

Unity H5A Multisensor Camera

9 MP

12 MP

15 MP

20 MP

24 MP

32 MP

Cover your site from all angles with the on-premise Avigilon H5A Multisensor camera that works together with Avigilon Unity Video software. It combines AI-enabled video analytics and three or four adjustable sensors into one powerful solution. Monitor virtually any area in all lighting conditions with up to 360-degree views from a single camera. This makes the Unity H5A Multisensor perfect for securing wide areas, including outdoor building corners, parking lots, crossroads, as well as indoor areas with high ceilings, long corridors and hallway intersections.



Features



AI-Powered Video Analytics

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



Impact, Water, Dust & Corrosion Protection

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



ONVIF® Compliant

ONVIF Profile S and T compliance enables easy integration with existing ONVIF infrastructures. Profile G compliance supports search, playback and retrieval of recordings on the edge, while Profile M allows for cross-functionality with third-party analytic solutions.



Varifocal Lenses

Enables you to customize the field of view to optimally protect your site, while lens distortion correction provides a seamless viewing experience.



FIPS 140-2 Compliant With Integrated TPM

Meets the high data security standards required by federal government agencies and heavily regulated enterprises with FIPS-compliant cryptography support, integrated TPM and Secure Boot.



High-Quality Images In All Lighting

Sees clearly in the most challenging lighting conditions with faster frame rates, improved Wide Dynamic Range and optional IR illumination.

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AVIGILON™

Specifications

| Image Performance | | 3.0 MP | 5.0 MP | 4K (8.0 MP) |
|--|---------|---|---|---|
| Image Sensor | | 1/2.8" CMOS | | 1/2.8" CMOS |
| Active Pixels (per image sensor) | | 1920 (H) x 1080 (V) (16:9) 2048 (H) x 1536 (V) (4:3) | 2560 x 1440 (16:9) 2592 x 1944 (4:3) | 3840 x 2160 (16:9) 2880 x 2160 (4:3) |
| 3 x Image Sensor, Max Resolution | | 5760 (H) x 1080 (V) (16:9) 6144 (H) x 1536 (V) (4:3) | 7680 x 1440 (16:9) 7776 x 1944 (4:3) | 11520 x 2160 (16:9) 8640 x 2160 (4:3) |
| 4 x Image Sensor, Max Resolution | | 7680 (H) x 1080 (V) (16:9) 8192 (H) x 1536 (V) (4:3) | 10240 x 1440 (16:9) 10368 x 1944 (4:3) | 15360 x 2160 (16:9) 11520 x 2160 (4:3) |
| Sensor Aspect Ratio | | 4:3 | 4:3 | 16:9 |
| IR Illumination - Optional (high power 850 nm LEDs) ¹ | | 30 m (98 ft) maximum distance at 0 lux when camera is mounted at 4 m (13 ft) off the ground | | |
| Minimum Illumination | | 0.020 lux (F1.5) in color mode 0.018 lux (F1.5) in mono mode 0 lux with optional IR illuminator | | 0.020 lux (F1.5) in color mode 0.016 lux (F1.5) in mono mode 0 lux with optional IR illuminator |
| Dynamic Range | WDR On | 120 dB, true WDR, dual exposure | | |
| | WDR Off | 80 dB | | |
| 3D Noise Reduction Filter | | Yes | | |
| Image Rate-Analytics Enabled on All Sensors²: | | | | |
| 3 x Image Sensor (60 Hz, 50 Hz) | | 30 / 25 fps | 30 / 25 fps | 24 / 20 fps |
| 4 x Image Sensor (60 Hz, 50 Hz) | | 30 / 25 fps | 24 / 25 fps | 17 / 16 fps |
| Image Rate-High Framerate Mode³: | | | | |
| 3 x Image Sensor (60 Hz, 50 Hz) | | 60 / 50 fps | 40 / 33 fps | 24 / 25 fps |
| 4 x Image Sensor (60 Hz, 50 Hz) | | 40 / 33 fps | 30 / 25 fps | 20 / 20 fps |

¹ The IR intensity is based on supplied PoE power.

² Full Feature Mode: Analytics and WDR enabled with H.265.

