

# H5A-PTZ Camera

2 MP

4 MP

8 MP

The Avigilon H5A Pan-Tilt-Zoom (PTZ) camera brings wide area coverage, high-speed tracking and long range detail, empowering security operators with 360° views to monitor large areas with ease, including greater zooming capabilities for evidentiary detail. This powerful camera delivers high-quality, detailed images with up to 36x zoom, which is ideal for critical infrastructure, public safety, sports and leisure, commercial buildings, transportation and large open areas (e.g. parking lots) for superior situational awareness.

As an Avigilon H5 platform camera, the H5A-PTZ camera is embedded with Next-Generation Video Analytics for enhanced object detection, tracking and classification, Unusual Activity Detection (UAD), Facial Recognition technology and Avigilon Appearance Search<sup>TM</sup> technology support to help ensure critical events do not go unnoticed.



## Features



### NEXT-GENERATION VIDEO ANALYTICS

Detects more objects with expanded object classifications and greater accuracy for faster responses, even in crowded scenes.



### LONG RANGE DETAIL

2, 4, and 8 MP with 36x zooming capabilities sets a new standard for high-performance 36x PTZ cameras with greater evidentiary detail.



### H.264 AND H.265 WITH HDSM SMARTCODEC<sup>TM</sup> TECHNOLOGY

Optimizes compression levels for regions in a scene to help maximize bandwidth savings and keep internet connectivity costs down.



### WATER, IMPACT AND ENCLOSURE RATED

IP66/7 rating for water resistance, IK10 impact rating for vandal resistance and NEMA 4X enclosure rating for windblown dust, water (e.g. rain, hose-directed water), and corrosion resistance.



### LIGHTCATCHER<sup>TM</sup> TECHNOLOGY

Offers exceptional detail in areas with low lighting.



### WIDE DYNAMIC RANGE\*

Captures details in scenes with both very bright and very dark areas.



### ONVIF<sup>®</sup> COMPLIANT

Native ONVIF Profile S, T, and G compliance allows easy integration with existing ONVIF infrastructures.



### FIPS 140-2 COMPLIANT

Enables the camera to be deployed at sites requiring FIPS-compliant cryptography.



### EASY TRANSITION FROM H4 PTZ TO H5A-PTZ

Field-replaceable parts allow for an easy transition from H4 PTZ cameras to H5A-PTZ cameras.



### WIDE AREA COVERAGE

Provides 360° zoomable views in high-resolution to monitor large areas with ease.

Preliminary Specifications - Subject to Change

# Specifications

		2.0 MP	4.0 MP	8.0 MP	
<b>IMAGE PERFORMANCE</b>	Image Sensor	1/2.8" progressive scan CMOS	1/2.5" Type "Exmor R" CMOS Sensor		
	Active Pixels (H x V)	1980 (H) x 1080 (V)	2688 (H) x 1512 (V)	3840 (H) x 2160 (V)	
	Imaging Area (H x V)	4.8 mm x 2.7 mm; 0.189" x 0.106"		6.2 mm x 3.5 mm; 0.244" x 0.138"	
	Minimum Illumination	0.1 lux (F/1.6) in color mode; 0.03 lux (F/1.6) in monochrome		TBD	
	Dynamic Range	120+ dB	TBD		
	Image Rate	Up to 60 fps		Up to 30 fps	
	Aspect Ratio (Resolution Scaling)	Down to (16:9) 384x216 or (5:4) 320x256			
	3D Noise Reduction Filter	Yes			
<b>LENS</b>	Lens	4.3 mm to 129 mm, F/1.6 – F/4.7, autofocus	4.4 mm to 88 mm, F/2.0 – F/3.8		
	Angle of View	63.7° – 1.9°		69.7° – 2.2°	
	Zoom	36x (with image stabilization off), 30x (with image stabilization on)			
<b>IMAGE CONTROL</b>	Video Compression	H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG			
	Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG			
	Motion Detection	Pixel motion: Selectable sensitivity and threshold. Classified object detection			
	Electronic Shutter Control	Automatic, Manual (1/1 to 1/10,000 sec)			
	Iris Control	Automatic, Open, Closed			
	Day/Night Control	Automatic, Manual			
	Flicker Control	60 Hz, 50 Hz			
	White Balance	Automatic, Manual			
	Backlight Compensation	On/Off			
	Privacy Zones	3D, up to 64 zones			
	Presets	500 named presets			
	Tours	10 named tours			
	Audio Compression Method	G.711, Opus			
	Digital Zoom	Up to 100x when used with ACC™ Client			
	Electronic Image Stabilization	Yes			
Digital Defog	Adjustable/Off				
<b>NETWORK</b>	Network	100BASE-TX			
	Cabling Type	CAT5e			
	Connector	RJ-45			
	ONVIF	ONVIF compliance version 1.02, 2.00, Profile S, Profile T, Profile G (www.onvif.org)			
	Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, FIPS 140-2 L1			
	Protocol	IPv6, 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			
	<b>PERIPHERALS</b>	Audio Input/Output	Line level input and output		
External I/O Terminals		2 Alarm In, 2 Alarm Out			
Onboard Storage		2 x microSD/microSDHC/microSDXC slot – minimum class 6; class 10/UHS-1 or better recommended. Currently one of the two SD card slots is available for onboard storage.			
<b>MECHANICAL</b>		<b>IN-CEILING MOUNT</b>	<b>PENDANT MOUNT</b>		
	Dimensions (ØxH)	228 mm x 252 mm; 9.0" x 9.9"		242 mm x 347 mm; 9.5" x 13.7"	
	Weight	3.4 kg; 7.5 lbs		3.7 kg; 8.2 lbs	
	Dome Bubble	Polycarbonate			
	Body	Aluminum			
	Housing	Recessed mount		Pendant mount	
	Finish	Powder coat, grey			
	Tilt	-10° to 90°, e-Flip, 300°/second			
Pan	360°, endless, 300°/second				
<b>ELECTRICAL</b>	Power Consumption	55 W max with 24 VDC aux power, 75 VA with 24 VAC aux power, 51 W max with 60 W PoE+, 25.5 W max with 30 W PoE+			
	Power Source	External Power	24 VDC ±10%; 24 VAC rms ±10%, 50 or 60 Hz		
		PoE*	60 W PoE: IEEE 802.3bt Class 6 PoE+, 60 W Cisco UPoE, Microsemi 60 W or higher midspans 30 W PoE: IEEE 802.3bt, 802.3at Class 4 PoE+		
	Power Connector	Red and Black input wires			
RTC Backup Battery	3V manganese lithium				

