AVIGILON™
H6A PTZ Camera

Physical security threats move fast.
We help you move faster..



Whether it's detecting security breaches, monitoring operational workflows or capturing vital evidence, the Avigilon H6A Pan, Tilt and Zoom (PTZ) camera empowers you with an unparalleled level of situational awareness. It offers intuitive controls to revolutionize the way you oversee your security operations. Put public safety at the forefront with this AI-powered camera that is designed to effectively cover large areas with expansive 360-degree views and 2 and 4 MP resolution options. It captures fast-moving objects with operator precision and offers up to 30x zoom for long range details in all lighting conditions.

AI-Powered Video Analytics

Be a step ahead with the camera's ability to classify people and vehicles and alert you of potentially critical events, such as a person crawling along a fence. It can distinguish between various trucks such as a van, pick-up truck or large truck with analytics event support.

Powerful Zoom & Focus

No matter the lighting condition or how vast your site is, equip yourself with long-range detail using a camera that can deliver 30x zoom and can capture fast-moving objects with operator precision.

Secure & Compliant

Trust that your data is well-protected with advanced cybersecurity features such as an onboard FIPS 140-3 level 3 compliant TPM and Secure Boot.

Auto-Tracking[1]

Automatically follow and zoom in on an analytic-detected person or vehicle for greater detail without operator intervention. Free up your time to focus on other tasks while ensuring critical moments never get missed.

Outdoor-Ready Design

Protects against impact, water, windblown dust and a degree of corrosion with IK10, IP66/67, NEMA Type 4X and TS2 ratings.

ONVIF® Compliant

Easily integrate with existing ONVIF infrastructures via Profile S and T. Search, playback and retrieve edge recordings with Profile G. Enable cross-functionality with third-party analytics using Profile M.

[1] Based on home position at launch. To be available post-launch via a firmware upgrade

ONVIF is a trademark of Onvif, Inc.

MOTOROLA SOLUTIONS

Specifications

Image Performance	2 MP	4 MP
Image Sensor	1/1.8” progressive scan CMOS	
Active Pixels (H x V)	1920 (H) × 1080 (V)	2560 (H) × 1440 (V)
Aspect Ratio	16:9	
Dynamic Range	80 dB	
Dynamic Range (WDR On, Measured According to IEC 62676 Part 5)	Up to 122 dB (dual exposure, 30 fps)	
Minimum Illumination:	0.1 lux in color mode 0.06 lux in mono mode	
Camera Operating Mode	Full Feature / No Video Analytics / High Framerate	
Max Frame Rate	(50 Hz/60 Hz): 50 fps/60 fps	(50 Hz/60 Hz): 25 fps/30 fps
Streaming Resolutions: Primary (H x V)	1920 (H) x 1080 (V)	2560 (H) x 1440 (V)
Streaming Resolutions: Secondary (H x V)	1280 x 720; 768 x 432; 640 x 360; 512 x 288;	1920 x 1080; 1280 x 720; 768 x 432; 640 x 360; 512 x 288;
Streaming Resolutions: Tertiary (H x V)	1280 x 720; 768 x 432; 640 x 360; 512 x 288; 384 x 216;	1920 x 1080; 1280 x 720; 768 x 432; 640 x 360; 512 x 288; 384 x 216;
Streaming Resolutions: Quaternary (H x V)	640 x 360; 512 x 288	
Bandwidth Management	HDSM SmartCodec technology; Idle scene mode	

Lens	2 MP	4 MP
Lens	6.5 mm to 162.5 mm, F/1.6 – F/4.8	
Angle of View (Horizontal x Vertical), Wide	58.1 x 34.8	
Angle of View (Horizontal x Vertical), Tele	2.3 x 1.4	
Zoom	30X Enhanced Optical	
Lens Control	Remote Zoom and Focus, Autofocus, IR Cut Filter, Auto Iris	

Image Control	2 MP	4 MP
Image Compression Method	H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG	
Streaming	Multi-stream (four streams) H.264, Multi-stream H.265, Motion JPEG	
Electronic Shutter Control	Automatic, Manual (1/1 to 1/10,000 sec)	
Day/Night Control	Automatic, Manual	
Flicker Control	ON/OFF (Automatically Adjusts for 50/60 Hz)	
Iris Control	Automatic, Manual	
White Balance	Automatic, Manual	
Backlight Compensation	ON/OFF	
Privacy Zones	Up to 64 Zones	
Digital Zoom	12x	
Electronic Image Stabilization	Yes	
Digital Defog	Yes	
P/T Presets	300 configurable	
P/T Tours	100 configurable	
3D Noise Reduction Filter	Yes	