³ High Frame Rate Mode: Analytics disabled with H.265. Max frame rate with WDR enabled is 30 fps.

| Image Control | |
|----------------------------|---|
| Image Compression Method | H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG |
| Streaming | Multi-stream H.264, Multi-stream H.265, Motion JPEG |
| Motion Detection | Selectable sensitivity and threshold |
| Electronic Shutter Control | Automatic, Manual (1/7.5 to 1/8000 sec) |
| Iris Control | Fixed |
| Day/Night Control | Automatic, Manual |
| Flicker Control | 60 Hz, 50 Hz |
| White Balance | Automatic, Manual |
| Backlight Compensation | Adjustable |
| Privacy Zones | Up to 64 zones |
| Removable Privacy Zones | Up to 8 zones per image sensor |
| Lens Distortion Correction | Fixed |

| Lens (per image sensor) | 3.0 MP | 5.0 MP | 4K (8.0 MP) |
|---|-------------------------------------|--------|--------------------------------------|
| Focal Length | 3.3-5.7 mm | | |
| Lens and Horizontal Field of View Based on Aspect Ratio | 53° - 97° (16:9) 53° - 99° (4:3) | | 58° - 106° (16:9) 43° - 76° (4:3) |
| Lens and Vertical Field of View Based on Aspect Ratio | 29° - 50° (16:9) 39° - 69° (4:3) | | 32° - 55° (16:9) 32° - 55° (4:3) |
| Aperture Range | F1.5 - F1.9 | | |
| Control | Fixed Iris, Remote Focus and Zoom | | |

| Network | |
|-----------------------------|--|
| Network | Gigabit Ethernet, 100BASE-TX, 1000BASE-TX |
| Cabling Type | CAT5E |
| Connector | RJ-45 |
| API | ONVIF® compliance Profile S, T, M, and G (www.onvif.org) |
| Security | Signed and encrypted firmware, password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, TLS1.3, FIPS140-2 Level 3 via onboard TPM |
| Secure Boot | Yes |
| Protocol | IPv4, IPv6, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMPv3, ICMP, DHCP, Zeroconf, HSTS, QoS, DSCP |
| Streaming Protocols | RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP, SRTP |
| Device Management Protocols | SNMP v2c, SNMP v3 |

| Peripherals | |
|-----------------|--|
| USB Port | USB 2.0 |
| Onboard Storage | Dual MicroSD/microSDHC/microSDXC slot - video speed class card required. Class V10 or better recommended. The dual SD cards will work as one contiguous region of storage. |

| Auxiliary I/O | |
|--------------------------|-----------------------------|
| Audio Compression Method | G.711 PCM 8 kHz, Opus |
| Audio Input/Output | Line level input and output |
| External I/O Terminal | Alarm In, Alarm Out |

| Electrical | In-Ceiling | Surface Mount | Pendant Mount |
|--------------------|---|---|---|
| Power Consumption | 26 W with 24 VDC 37 VA with 24 VAC 25.5 W with IEE 802.3at Type 2 (PoE+) | With IR: 52 W with 24 VDC 74 VA with 24 VAC 51 W with high power PoE (PoE++) Without IR: 26 W with 24 VDC 37 VA with 24 VAC 25.5 W with IEEE 802.3at Type 2 (PoE+) | With IR: 52 W with 24 VDC 74 VA with 24 VAC 51 W with high power PoE (PoE++) Without IR: 26 W with 24 VDC 37 VA with 24 VAC 25.5 W with IEEE 802.3at Type 2 (PoE+) |
| External Power | 24 VDC ± 10 %; 24 VAC rms ± 10 %, 50 or 60 Hz | | |
| PoE* | 30 W IEEE 802.3at Type 2 (PoE+) | With IR: 60 W (PoE++): IEEE 802.3bt Type 3, Cisco® UPoE or legacy high-power PoE* Up to 35% IR Power or without IR: 30 W IEEE 802.3at Type 2 (PoE+) | |
| Redundant Power | Seamless failover between PoE and Aux and back without interruption in camera operation | | |
| RTC Backup Battery | 3V manganese lithium | | |

* Supported high power PoE products are listed in the **Optional Injectors and Switches** Section and may require adjusting the PoE mode switch. Contact sales or technical support for more information.