\* 60W PoE may not be compatible with switches and injectors not listed here. Contact Avigilon sales or Avigilon technical support for more information.

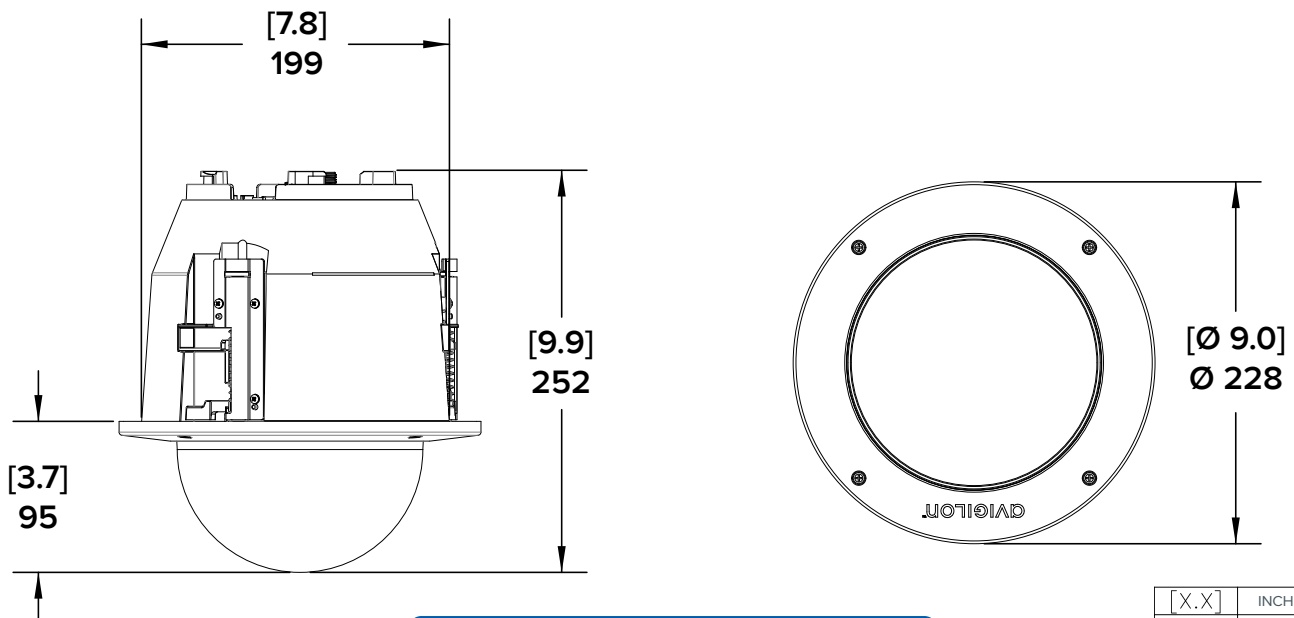
Preliminary Specifications - Subject to Change