Network	
Network	100BASE-TX, 1000BASE-T with Auto MDI/MDI-X speed
Cabling Type	CAT5e minimum
Connector	RJ-45
ONVIF	ONVIF compliance, Profile S, Profile T, Profile G, and Profile M (www.onvif.org)
Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, CC EAL6+, FIPS 140-2 L1 (with optional camera license), onboard FIPS 140-3 L3 certified TPM, signed and encrypted firmware
Protocol	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf, HSTS, NTCIP, FTP, MQTT
Streaming Protocols	RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP
Device Management Protocol	SNMP v2c, SNMP v3
Secure Boot	Yes

Peripherals	
Onboard Storage	2 × microSD/microSDHC/microSDXC slots – video speed class card required. Class V10 or better recommended.

Auxiliary I/O	
Audio Input/Output	Full Duplex Line level input and output
Audio Compression Method	G.711 PCM 8 kHz, Opus
External I/O Terminals	3x Alarm In (3.5VDC/3.5mA MAX), 1x NO Relay Out (32VDC/150mA MAX), 1x Digital Out (13VDC/140mA MAX), 1 x 12VDC source (11~13VDC/140 mA MAX)

Mechanical	In-Ceiling Mount	Pendant Mount
Dimensions (LxWxH), Camera Only (In Shipping Box)	263 mm × 225 mm x 225 mm (280 mm x 267 mm x 551 mm); 10.4 in × 8.8 in x 8.8 in (11 in x 10.5 in x 21.7 in)	302 mm × 242 mm x 242 mm (280 mm x 267 mm x 551 mm); 11.9 in × 9.5 in x 9.5 in (11 in x 10.5 in x 21.7 in)
Weight, Camera Only (In Shipping Box)	3.45 kg (4.90 kg); 7.60 lb. (10.78 lb.)	4.15 kg (5.60 kg); 9.13 lb. (12.31 lb.)
Maximum Ceiling Thickness	1.75" (44.5 mm)	N/A
Dome Bubble	Polycarbonate	
Body	Polycarbonate and aluminum	
Housing	Recessed mount	Pendant mount
Finish	Plastic injection mold close to RAL9002 and Black; Powdercoat Gray, AKZO Nobel JP301H; Sand Grain Texture with Satin Sheen	
Pan Range	360° continuous	
Tilt Range	95°	
Pan Speed	0.05-500°/sec w/IEEE 802.3at Type 2, Class 4 0.05-750°/sec w/IEEE 802.3bt Type 3, Class 6 0.05-900°/sec w/IEEE 802.3bt Type 4, Class 8	
Tilt Speed	0.05-160°/sec w/IEEE 802.3at Type 2, Class 4 0.05-250°/sec w/IEEE 802.3bt Type 3, Class 6 0.05-300°/sec w/IEEE 802.3bt Type 4, Class 8	
Preset Accuracy	0.1°	

Electrical	In-Ceiling Mount	Pendant Mount
Power Source, PoE	IEEE 802.3 at Type 2, Class 4 compliant	IEEE 802.3at Type 2, Class 4 compliant* IEEE802.3bt Type 3, Class 6 compliant* IEEE802.3bt Type 4, Class 8 compliant*
PoE Power Consumption	25W Maximum	70W Maximum
Power Source, Aux	Aux 24 VDC/VAC +/- 10%	

Electrical	In-Ceiling Mount	Pendant Mount
AUX Power Consumption	35W (DC source), 55VA (AC source) Maximum	70W (DC source), 85VA (AC source) Maximum
RTC Backup Battery	3V manganese lithium	
Auxillary Power Connector	2-Pin Screw terminal removable plug	
Memory	4GB, RAM, 4GB Flash	
Redundant Power	Seamless failover between PoE and Aux and back without interrupt in camera operation	

*Using anything less than a Type 4, Class 8 PSE will result in reduced environmental and pan/tilt speed specifications.