| Mechanical | In-Ceiling | Surface Mount | Pendant Mount |
|------------------------------|--|--|--|
| Dimension | Overall: 298 mm x 161 mm (11.75" x 6.33") Below mounting surface: 298 mm x 64 mm (11.75" x 2.52") | 304 mm x 114 mm (11.95" x 4.48") | With wall arm: 385 mm x 262 mm x 299 mm (15.15" x 10.30" x 11.77") With NPT adapter: 299 mm x 248 mm (11.77" x 9.76") |
| Weight | Mount: 1100 g (2.4 lbs) Bezel: 490 g (1.1 lbs) Camera Module (4 lenses): 1590 g (3.5 lbs) | Mount: 950 g (2.1 lbs) Bezel: 1250 g (2.8 lbs) Camera Module (4 lenses): 1590 g (3.5 lbs) Optional IR Illuminator Ring: 670 g (1.5 lbs) | Wall Mount: 1190 g (2.6 lbs) NPT Adapter Mount: 470 g (1.04 lbs) Pendant: 1680 g (3.7 lbs) Bezel: 1250 g (2.8 lbs) Camera Module (4 lenses): 1590 g (3.5 lbs) Optional IR Illuminator Ring: 670 g (1.5 lbs) |
| Body | Aluminum, Plastic dome trim | Aluminum | Aluminum |
| Finish | Plastic, Injection Molded, Pantone 427C | Cast, Anodized and Powder Coated, Pantone 427C | Cast, Anodized and Powder Coated, Pantone 427C |
| Optional IR Illuminator Ring | Not available | Optional accessory, 30 m (98 ft) IR range | |

| Environmental | In-Ceiling | Surface Mount | Pendant Mount |
|--------------------------|-------------------------------------|---|---------------|
| Operating Temperature | -10 °C to +50 °C (14 °F to 122 °F) | -40 °C to +60 °C (-40 °F to 140 °F) | |
| Storage Temperature | -30 °C to +70 °C (-22 °F to 158 °F) | | |
| Humidity | 0 - 95% non-condensing | | |
| IR Illumination Behavior | Not available | The IR illuminator will operate at 100% power from -40 °C to 44 °C (-40 °F to 111 °F). The IR power will reduce to 60% from 44 °C to 53 °C (111 °F to 127 °F). The IR illuminator will turn off when the temperature is greater than 53 °C (127 °F). Hysteresis: 6 °C (10.8 °F). For 25.5 W PoE+, the IR illuminator will operate at only 35% power and will turn off if the temperature is below -26 °C (-15 °F). | |

| Per Sensor | |
|------------|--|
| Tilt | +7° to 96° from horizon |
| Pan | +/-120° (depending on position of image sensors) |
| Azimuth | +/-180° |

| Certifications | In-Ceiling | Surface Mount | Pendant Mount |
|-------------------------------------|---|---|---------------|
| Certifications/Approvals | UL, cUL, CE, ROHS, RCM, BIS, UKCA, NOM, KC | | |
| Safety Standards | UL 62368-1, CSA 62368-1, IEC/EN 62368-1 | | |
| | UL 2043 (Plenum) | IEC/EN 62471 | |
| Environmental Standards/Ratings | IEC 60529 IP5X rating (dust only) | IEC 60529 IP66, IP67 rating IEC/EN 62262 Impact (IK 10) 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 61000-3-2 EN 61000-3-3 | | |
| Electromagnetic Immunity Standards | EN 55035 EN 61000-6-1 EN 50121-4 EN 50130-4 | | |
| NEMA TS2 | Not applicable | NEMA TS2 paragraph 2.2.7 - 2.2.9 | |

Supported Analytics Events

| | |
|-------------------------------|--|
| Objects in Area | The event is triggered when the selected object type moves into the region of interest. This event can be used to count objects. |
| 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. |
| 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. |
| Object Too Close | The event is triggered when an object moves to within a certain threshold distance of another object. |
| 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

| | |
|------------------------------|--|
| Object Types in Outdoor Mode | Person and Vehicle sub-types: Car, Truck, Bicycle, Motorcycle, Bus |
| Object Types in Indoor Mode | Person |

Teach By Example

| | |
|---|---|
| Object Types Teach By Example in Outdoor Mode | Yes, when used with Avigilon Control Center™. |
|---|---|

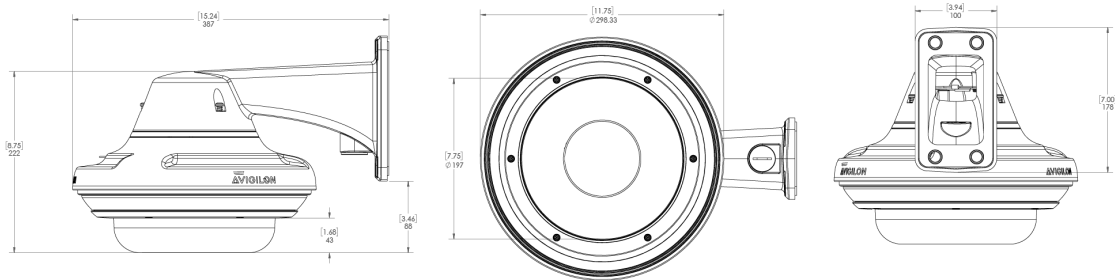
Avigilon Control Center (ACC) Versions Supported Features

| | |
|---|---|
| ACC Enterprise Edition Version 7.2 or higher | All supported analytic events with people and vehicles and all vehicle sub-types as classified objects. |
|---|---|

