓
2.0C-H4A-DP1-IR	2.0	✓	✓	✓	3 - 9 mm	✓	✓
2.0C-H4A-DP2	2.0	✓	✓	✓	9 - 22 mm		✓
3.0C-H4A-DP1	3.0	✓	✓	✓	3 - 9 mm		✓
3.0C-H4A-DP1-IR	3.0	✓	✓	✓	3 - 9 mm	✓	✓
3.0C-H4A-DP2	3.0	✓	✓	✓	9 - 22 mm		✓
5.0L-H4A-DP1	5.0		✓	✓	4.3 - 8 mm		✓
5.0L-H4A-DP1-IR	5.0		✓	✓	4.3 - 8 mm	✓	✓
5.0L-H4A-DP2	5.0		✓	✓	9 - 22 mm		✓
8.0-H4A-DP1	8.0		✓	✓	4.3 - 8 mm		✓
8.0-H4A-DP1-IR	8.0		✓	✓	4.3 - 8 mm	✓	✓
H4A-MT-WALL1	Indoor/Outdoor Pendant Wall Arm Mount						
H4A-MT-NPTA1	Indoor/Outdoor Pendant NPT Mount						
H4A-DP-SMOK1	Dome Camera Cover with Smoked Bubble						
H4A-DP-CLER1	Dome Camera Cover with Clear Bubble						
H4-MT-POLE1	Aluminum pole mounting bracket for H4 HD Pendant Dome Cameras and H4 HD Bullet Cameras						
H4-MT-CRNR1	Aluminum corner mounting bracket for H4 HD Pendant Dome Cameras and H4 HD Bullet Cameras						
H4A-AC-GROM1	Camera Sealing Grommet, Pack of 10						
H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wifi Adapter						
CM-AC-AVIO1	3.5 mm Jack with 1.8 m Fly Wires						
CM-AC-GROM1	Pipe Grommet, Pack of 10						
SURFACE MOUNT OUTDOOR DOME CAMERAS	MP	WDR	LightCatcher Technology	Analytics	Lens	IR	HDSM SmartCodec
1.0C-H4A-DO1	1.0	✓	✓	✓	3 - 9 mm		✓
1.0C-H4A-DO1-IR	1.0	✓	✓	✓	3 - 9 mm	✓	✓
1.0C-H4A-DO2	1.0	✓	✓	✓	9 - 22 mm		✓
2.0C-H4A-DO1	2.0	✓	✓	✓	3 - 9 mm		✓
2.0C-H4A-DO1-IR	2.0	✓	✓	✓	3 - 9 mm	✓	✓
2.0C-H4A-DO2	2.0	✓	✓	✓	9 - 22 mm		✓
3.0C-H4A-DO1	3.0	✓	✓	✓	3 - 9 mm		✓
3.0C-H4A-DO1-IR	3.0	✓	✓	✓	3 - 9 mm	✓	✓
3.0C-H4A-DO2	3.0	✓	✓	✓	9 - 22 mm		✓
5.0L-H4A-DO1	5.0		✓	✓	4.3 - 8 mm		✓
5.0L-H4A-DO1-IR	5.0		✓	✓	4.3 - 8 mm	✓	✓
5.0L-H4A-DO2	5.0		✓	✓	9 - 22 mm		✓
8.0-H4A-DO1	8.0		✓	✓	4.3 - 8 mm		✓
8.0-H4A-DO1-IR	8.0		✓	✓	4.3 - 8 mm	✓	✓
H4A-DO-SMOK1	Outdoor Dome Camera Cover with Smoked Bubble						
H4A-DO-CLER1	Outdoor Dome Camera Cover with Clear Bubble						
H4-AC-WIFI2-NA / H4-AC-WIFI2-EU	USB Wifi Adapter						
H4A-AC-GROM1	Camera Sealing Grommet, Pack of 10						
CM-AC-AVIO1	3.5 mm Jack with 1.8 m Fly Wires						
CM-AC-GROM1	Pipe Grommet, Pack of 10						

Avigilon Self-Learning Video Analytics

Avigilon self-learning analytics extend the effectiveness of your security personnel by providing effective monitoring and enabling proactive, real-time response from your team. Built from the ground up to manage high-definition video, Avigilon offers analytics embedded in Avigilon cameras up to 5K (16 MP) resolution.

Through the use of advanced pattern-based analytics and teach-by-example technology, Avigilon video analytics are designed to increase the productivity of security personnel while making monitoring more affordable and efficient.



