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. These cameras are extremely versatile and can work in almost any location, including banks, schools, retail outlets, municipal grounds and buildings, hotels, bars and restaurants.

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

Factory pre-configured Image preset modes for maximum image performance in a variety of lighting conditions

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)
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				
	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, RTCP, 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				

		PENDANT DOME CAMERA	SURFACE MOUNT OUTDOOR DOME CAMERA
MECHANICAL	Dimensions (LxWxH)	dome camera only: 172 mm x 172 mm x 124 mm; (6.8" x 6.8" x 4.9") 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")	163 mm x 163 mm x 121 mm; (6.4" x 6.4" x 4.8")
	Weight	dome camera only: 1.55 kg (3.42 lbs) with wall mount (H4-MT-WALL1): 3.00 kg (6.62 lbs) with NPT mount (H4-MT-NPTA1): 1.80 kg (3.98 lbs)	1.35 kg (2.97 lbs)
	Dome Bubble	Polycarbonate, clear	
	Body	Aluminum	
	Housing	Pendant mount, vandal resistant - with wall mount (H4-MT-WALL1) / NPT mount (H4-MT-NPTA1)	Surface mount, vandal resistant
	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) 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/Directives	UL	cUL	CE	ROHS	WEEE	RCM
	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 55022 Class B	EN 61000-6-3 EN 61000-3-2 EN 61000-3-3
	Electromagnetic Immunity	EN 55024				EN 61000-6-1	