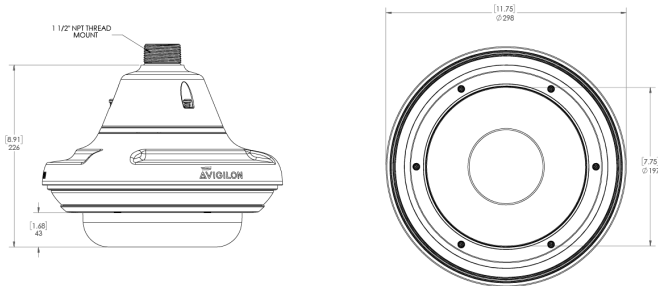
Outline Dimensions

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

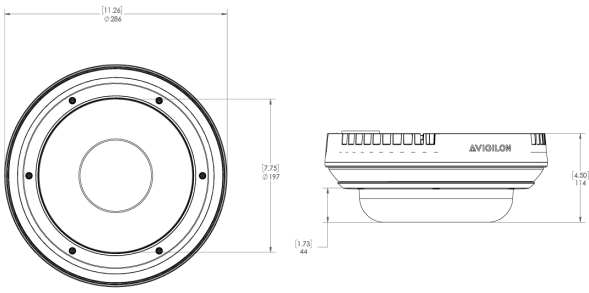
Pendant Wall Mount



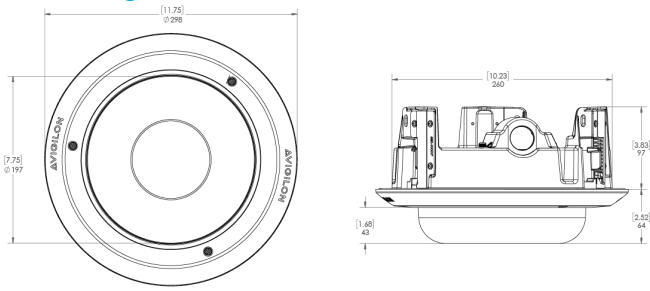
Pendant NPT Mount



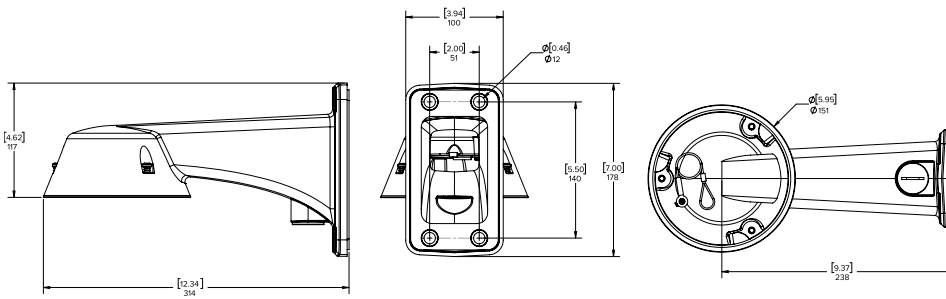
Surface Mount



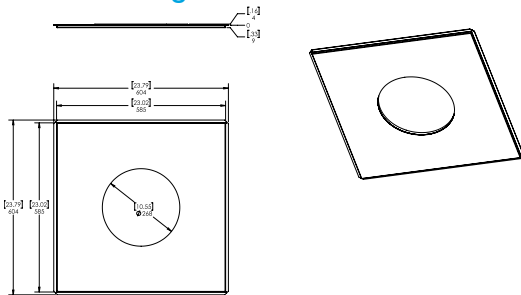
In-Ceiling Mount



Wall Mount







Metal Ceiling Panel



Ordering Information

The variety of mounting options for the H5A Multisensor provides maximum flexibility. All the available camera modules can be used in any of the mounting options.

| Mounting Scenario | | Ordering Information |
|--------------------|---|--|
| PENDANT WALL MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H5AMH-AD-PEND1 • H5AMH-DO-COVR1 or H5AMH-DO-COVR1-SMOKE • WLMT-1001 • Optional, H4AMH-AD-IRIL1 |
| PENDANT NPT MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H5AMH-AD-PEND1 • H5AMH-DO-COVR1 or H5AMH-DO-COVR1-SMOKE • NPTA-1001 • Optional, H4AMH-AD-IRIL1 |
| SURFACE MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H5AMH-AD-DOME1 • H5AMH-DO-COVR1 or H5AMH-DO-COVR1-SMOKE • Optional, H4AMH-AD-IRIL1 |
| IN-CEILING MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H5AMH-AD-CEIL1 • H5AMH-DC-COVR1 or H5AMH-DC-COVR1-SMOKE • Optional, CLPNL-1001 if ceiling panel is needed |

