

# Indoor Dome Cameras with Self-Learning Video Analytics

AVIGILON

Avigilon offers the broadest range of high definition cameras in the industry – 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 the best solution for your security needs.

The innovative HD indoor dome cameras are just one way Avigilon can help provide the very best monitoring and protection.



The HD dome camera with self-learning video analytics brings together Avigilon's world renowned camera technology with video analytics. The combination of instant and accurate object detection and classification alerts, with the identification performance of high-definition video, provides users with an unmatched level of perimeter protection to keep both personnel and assets safe.

The HD indoor dome camera is a great solution for monitoring both daytime and nighttime indoor activities. It features an integrated lens for remote focus and zoom control with excellent low light performance. P-Iris control also allows the camera to automatically set its iris position to maximize image quality in all lighting conditions, while onboard storage capabilities let you manage storage directly on the camera using a standard SD memory card.

## KEY FEATURES

Patented Advanced Video Pattern Detection and Teach by Example Technology
Self-Learning Video Analytics
Available with 3-9 mm F1.2 or 9-22 mm F1.6 P-Iris lens with remote focus and zoom
Up to 30 images per second
Triple Exposure Ultra Wide Dynamic Range (3 Megapixel)
Avigilon's LightCatcher™ technology provides unsurpassed image quality in low light environments
SD card slot for onboard storage support
H.264 and Motion JPEG compression
Zoom and content adaptive integrated IR (Infrared) LEDs provide uniform illumination in the dark, even at 0 lux, up to a maximum of 15 m (50 ft) away
Power over Ethernet, 24 VAC or 12 VDC power input
ONVIF compliant with version 2.2.0 of the Analytics Service Specification

# Specifications

## IMAGE PERFORMANCE

	1.0 MP	2.0 MP	3.0 MP
Image Sensor	1/2.8" progressive scan CMOS		
Active Pixels	1280 (H) x 720 (V)	1920 (H) x 1080 (V)	2048 (H) x 1536 (V)
Imaging Area	4.8 mm (H) x 2.7mm (V); 0.189" (H) x 0.106" (V)		5.12 mm (H) x 3.84 mm (V); 0.202" (H) x 0.151" (V)
Minimum Illumination	3-9 mm lens:	0.1 lux (F1.2) in color mode; 0.01 lux (F1.2) in monochrome mode	
	9-22 mm lens:	0.2 lux (F1.6) in color mode; 0.02 lux (F1.6) in monochrome mode	
Dynamic Range	100 dB Dual Exposure True WDR		120 dB Triple Exposure Ultra WDR
Image Rate	30 fps (all resolutions)		20 fps (at full resolution); 30 fps (at 1920 x 1080 or smaller)
Resolution Scaling	Down to 768x432		Down to 768 x 432

## LENS

Lens	3-9 mm lens:	F1.2, 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:	32° - 91°	34° - 97°
	9-22 mm lens:	13° - 28°	15° - 30°

## IMAGE CONTROL

Image Compression Method	H.264 (MPEG-4 Part 10/AVC), Motion JPEG
Streaming	Multi-stream H.264 and Motion JPEG
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	(1MP and 2MP only) NTSC/PAL, A/V mini-jack (3.5 mm)
External I/O Terminals	Alarm In, Alarm Out
IR Illumination (option)	850 nm wavelength, 15 m (50 ft) max. distance of IR illumination at 0 lux

## 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

## MECHANICAL

	SURFACE MOUNT INDOOR DOME CAMERA	IN-CEILING DOME CAMERA
Dimensions (ØxH)	138 mm x 104 mm; 5.4" x 4.1"	165 mm x 130 mm; 6.5" x 5.1"
Weight	0.53 kg (1.17 lbs)	0.56 kg (1.2 lbs)
Dome Bubble	Polycarbonate, clear	
Body	Plastic	
Housing	Surface mount, tamper resistant	Recessed mount, tamper resistant
Finish	Plastic, RAL 9003;	
Adjustment Range	360° pan, 180° tilt (122° tilt with -IR option), 180° azimuth	
Onboard Storage	SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended	

## ELECTRICAL

Power Consumption	5 W (10 W for -IR option)	
Power Source	VDC: 12 V +/- 10%, 6 W min (10 W min with -IR option) VAC: 24 V +/- 10%, 8 VA min (12 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	-10 °C to +50 °C (14 °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	EAC	KC
Safety	UL 60950-1		CSA 60950-1		IEC/EN 60950-1		IEC 62471 (for models with IR Illuminators only)	
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
Electromagnetic Immunity	EN 55024				EN 61000-6-1			