Environmental	In-Ceiling Mount	Pendant Mount
Operating Temperature	-10 °C to +50 °C (14 °F to 122 °F)	-10 °C to +60 °C (14 °F to 140 °F), w/ IEEE 802.3at Type 2, Class 4 -40 °C to +60 °C (-40 °F to 140 °F), w/ IEEE802.3bt Type 3, Class 6 -51 °C to +60 °C (-59.8 °F to 140 °F), w/ IEEE802.3bt Type 4, Class 8
Boot Temperature*	-10 °C to +50 °C (14 °F to 122 °F)	-10 °C to +60 °C (14 °F to 140 °F), w/ IEEE 802.3at Type 2, Class 4 -25 °C to +60 °C (-13 °F to 140 °F), w/ IEEE802.3bt Type 3, Class 6 -40 °C to +60 °C (-40°F to 140 °F), w/ IEEE802.3bt Type 4, Class 8
Absolute Maximum Temperature	74 °C (165 °F) per NEMA TS2 (Temp.) para 2.2.7.2 - 2.2.7.7	
Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)	
Operating Humidity	10 - 90% condensing	10 - 100%

*Discovery/Streaming expected within 5 minutes, Full Operation expected within 60 minutes.

Sustainability	
RoHS	RoHS in accordance with EU RoHS Directive 2011/65/ EU and 2015/863, and standard EN IEC 63000:2018
REACH	REACH in accordance with (EC) No 1907/2006
OECD	Screened for conflict minerals in accordance with OECD guidelines
SCIP UUID	For SCIP UUID, see echa.europa.eu/scip
ISO	ISO certifications in accordance with ISO 14001, ISO 45001, and ISO 9001 standards
WEEE	WEEE compliant with EU WEEE Directive 2012/19/EU and standard EN 50419
Global recycling initiatives	Global recycling initiatives supported for secure, end-of-life product processing, see https://www.motorolasolutions.com/en_us/about/environmental-social-corporate-governance-esg/environment.html
RBA	RBA membership and operations in alignment with Code of Conduct v8.0

Certifications	In-Ceiling Mount	Pendant Mount
Certifications/Approvals	UL, cUL, CE, ROHS, RCM, UKCA, NOM, KC, BIS, BSMI	
Safety Standards	UL 62368-1, CSA 62368-1, IEC/EN 62368-1	
	UL 2043 (Plenum)	N/A
Environmental Standards/Ratings	IEC/EN 62262 Impact IK10 (Enclosure), IK09 (Bubble)	IEC 60529 IP66, IP67 rating IEC/EN 62262 Impact IK10 (Enclosure), IK09 (Bubble) IEC/EN 60068-2-6 Product Vibration IEC/EN 60068-2-27 Product Shock Type 4X
Electromagnetic Emissions Standards	FCC Part 15 Subpart B (Class A) ICES-003 (Class A) EN 55032 (Class A) EN IEC 61000-6-8 (Class A) EN 61000-3-2 EN 61000-3-3	
Electromagnetic Immunity Standards	EN 55035	

Certifications	In-Ceiling Mount	Pendant Mount
	EN 61000-6-1 EN 61000-6-2 EN 50121-4 EN 50130-4	
NEMA TS2	N/A	NEMA TS2 paragraph 2.2.7-2.2.9
Warranty	Limited 5 Year Warranty	

Analytics Specifications

Supported 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 moves into the region of interest and then stays 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 moves into a region of interest and then stops moving for the specified threshold time.
Object Too Close	The event is triggered when two objects are too close together, based on the specified distance set for the event.
Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.
Smart Motion Rule	Events are sent for person and vehicle present, against default-unchangable parameters, but can be searched by ACC.
Tamper Detection	The event is triggered when the scene unexpectedly changes.
Motion Detection	Pixel motion: Selectable sensitivity and threshold. Classified object detection.

* Analytics capabilities, including detection range, may vary by camera line. Please consult the Avigilon Self-Learning Video Analytics Design Guide for details specific to the H6APTZ Camera Line.

