

# H5A-PTZ Camera

2 MP

The Avigilon H5A Pan-Tilt-Zoom (PTZ) camera brings wide area coverage, high-speed movement 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 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 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.



### TRUE 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.

# Specifications

		2.0 MP		
<b>IMAGE PERFORMANCE</b>	Image Sensor	1/2.8" progressive scan CMOS		
	Active Pixels (H x V)	1920 (H) x 1080 (V)		
	Imaging Area (H x V)	4.8 mm x 2.7 mm; 0.189" x 0.106"		
	Minimum Illumination	0.1 lux (F/1.6) in color mode; 0.03 lux (F/1.6) in monochrome		
	Dynamic Range	120+ dB		
	Image Rate	Up to 60 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		
	Angle of View	Horizontal	63.7° – 1.9°	
		Vertical	38.5° – 1.1°	
	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 ( <a href="http://www.onvif.org">www.onvif.org</a> )		
	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.		
<b>MECHANICAL</b>		IN-CEILING MOUNT	PENDANT MOUNT	
	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	51 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.

		IN-CEILING MOUNT	PENDANT MOUNT
ENVIRONMENTAL	Operating Temperature	-30 °C to +60 °C (-22 °F to 140 °F) with external power or 60 W PoE -10 °C to +60 °C (14 °F to 140 °F) with IEEE 802.3at 30 W PoE+	-40 °C to +60 °C (-40 °F to 140 °F) with external power or 60 W PoE -10 °C to +60 °C (14 °F to 140 °F) with IEEE 802.3at 30 W PoE+
	Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)	
	Humidity	0-95%, non-condensing	

CERTIFICATIONS		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

SUPPORTED VIDEO ANALYTICS EVENTS AT HOME POSITION	Event	Description
	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.

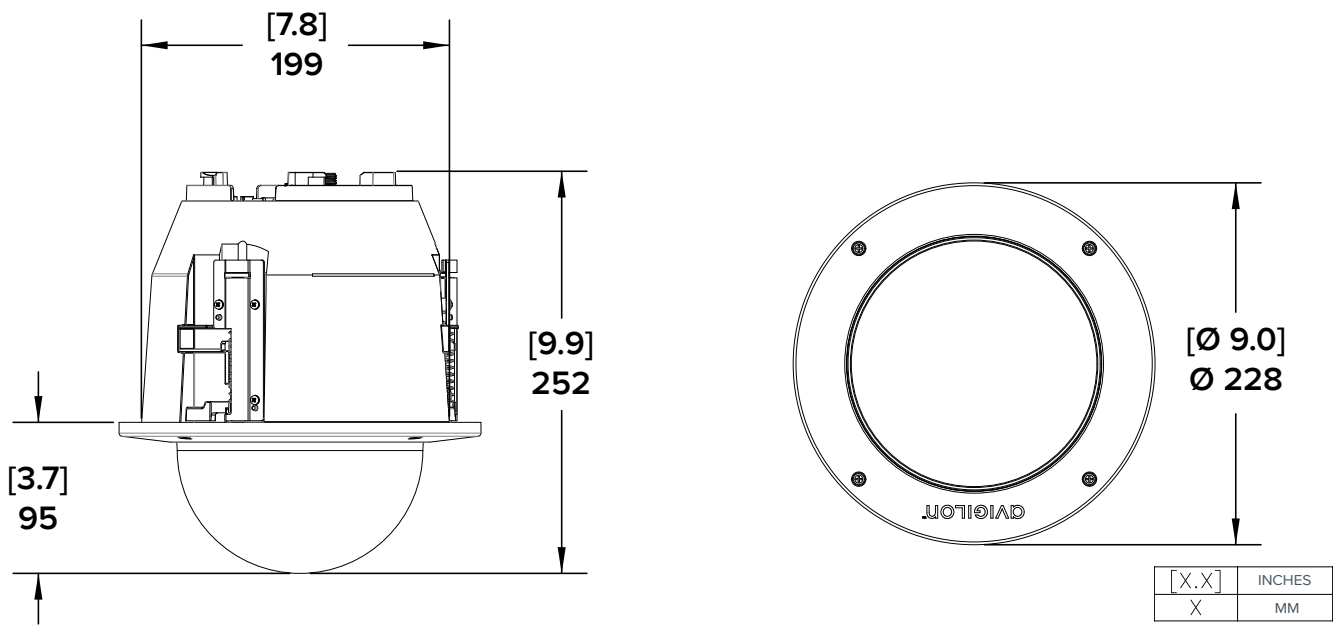
SUPPORTED CLASSIFIED OBJECT TYPES	Mode	Object Types
	Object Types in Outdoor Mode	Vehicle, sub-types: Car, Truck, Bicycle, Motorcycle, Bus Person
	Object Types in Indoor Mode	Person

TEACH BY EXAMPLE	Teach By Example	Yes, when used with Avigilon Control Center™
------------------	------------------	--

AVIGILON CONTROL CENTER (ACC) VERSIONS SUPPORTED FEATURES	ACC Version	Supported Features
	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