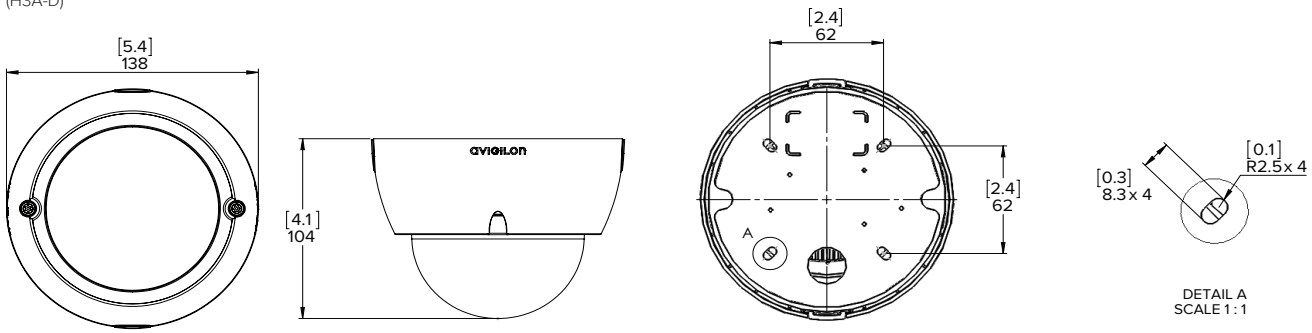
## SUPPORTED VIDEO ANALYTICS EVENTS

Objects in Area	The event is triggered when the selected object type moves into the region of interest. If the number of objects is exceeded, a new event is not triggered until the number of objects falls below the defined value.
Object Loitering	The event is triggered when the selected object type stays within the region of interest for an extended amount of time. The event is reset when the object leaves the region of interest.
Objects Crossing Beam	The event is triggered when the specified number of objects have crossed the directional beam that has is configured over the camera's field of view. The beam can be unidirectional or bidirectional. If the number of objects is exceeded, a new event is not triggered until the event timesout.
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

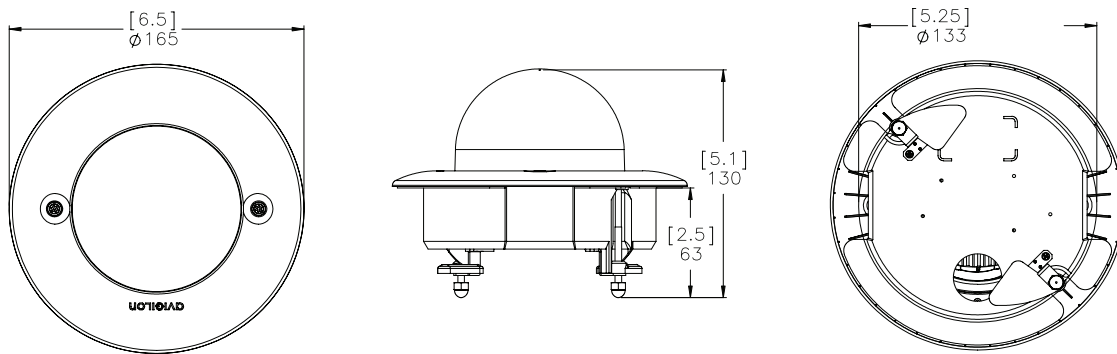
(H3A-D)



HD VIDEO ANALYTICS CAMERA

## In-Ceiling Dome Camera

(H3A-DC)



[X.X]	INCHES
X	MM

# Ordering Information

### SURFACE MOUNT INDOOR DOME CAMERAS

1.0C-H3A-D1	1.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Indoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
1.0C-H3A-D1-IR	1.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Indoor Dome Camera with IR Illuminator and Self-Learning Video Analytics and LightCatcher Technology
1.0C-H3A-D2	1.0 Megapixel WDR Day/Night H.264 HD 9-22 mm Indoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-D1	2.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Indoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-D1-IR	2.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Indoor Dome Camera with IR Illuminator and Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-D2	2.0 Megapixel WDR Day/Night H.264 HD 9-22 mm Indoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-D1	3.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Indoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-D1-IR	3.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Indoor Dome Camera with IR Illuminator and Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-D2	3.0 Megapixel WDR Day/Night H.264 HD 9-22 mm Indoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
H3-D-SMOKE	Dome Camera Cover with Smoked Bubble
H3-D-CLEAR	Dome Camera Cover with Clear Bubble

### IN-CEILING DOME CAMERAS

1.0C-H3A-DC1	1.0 Megapixel WDR Day/Night H.264 HD 3-9 mm In-Ceiling Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
1.0C-H3A-DC2	1.0 Megapixel WDR Day/Night H.264 HD 9-22 mm In-Ceiling Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-DC1	2.0 Megapixel WDR Day/Night H.264 HD 3-9 mm In-Ceiling Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-DC2	2.0 Megapixel WDR Day/Night H.264 HD 9-22 mm In-Ceiling Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-DC1	3.0 Megapixel WDR Day/Night H.264 HD 3-9 mm In-Ceiling Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-DC2	3.0 Megapixel WDR Day/Night H.264 HD 9-22 mm In-Ceiling Dome Camera with Self-Learning Video Analytics and LightCatcher Technology
H3-DC-SMOKE	Dome Camera Cover with Smoked Bubble
H3-DC-PNL	Metal Ceiling Panel
H3-DC-CLEAR	Dome Camera Cover with Clear Bubble