Supported Classified 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™

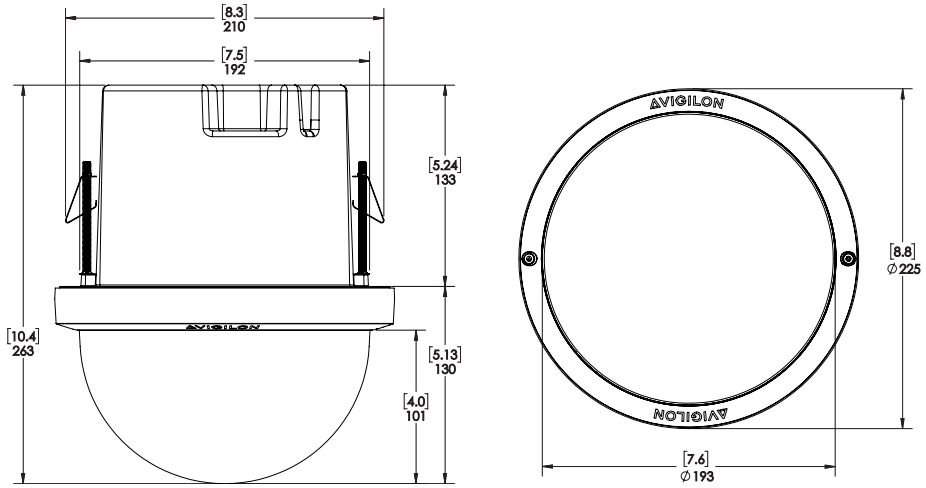
Avigilon Control Center (ACC) Versions Supported Features	
ACC Version 7.2 or higher*	All supported analytic events with people and vehicles and all vehicle sub-types as classified objects. Appearance search when paired with appropriate server hardware.

* Auto-tracking requires ACC 7.14.14 or higher to configure.

Outline Dimensions

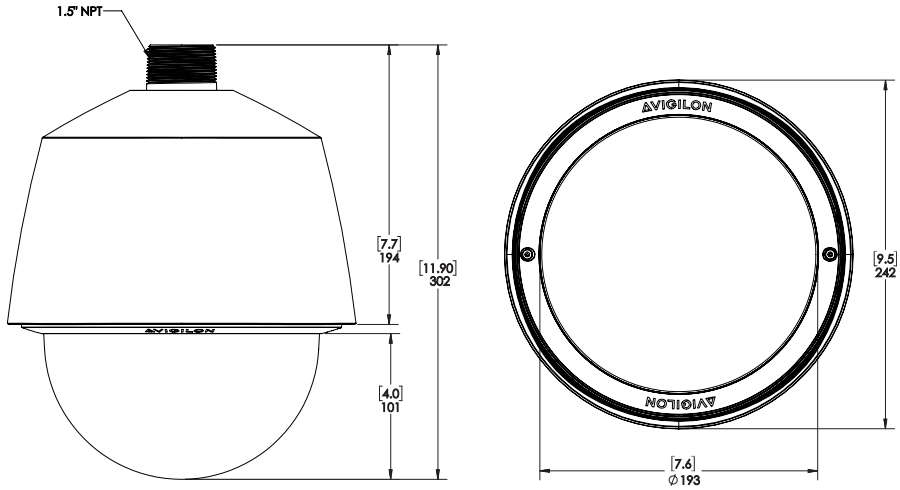
[X.X]	INCHES
X.X	MM

(H6A-PTZ-DC)



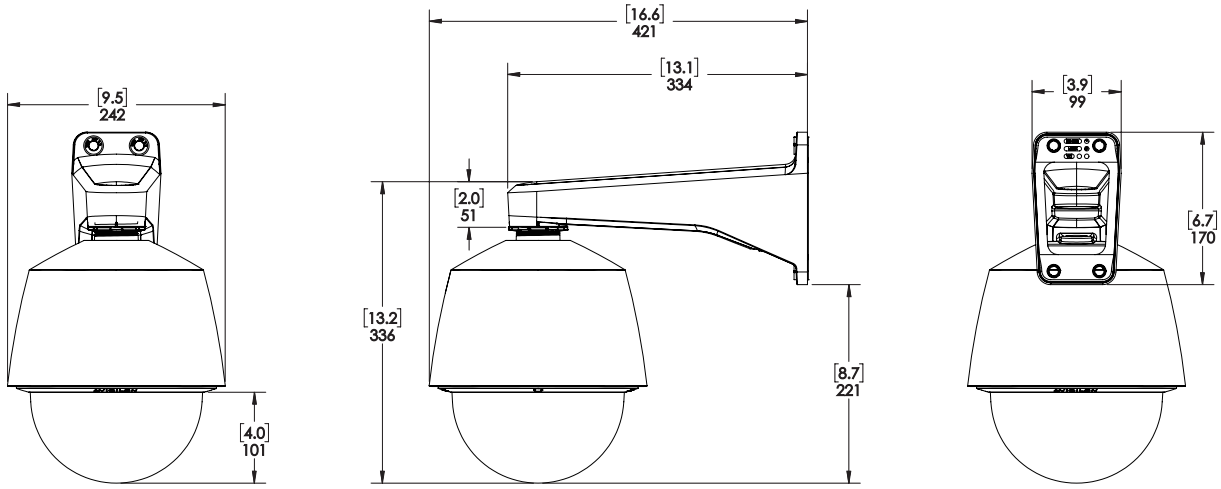
[X.X]	INCHES
X.X	MM

(H6A-PTZ-DP)

