

# AVIGILON™ H6A PTZ Camera

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

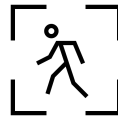


Whether it's detecting security breaches, monitoring operational workflows or capturing vital evidence, the Avigilon H6A Pan, Tilt and Zoom (PTZ) camera empowers you with an unparalleled level of situational awareness. It offers intuitive controls to revolutionize the way you oversee your security operations.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



#### AdaptAI 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.



#### Auto-Tracking<sup>3</sup>

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.



#### Audio Analytics<sup>1</sup> & Recording

Expand your awareness with alerts for gunshots<sup>2</sup>, breaking glass, fire alarms and more. Review video from the triggering camera to investigate the sound. Have the option to record audio when you need it.



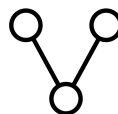
#### Outdoor-Ready Design

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



#### Secure & Compliant

Trust that your data is well-protected with advanced cybersecurity features such as an onboard FIPS 140-2 level 3 compliant TPM and Secure Boot.



#### 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.

<sup>1</sup> Audio analytics to be available post-launch via a firmware upgrade.

<sup>2</sup> Separate license required.

<sup>3</sup> Based on home position at launch.

ONVIF is a trademark of Onvif, Inc.

# Specifications

| Image Performance  | 2 MP  | 4 MP   |
|--|---|--|
| Image Sensor   | 1/1.8" progressive scan CMOS                            |  |
| Active Pixels (H x V)  | 1920 (H) x 1080 (V)                                     | 2560 (H) x 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<br>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  |      |
| 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 ( <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 (with optional camera license), onboard FIPS 140-2 L3 certified TPM |
| Protocol                   | IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf, ARP, HSTS   |
| 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. |
| Microphone      | Built-in microphone array for audio analytics, for certain variants.                                      |

| 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 MAX), 1 x 12VDC source (11~13VDC/140 mA MAX) |

| Mechanical  | In-Ceiling Mount   | Pendant Mount   |
|---|--|---|
| Dimensions (LxWxH), Camera Only (In Shipping Box) | 264 mm × 225 mm x 225 mm (280 mm x 275 mm x 530 mm);<br>10.4 in × 8.8 in x 8.8 in (11 in x 10.8 in x 20.9 in)                                | 303 mm × 242 mm x 242 mm (280 mm x 275 mm x 530 mm);<br>11.9 in × 9.5 in x 9.5 in (11 in x 10.8 in x 20.9 in) |
| Weight, Camera Only (In Shipping Box)             | 3.59 kg (4.79 kg);<br>7.91 lb. (10.56 lb.)   | 4.25 kg (5.45 kg);<br>9.37 lb. (12.02 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<br>0.05-750°/sec w/IEEE 802.3bt Type 3, Class 6<br>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<br>0.05-250°/sec w/IEEE 802.3bt Type 3, Class 6<br>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*<br>IEEE802.3bt Type 3, Class 6 compliant*<br>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<br>-40 °C to +60 °C (-40 °F to 140 °F), w/ IEE802.3bt Type 3, Class 6<br>-51 °C to +60 °C (-59.8 °F to 140 °F), w/ IEE802.3bt 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<br>-25 °C to +60 °C (-13 °F to 140 °F), w/ IEE802.3bt Type 3, Class 6<br>-40 °C to +60 °C (-40 °F to 140 °F), w/ IEE802.3bt 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% non-condensing                                    | 10 - 100%   |