Camera Modules

With the modular design of the H5A Multisensor, any camera module can be paired with any mounting adapter for maximum versatility and optimal installation. Each camera module must be ordered with a matching mounting adapter and dome cover.

| Display Part Number | Description |
|---------------------|--|
| 9C-H5A-3MH | 3X3MP, WDR, 270 degree max field of view, Lightcatcher, 3.3-5.7MM, Camera Only |
| 12C-H5A-4MH | 4X3MP, WDR, 360 degree max field of view, Lightcatcher, 3.3-5.7MM, Camera Only |
| 15C-H5A-3MH | 3X5MP, WDR, 270 degree max field of view, Lightcatcher, 3.3-5.7MM, Camera Only |
| 20C-H5A-4MH | 4X5MP, WDR, 360 degree max field of view, Lightcatcher, 3.3-5.7MM, Camera Only |
| 24C-H5A-3MH | 3X8MP, WDR, 270 degree max field of view, Lightcatcher, 3.3-5.7MM, Camera Only |
| 32C-H5A-4MH | 4X8MP, WDR, 360 degree max field of view, Lightcatcher, 3.3-5.7MM, Camera Only |

Mounting Adapters and Dome Covers

The H5A Multisensor modular design provides pendant, surface, or in-ceiling mounting adapters and a choice of two dome covers compatible with all the H5A Multisensor camera modules.

| Display Part Number | Description |
|----------------------|--|
| H5AMH-AD-DOME1 | Outdoor surface mount adapter, must order either a H5AMH-DO-COVR1 or H5AMH-DO-COVR1-SMOKE. |
| H5AMH-AD-PEND1 | Outdoor pendant mount adapter, must order one of WLMT-1001 or NPTA-1001 and one of H5AMH-DO-COVR1 or H5AMH-DO-COVR1-SMOKE. |
| H5AMH-AD-CEIL1 | In-ceiling adapter, must order either a H5AMH-DC-COVR1 or H5AMH-DC-COVR1-SMOKE. |
| H5AMH-DO-COVR1 | Dome bubble and cover, for outdoor surface mount or pendant mount, clear. |
| H5AMH-DO-COVR1-SMOKE | Dome bubble and cover, for outdoor surface mount or pendant mount, smoked. Not recommended for low light applications. |
| H5AMH-DC-COVR1 | Dome bubble and cover, for in-ceiling mount, clear. |
| H5AMH-DC-COVR1-SMOKE | Dome bubble and cover, for in-ceiling mount, smoked. Not recommended for low light applications. |
| WLMT-1001 | Pendant wall arm adapter, for use with H5AMH-AD-PEND1. |
| NPTA-1001 | Pendant NPT adapter for use with H5AMH-AD-PEND1. |
| PLMT-1001 | Aluminum pole mounting bracket, compatible with WLMT-1001. |
| CRNMT-1001 | Aluminum corner mounting bracket, compatible with WLMT-1001. |
| CLPNL-1001 | Metal ceiling panel. |

Optional IR Illuminator

The optional IR Illuminator is available for the H5A Multisensor when mounted in a pendant or surface mount adapter.

| Display Part Number | Description |
|---------------------|--|
| H4AMH-AD-IRIL1 | Optional IR illuminator ring, for use with H5AMH-DO-COVR1. |

Optional Injectors

| Display Part Number | Description |
|------------------------|--|
| PD-9001 GR/AT/AC-*-MSI | Indoor single port PoE+ 30W injector. Injector operational temperature range -20 °C to +40 °C (-4 °F to 104 °F). |
| POE60U-1BTE | Gigabit 802.3bt 60 W PoE Injector, single port. |

Optional Accessories

| Display Part Number | Description |
|-----------------------------------|--|
| USB-AC56-NA-MSI / USB-AC56-EU-MSI | USB Wi-Fi adapter. |
| CBLKT-1001 | Cable kit replacement for Multi Head cameras. |
| CAM-FIPS | Camera license to enable FIPS cryptographic mode on the H5A Multisensor or any H5A camera. |

Support

Learn more and find additional documentation at avigilon.com or email sales@avigilon.com for specific product support.

For more information, contact:



info@erswireless.com
800-475-3320



AVIGILON™

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