		IN-CEILING MOUNT	PENDANT MOUNT	
<b>ENVIRONMENTAL</b>	Operating Temperature	-30 °C to +60 °C (-22 °F to 140 °F)	-40 °C to +60 °C (-40 °F to 140 °F)	
	Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)		
	Humidity	0-95%, non-condensing		
<b>CERTIFICATIONS</b>	Certifications/Directives	UL, cUL, CE, ROHS, RCM		
	Safety	UL 62368-1, CSA 62368-1, IEC/EN 62368-1		
	Environmental	In-Ceiling	IEC 62262 IK10 Impact Rating, UL 2043	
		Pendant	IEC 62262 IK10 Impact Rating, UL/CSA/IEC 60950-22, IEC 60529 IP66 and IP67 Weather Rating, NEMA 4X	
	Electromagnetic Emissions	FCC Part 15 Subpart B Class B, IC ICES-003 Class B, EN 55032 Class B, EN 61000-6-3, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3, EN 50121-4		
Electromagnetic Immunity	EN 55035, EN 61000-6-1, EN 50121-4			
<b>SUPPORTED VIDEO ANALYTICS EVENTS AT HOME POSITION</b>	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.		
<b>SUPPORTED CLASSIFIED OBJECT TYPES</b>	Object Types in Outdoor Mode	Vehicle, sub-types: Car, Truck, Bicycle, Motorcycle, Bus Person		
	Object Types in Indoor Mode	Person		
<b>TEACH BY EXAMPLE</b>	Teach By Example	Yes, when used with Avigilon Control Center™		
<b>AVIGILON CONTROL CENTER (ACC) VERSIONS SUPPORTED FEATURES</b>	ACC Version 6.14.12 or higher	All supported analytic events with two types of classified objects: person or vehicle. Appearance search when paired with appropriate server hardware. H.265 supported.		
	ACC Version 7.2 or higher	All supported analytic events with people and vehicles and all vehicle sub-types as classified objects. Appearance search when paired with appropriate server hardware. H.265 supported.		

## Outline Dimensions

### In-Ceiling PTZ Dome Camera

(H5A-PTZ-DC)



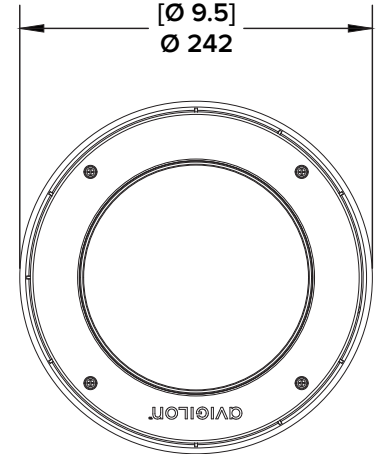
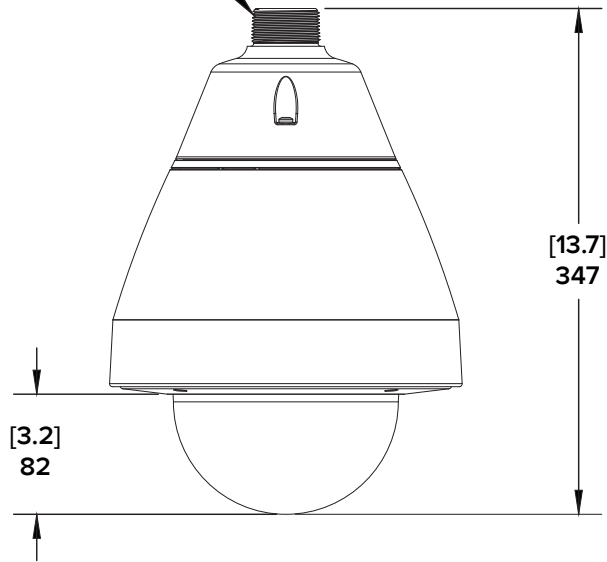
Preliminary Specifications - Subject to Change