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

| Certifications                      | In-Ceiling Mount  | Pendant Mount  |
|-------------------------------------|---|--|
| Certifications/Approvals            | UL, cUL, CE, ROHS, RCM, UKCA, NOM, KC, BIS  |  |
| Safety Standards                    | UL 62368-1, CSA 62368-1, IEC/EN 62368-1   |  |
|                                     | UL 2043 (Plenum)  | N/A  |
| Environmental Standards/Ratings     | Not applicable  | IEC 60529 IP66, IP67 rating<br>IEC/EN 62262 Impact IK10 (Enclosure), IK09 (Bubble)<br>IEC/EN 60068-2-6 Product Vibration<br>IEC/EN 60068-2-27 Product Shock<br>Type 4X |
| Electromagnetic Emissions Standards | FCC Part 15 Subpart B (Class A)<br>ICES-003 (Class A)<br>EN 55032 (Class A)<br>EN IEC 61000-6-8 (Class A)<br>EN 61000-3-2<br>EN 61000-3-3 |  |
| Electromagnetic Immunity Standards  | EN 55035<br>EN 61000-6-1<br>EN 61000-6-2<br>EN 50121-4<br>EN 50130-4  |  |
| NEMA TS2                            | N/A   | NEMA TS2 paragraph 2.2.7-2.2.9   |
| Warranty                            | Limited 5 Year Warranty   |  |

## 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.  |
| 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-unchangeable 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<br>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

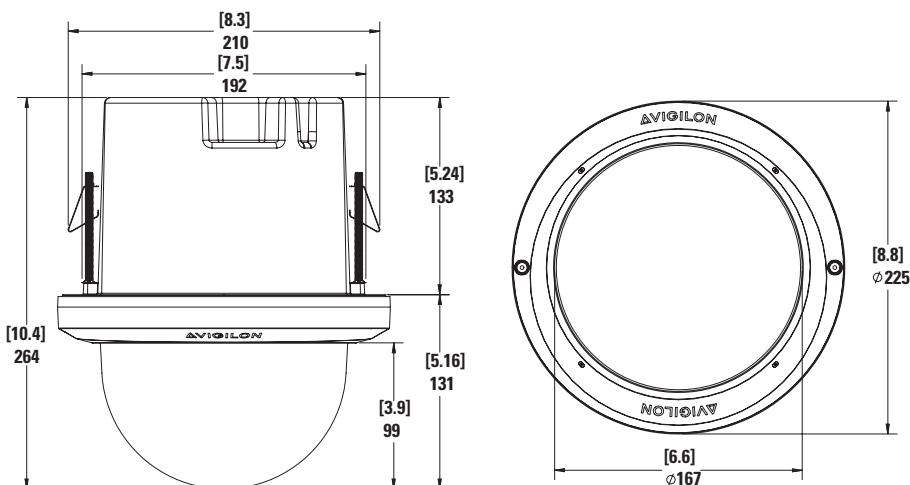
|                            |   |
|----------------------------|---|
| ACC Version 7.2 or higher* | All supported analytic events with people and vehicles and all vehicle sub-types as classified objects. Appearance search when paired with appropriate server hardware. |
|----------------------------|---|

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

# Outline Dimensions

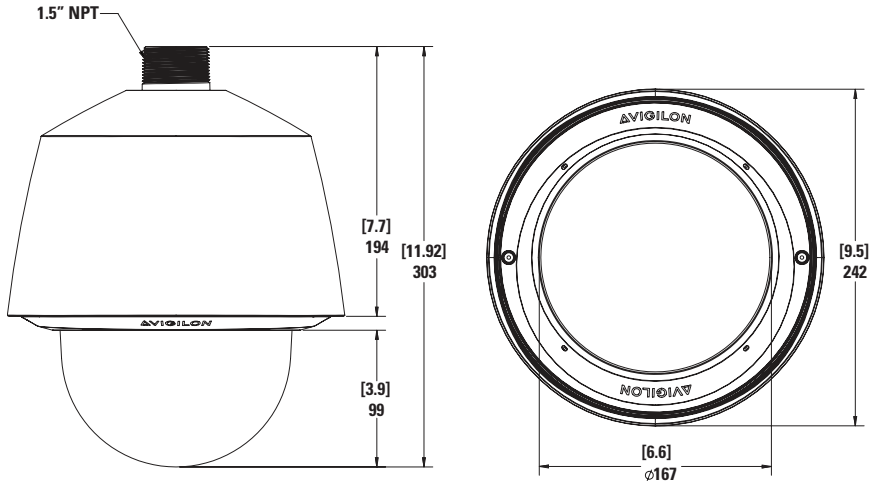
## In-Ceiling PTZ Dome Camera (H6A-PTZ-DC)