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

[6.8] Ø172
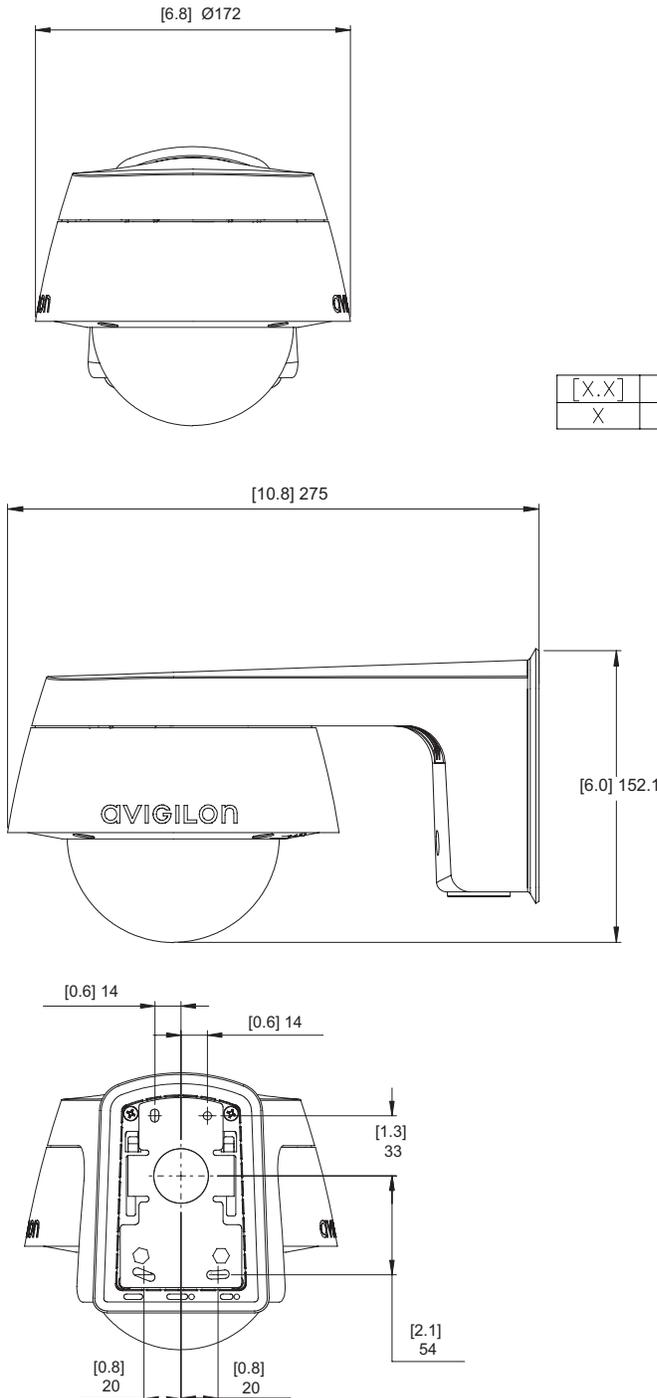
[X.X]	INCHES
X	MM

**WITH NPT MOUNT
(H4A-MT-NPTA1)**
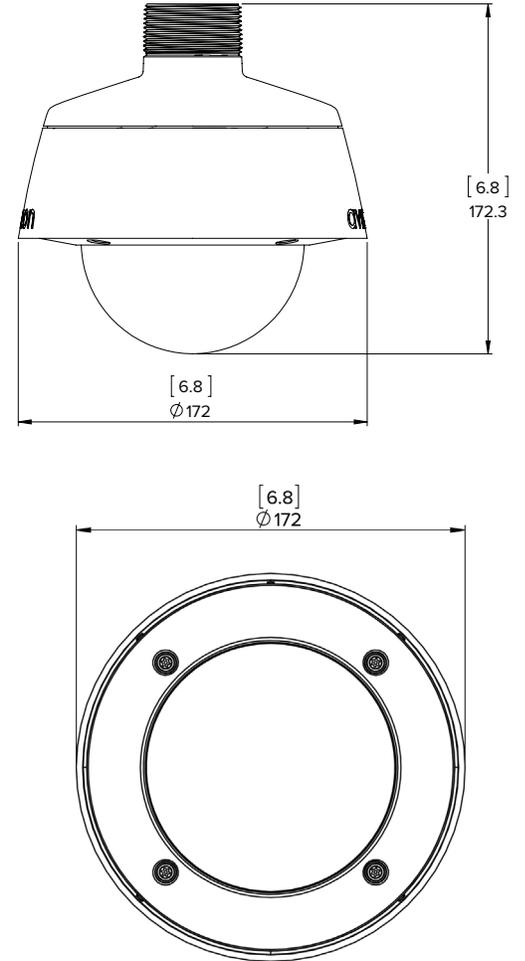
[6.8] 172.3

[6.8] Ø172

[10.8] 275

[6.0] 152.1

avigilon

[6.8] Ø172

[0.6] 14

[0.6] 14

[1.3] 33

[2.1] 54

[0.8] 20

[0.8] 20

Surface Mount Outdoor Dome Camera

(H4A-DO)

Dimensions: [6.4] 163, [6.4] 163, [4.8] 121, [4.5] 113, [2.4] 60, [0.21] 5.3 (15X), [3.5] 89, [2.5] 63, [2.5] 63, [3.4] 85, [3.4] 85
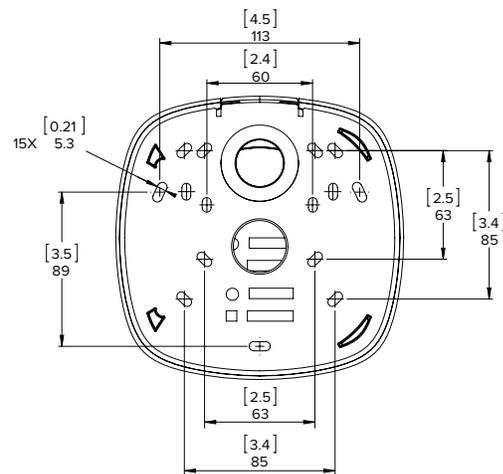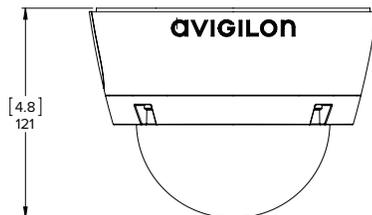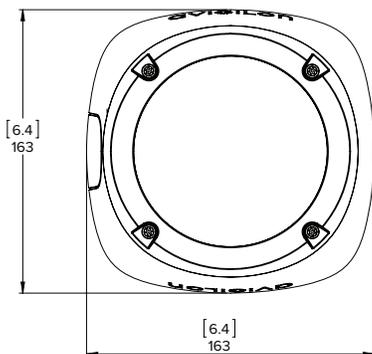
Ordering Information

PENDANT DOME CAMERAS	MP	WDR	LIGHTCATCHER	ANALYTICS	LENS	IR
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-WIFI1-NA	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	ANALYTICS	LENS	IR
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-WIFI1-NA	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

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