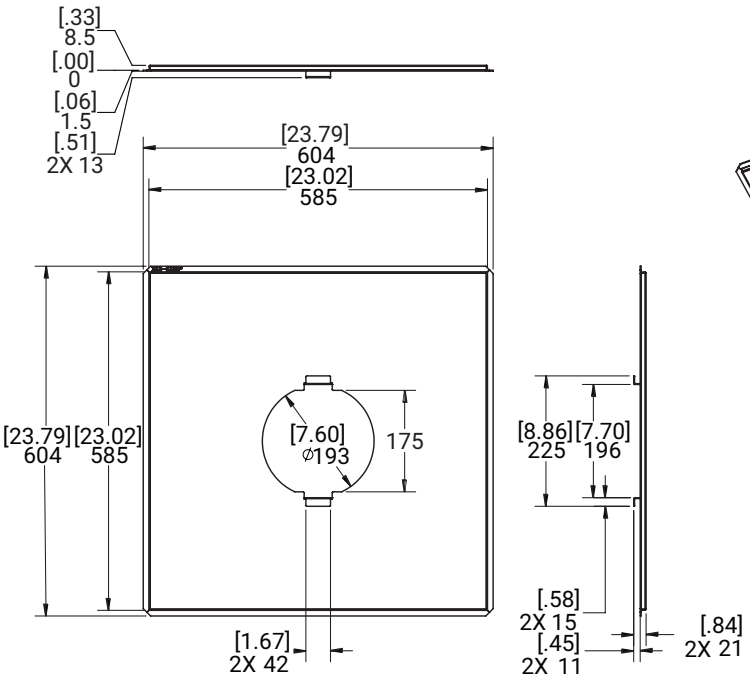


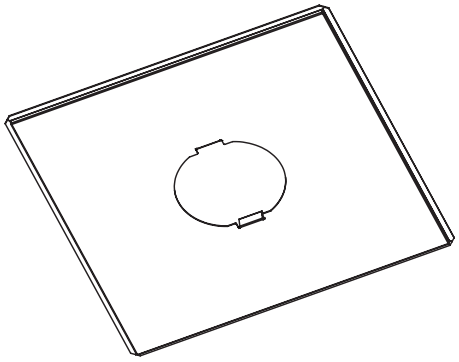
[X.X]	INCHES
X.X	MM

(H6A-PTZ-DP) WITH WALL ARM



PTZ-CPNL-G





Ordering Information

	Description	Resolution	True WDR	IP66/67
2.0C-H6A-PTZ-DC30-B	CAM, H6A PTZ, In-Ceiling, 2MP, 30X	2.0	✓	X
2.0C-H6A-PTZ-DP30-B	CAM, H6A PTZ, Pendant, 2MP, 30X	2.0	✓	✓
4.0C-H6A-PTZ-DC30-B	CAM, H6A PTZ, In-Ceiling, 4MP, 30X	4.0	✓	X
4.0C-H6A-PTZ-DP30-B	CAM, H6A PTZ, Pendant, 4MP, 30X	4.0	✓	✓

	Description
WLMT-1031	Mount, Pendant Arm, 30 cm Long, 1.5 NPT
WLMT-1021	Pendant wall arm, 1.5" NPT female, 20 cm (7.8") long
PLMT-1001	Pole mount adapter
CRNMT-1001	Corner mount adapter
CAM-FIPS	Camera license required to enable FIPS 140-2 cryptographic modules
POEA30U-1ATE-M-R-*-MSI	Indoor single port PoE+ 30W injector. Injector operational temperature range -20 °C to +40 °C (-4 °F to 104 °F). *NA/EU/UK/AU options available.
POE60U-1BTE	Gigabit 802.3bt 60 W PoE Injector
POE90U-1BT	PoE injector 802.3bt 90W Single Port
PTZ-CPNL-G	Metal Ceiling Panel for In-Ceiling Installations, Grey
PTZH6A-SMK50	Replacement smoked dome, 50% tint
PTZH6A-CLRBBL	Replacement clear dome

Support

For product support, visit: avigilon.com or sales@avigilon.com

To learn more, visit: www.avigilon.com

MOTOROLA SOLUTIONS

AVIGILON™

Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. motorolasolutions.com

© 2026, Avigilon Corporation. All rights reserved. MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners.

20261103-en Rev 12