[X.X]	INCHES
X	MM

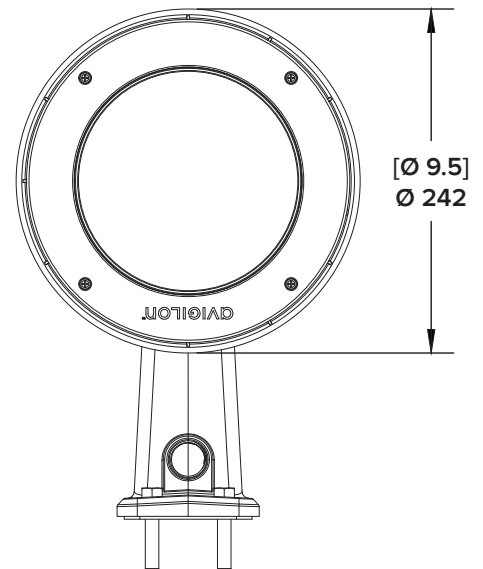
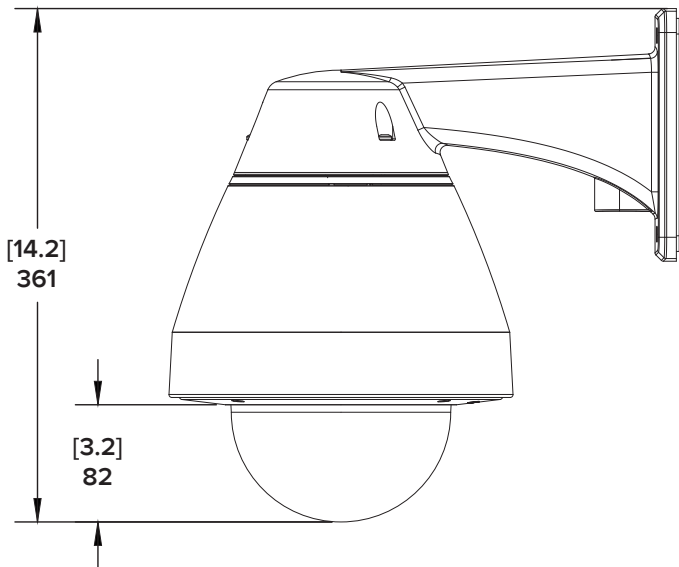
# Pendant PTZ Dome Camera

(H5A-PTZ-DP)

1 1/2" NPT Thread Mount



(H5A-PTZ-DP) WITH WALL ARM



Preliminary Specifications - Subject to Change

# Ordering Information

IN-CEILING PTZ DOME CAMERAS	MP	WDR	LIGHTCATCHER TECHNOLOGY	ANALYTICS AT HOME POSITION	LENS	ZOOM	HDSM SMARTCODEC
2.0C-H5A-PTZ-DC36	2.0	True WDR	✓	✓	4.3 – 129 mm	36x*	✓
4.0C-H5A-PTZ-DC36	4.0	Digital WDR	✓	✓	27 – 540 mm	36x*	✓
8.0C-H5A-PTZ-DC36	8.0	Digital WDR	✓	✓	27 – 540 mm	36x*	✓

\* 36x zoom is achieved with Image Stabilization off. Image Stabilization set to on will provide 30x zoom.

PTZH5A-CLER1	Clear Bubble Assembly - Replacement
PTZH5A-SMOK1	Smoked Bubble Assembly - Replacement
PTZMH-DC-CPNL1	Metal Ceiling Panel for In-Ceiling Installation

PENDANT PTZ DOME CAMERAS	MP	WDR	LIGHTCATCHER TECHNOLOGY	ANALYTICS AT HOME POSITION	LENS	ZOOM	IP66/IP67	HDSM SMARTCODEC
2.0C-H5A-PTZ-DP36	2.0	True WDR	✓	✓	4.3 – 129 mm	36x*	✓	✓
4.0C-H5A-PTZ-DP36	4.0	Digital WDR	✓	✓	27 – 540 mm	36x*	✓	✓
8.0C-H5A-PTZ-DP36	8.0	Digital WDR	✓	✓	27 – 540 mm	36x*	✓	✓

\* 36x zoom is achieved with Image Stabilization off. Image Stabilization set to on will provide 30x zoom.

IRPTZ-MNT-NPTA1	NPT Pendant Adapter
IRPTZ-MNT-WALL1	Wall Arm Mount
H4-MT-POLE1	Pole Mounting Bracket
H4-MT-CRNR1	Corner Mounting Bracket
PTZH5A-CLER1	Clear Bubble Assembly - Replacement
PTZH5A-SMOK1	Smoked Bubble Assembly - Replacement
POE-INJ-BT-60W	Gigabit 802.3bt 60W PoE Injector, single port. NA/EU/AU options available.
POE-INJ2-PLUS	30W PoE+ Injector. Injector operational temperature range is -20°C (-4°F) to 40°C (104°F). NA/EU/UK/AU options available.
PTZ-ACCS-IC-RETRO	Cable conversion kit. Cable stereo (4 conductor, TRRS) phone jack, 3.5mm (1/8"), to cable (round) 6.0' (1.83m).