|       |        |
|-------|--------|
| [X.X] | INCHES |
| X     | MM     |



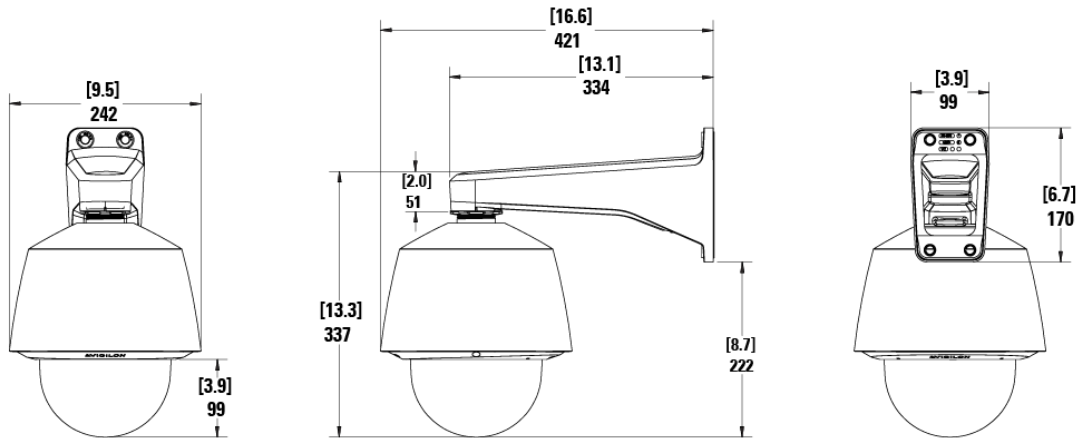
# Pendant PTZ Dome Camera (H6A-PTZ-DP)

|       |        |
|-------|--------|
| [X.X] | INCHES |
| X     | MM     |



|       |        |
|-------|--------|
| [X.X] | INCHES |
| X     | MM     |

## (H6A-PTZ-DP) WITH WALL ARM



## PTZ DOME CAMERAS

|                    | Description                             | Resolution | True WDR | Microphone | IP66/67 |
|--------------------|---|------------|----------|------------|---------|
| 2.0C-H6A-PTZ-DCM30 | CAM, H6A PTZ, In-Ceiling, 2MP, 30X, Mic | 2.0        | ✓        | ✓          | X       |
| 2.0C-H6A-PTZ-DPM30 | CAM, H6A PTZ, Pendant, 2MP, 30X, Mic    | 2.0        | ✓        | ✓          | ✓       |
| 4.0C-H6A-PTZ-DCM30 | CAM, H6A PTZ, In-Ceiling, 4MP, 30X, Mic | 4.0        | ✓        | ✓          | X       |
| 4.0C-H6A-PTZ-DPM30 | CAM, H6A PTZ, Pendant, 4MP, 30X, Mic    | 4.0        | ✓        | ✓          | ✓       |
| 2.0C-H6A-PTZ-DC30  | CAM, H6A PTZ, In-Ceiling, 2MP, 30X      | 2.0        | ✓        | X          | X       |
| 2.0C-H6A-PTZ-DP30  | CAM, H6A PTZ, Pendant, 2MP, 30X         | 2.0        | ✓        | X          | ✓       |

## PTZ CAMERA ACCESSORIES

|                      | 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   |
| PD-9001GR/AT/AC-*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   |

## Support

Learn more and find additional documentation at [avigilon.com](https://www.avigilon.com) or email [sales@avigilon.com](mailto:sales@avigilon.com) for specific product support.



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