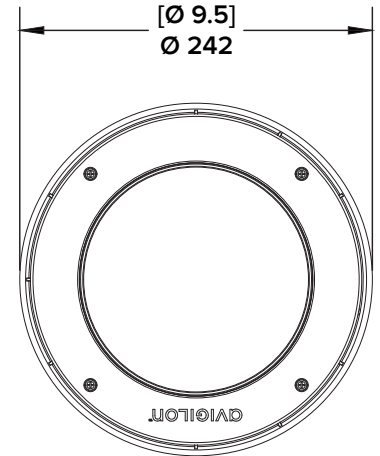
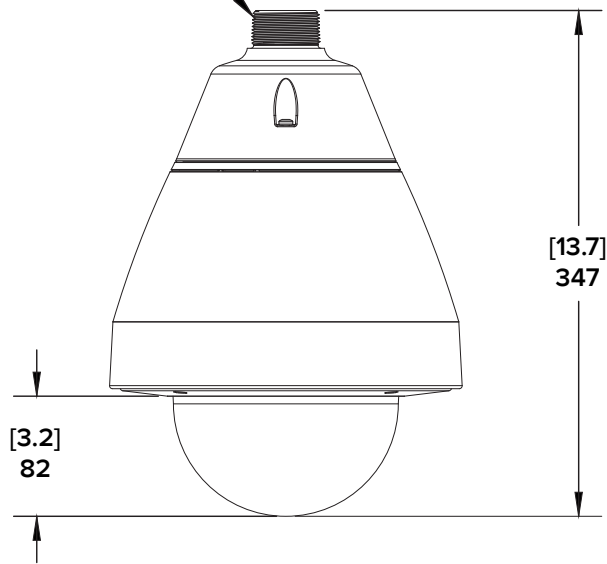
## In-Ceiling PTZ Dome Camera (H5A-PTZ-DC)



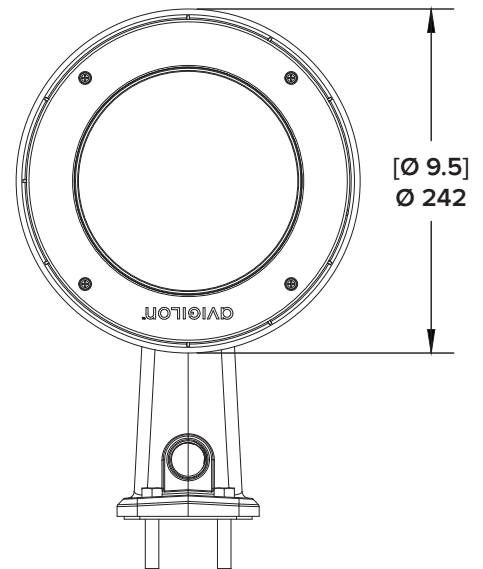
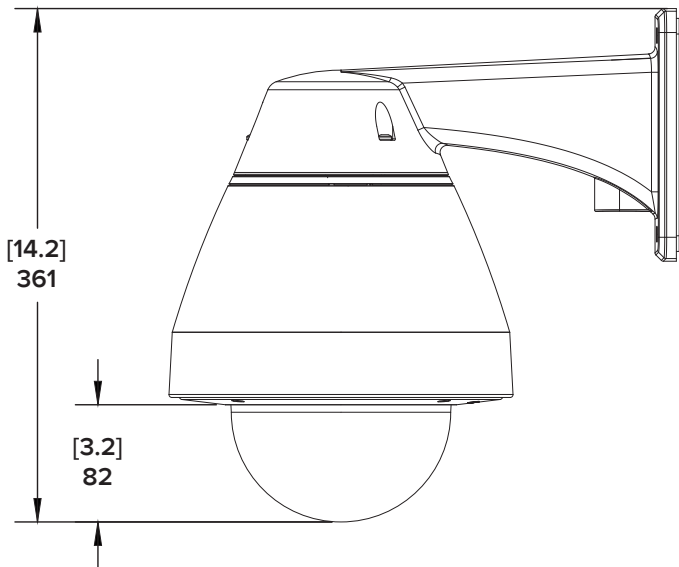
# Pendant PTZ Dome Camera

(H5A-PTZ-DP)

1 1/2" NPT Thread Mount



(H5A-PTZ-DP) WITH WALL ARM



# Ordering Information

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*	✓	✓
2.0C-H5A-PTZ-DC36	2.0	True WDR	✓	✓	4.3 – 129 mm	36x*		✓

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

PTZ CAMERA ACCESSORIES	PENDANT PTZ	IN-CEILING PTZ	DESCRIPTION
IRPTZ-MNT-NPTA1	✓		NPT Pendant Adapter
IRPTZ-MNT-WALL1	✓		Wall Arm Mount
H4-MT-POLE1	✓		Pole Mounting Bracket
H4-MT-CRNR1	✓		Corner Mounting Bracket
PTZMH-DC-CPNL1		✓	Metal Ceiling Panel for In-Ceiling Installation
PTZH5A-CLER1	✓	✓	Clear Bubble Assembly - Replacement
PTZH5A-SMOK1	✓	✓	Smoked Bubble Assembly - Replacement
POE-INJ-BT-60W-NA	✓	✓	Gigabit 802.3bt 60W PoE Injector, single port.
POE-INJ2-PLUS-NA	✓	✓	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		✓	H4 In-Ceiling PTZ audio retrofit kit
H5PTZ-ACCS-CABL1	✓		Cable gland nut kit, pack of 10