Advanced pattern-based analytics

Avigilon advanced video pattern detection technology is able to accurately recognize the movements of people and vehicles while ignoring motion not relevant to a scene. Embedded into cameras up to 5K (16 MP), the system's ability to constantly learn reduces false positives and helps ensure alerts are meaningful, which avoids wasted time and improves efficiencies.

Teach-by-example technology

Our teach-by-example object classifier technology enables users to provide feedback about the accuracy of alarm events generated by Avigilon devices. Rather than decreasing analytics sensitivity to reduce false alarms, the feedback trains the device, increasing the accuracy of the analytics used to determine which alarms are real and which are false to further improve a low false-positive alarm rate.

Over time, the system learns the scene and is able to prioritize important events based on user feedback. This increases sensitivity to conditions that are of concern while reducing false alarms to keep the focus on what matters.

KEY FEATURES

Pattern-based object classification and tracking technology.
Continuously self-learning analytics with no manual calibration required.
Efficient installation and setup.
Operator input teach-by-example technology.
Embedded in cameras for resolutions 1-16 MP.
Analytics appliances for any IP cameras or analog system.
Real time analytic rule-based alarm notifications.
Fully integrated with Avigilon Control Center™ software for an end-to-end analytics solution.
Powerful forensic video analytics accelerates forensic search times using a fully unified ACC™ client.
Cost effective. No additional servers required.
No additional licensing required for analytics and rules-based events.

Key Features and Benefits

Ease of installation and ongoing accuracy

Point-and-shoot system setup. Self-learning video analytics works out of the box with no manual calibration required.

Self-learning analytics lower false alarm rates

Analytics continuously adjust to increase detection and confidence levels.

Broad variety of devices

Avigilon devices embedded with self-learning video analytics include appliances and cameras with resolutions from 1 MP to 5K (16 MP).

Pattern-based object classification and tracking technology

Object classification and tracking using pattern-based analytics algorithms are tuned to recognize people and vehicles, while ignoring nuisance motion.

Operator input teach-by-example technology

Teach-by-example technology enables users to provide feedback to the system about accuracy, which further enhances the pattern-based analytics database.

Integrated with Avigilon Control Center (ACC)

Fully integrated with ACC client and ACC mobile so that users can respond in real time even from mobile devices. Analytic alarm notifications can be automatically sent to any authorized client based on configured rules.

Analytics appliances for IP cameras or analog system

Add self-learning video analytics to IP or analog surveillance camera with Avigilon analytics appliances.

Idle scene mode

Idle scene mode reduces bandwidth and storage, and is triggered by analytics specific objects rather than motion detection.

Powerful forensics

Forensic search capabilities of analytics events accelerate search times using a fully unified ACC client.

Cost effective

No additional servers required.

No licensing required

Fully embedded edge analytics with no additional rules-based licensing on cameras.

The Avigilon Video Management Solution

Avigilon Control Center (ACC) video management software provides the ability for analytics events and alarms to be viewed and searched through an intuitive user interface. Real-time events and forensic capabilities detect and notify scene changes, missing objects and rules violations — all through an easy-to-use interface. Avigilon Control Center software gives you full control over playback of events, enabling you to quickly retrieve evidence to speed up response times and investigations.

RULES AND ALARMS

The Avigilon Control Center rules engine enables you to selectively apply analytics-based events as alarms and rule triggers, providing local or mobile users with immediate notifications for suspicious activities.

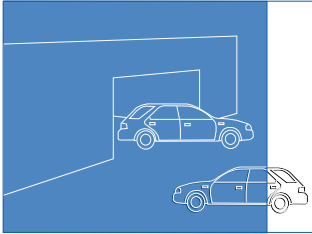
INTELLIGENT SEARCH OF CLASSIFIED OBJECTS

Avigilon Control Center software uses powerful analytics technology to intelligently search for specified events of classified objects to help you find the video you need quickly.

Avigilon Analytics Rules

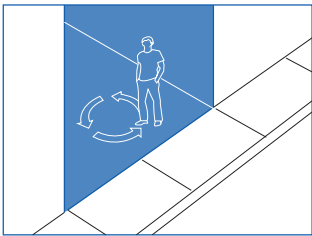
The following is a complete list of Avigilon self-learning video analytics features for object detection and classification for live or forensic events. The following images are for illustration purposes only.

OBJECTS IN AREA



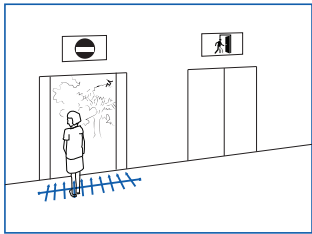
The event is triggered when the selected number of objects are present in the region of interest. The object can appear from within the region of interest or enter from outside the region of interest.

OBJECT LOITERING



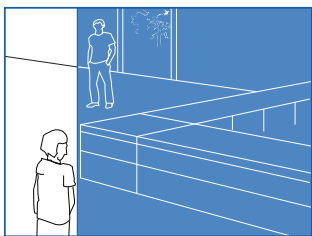
The event is triggered for each object that stays within the region of interest for an extended amount of time.

OBJECTS CROSSING BEAM



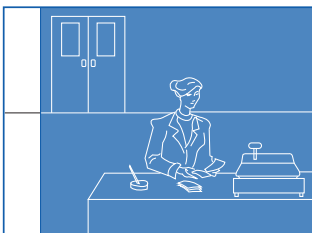
The event is triggered when the specified number of objects have crossed the directional beam that is configured over the camera's field of view in the selected time period. The beam can be unidirectional or bidirectional.

OBJECT APPEARS OR ENTERS AREA



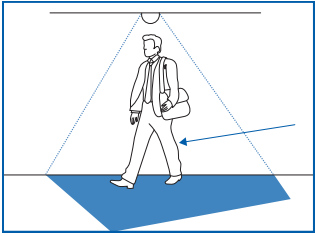
The event is triggered by each object present in the region of interest. The object can appear from within the region of interest or enter from outside the region of interest.

OBJECT NOT PRESENT IN AREA



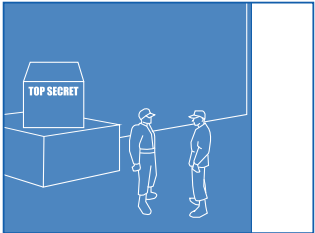
The event is triggered when no objects are present in the region of interest.

OBJECTS ENTER AREA



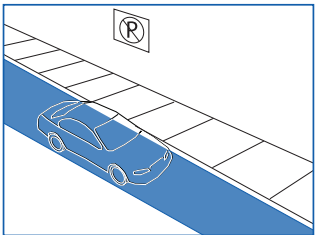
The event is triggered when the specified number of objects have entered the region of interest from outside of the region.

OBJECTS LEAVE AREA



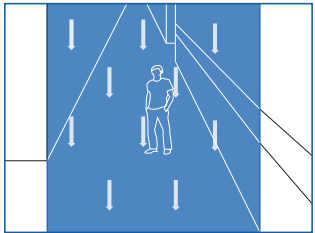
The event is triggered when the specified number of objects have left the region of interest.

OBJECT STOPS IN AREA



The event is triggered for each object in a region of interest that stops moving for the specified threshold time.

DIRECTION VIOLATED



The event is triggered for each object that moves in the prohibited direction of travel.

CAMERA TAMPERING



The event is triggered when the scene unexpectedly changes.

IDLE SCENE MODE



Analytic capable cameras will stream at a different image rate and reduced quality while no events are detected in the scene.

ANALYTICS SOFTWARE REQUIREMENTS & CAPABILITIES

Setup with Avigilon Control Center software	ACC version 6.x; or ACC version 5.4 and later
Setup with Avigilon Rialto™ Devices for Third-Party Cameras	Avigilon View
Real-Time Alerts and Events Configuration	Set up in ACC client
Real-Time Alerts and Events Notification	ACC client, other multiple notifications possible based on rules engine configuration
Forensic Search Capabilities	Set up in ACC client
Display of Video ACC Client for Forensic Searches	ACC client

SUPPORTED VIDEO ANALYTICS DEVICES

Avigilon H3A Series	1-3MP; bullet, dome and camera form factors
Avigilon HD Pro Series	4K (8 MP), 4.5K (12 MP) and 5K (16 MP)
Avigilon H4 Series	1-5 MP and 4K (8 MP); bullet, dome and camera form factors
ACC ES Analytics Appliance	Supports up to 4 direct camera connection channels, or up to 4 x Avigilon H.264 Analog Video Encoders
Avigilon Rialto Series	<ul style="list-style-type: none"> Rialto I4, A4 and R-Series Avigilon View software is required Supported resolutions: <ul style="list-style-type: none"> D1 720 and 1080p (1920 x 1080) resolutions at 30fps using RTSP H.264 video streaming Analog 3rd party camera connection supports D1 resolution at 30fps

