

H4 MULTISENSOR CAMERA LINE

9 MP

12 MP

15 MP

20 MP

24 MP

32 MP

Provides exceptional scene coverage and high image detail with 3 or 4 individually configurable camera sensors that can be positioned to monitor virtually any area. Delivers broad scene coverage with high image detail up to 32 MP total resolution and uses H.265 compression technology to significantly reduce bandwidth and storage requirements. With self-learning video analytics on board, the H4 Multisensor camera can detect and differentiate people and vehicles from regular motion, and notify operators of potentially critical events that may need further investigation. Featuring wide dynamic range, Avigilon LightCatcher™ technology and the option to add content adaptive IR to outdoor models, the H4 Multisensor camera can provide exceptional image quality in challenging lighting conditions.



FEATURES



SELF-LEARNING VIDEO ANALYTICS

Exceptional efficiency when monitoring and reviewing video with excellent coverage from a single camera.



LIGHTCATCHER™ TECHNOLOGY

Offers excellent image detail in low-light settings.



ONVIF® COMPLIANT

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



H.265 & HDSM SMARTCODEC™ TECHNOLOGY

Combines compression technologies to maximize bandwidth and storage.



CONTENT ADAPTIVE IR

Adjusts IR beam width and illumination settings based on scene conditions to help maximize image quality.



WIDE DYNAMIC RANGE

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

ONVIF is a trademark of Onvif, Inc.



SPECIFICATIONS

| IMAGE PERFORMANCE | 3.0 MP | 5.0 MP | 4K (8.0 MP) |
|---|---|---|---|
| Image Sensor | 1/2.8" progressive scan CMOS | | 1/2.5" progressive scan CMOS |
| Active Pixels | 2048 (H) x 1536 (V) | 2592 x 1944 | 3840 x 2160 |
| 3 x Image Sensor, Max Resolution (per image sensor) | 6144 (H) x 1536 (V) | 7776 x 1944 | 11520 x 2160 |
| 4 x Image Sensor, Max Resolution (per image sensor) | 8192 (H) x 1536 (V) | 10368 x 1944 | 15360 x 2160 |
| Aspect Ratio | 4:3 | 4:3 | 16:9 |
| IR Illumination - Optional (high power 850 nm LEDs) | 30 m (98 ft) maximum distance at 0 lux when camera is mounted at 4 m (13 ft) off the ground | | |
| Minimum Illumination | 2.8 mm: 0.025 lux (F1.2) in color mode 0.005 lux (F1.2) in mono mode 0 lux with optional IR illuminator 4 mm: 0.05 lux (F1.6) in color mode 0.010 lux (F1.6) in mono mode 0 lux with optional IR illuminator | | 0.02 lux (F1.8) in color mode 0.04 lux (F1.8) in mono mode 0 lux with optional IR illuminator |
| Dynamic Range | 100 dB, true WDR, dual exposure | | |
| 3D Noise Reduction Filter | Yes | | |
| Image Rate-Analytics Enabled on All Sensors: | | | |
| 3 x Image Sensor (60 Hz, 50 Hz) | 24 / 25 fps | 15 / 17 fps | 12 / 13 fps |
| 4 x Image Sensor (60 Hz, 50 Hz) | 20 / 20 fps | 13 / 13 fps | 8 / 8 fps |
| Image Rate-High Framerate Mode: | | | |
| 3 x Image Sensor (60 Hz, 50 Hz) | 30 / 25 fps | 20 / 20 fps | 15 / 14 fps |
| 4 x Image Sensor (60 Hz, 50 Hz) | 20 / 20 fps | 15 / 14 fps | 10 / 10 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 (1/8 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 | | |
| Audio Compression Method | G.711 PCM 8 kHz | | |
| Audio Input/Output | Line level input and output | | |
| External I/O Terminals | Alarm In, Alarm Out | | |
| LENS (PER IMAGE SENSOR) | 3.0 MP | 5.0 MP | 4K (8.0 MP) |
| Lens and Horizontal Field of View | 2.8 mm F1.2 - 103° 4 mm F1.6 - 72° Remote Focus | 2.8 mm F1.2 - 103° 4 mm F1.6 - 72° Remote Focus | 4 mm F1.8 - 101° 5.2 mm F1.8 - 70° Remote Focus |

| NETWORK | |
|-----------------------------|--|
| Network | Gigabit Ethernet, 1000BASE-TX |
| Cabling Type | CAT5E |
| Connector | RJ-45 |
| API | ONVIF® compliance Profile S, T, and G (www.onvif.org) |
| Security | Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication |
| Protocol | IPv4, IPv6, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, 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 Protocols | SNMP v2c, SNMP v3 |

| PERIPHERALS | |
|-----------------|--|
| USB Port | USB 2.0 |
| Onboard Storage | MicroSD/microSDHC/microSDXC slot - video speed class card required. Class V10 or better recommended. |

| ELECTRICAL | IN-CEILING | SURFACE MOUNT | PENDANT MOUNT |
|-------------------|---|---|---|
| Power Consumption | 26 W with 24 VDC 37 VA with 24 VAC PoE+ | With IR: 52 W with 24 VDC 74 VA with 24 VAC PoE++ or 60 W PoE* Without IR: 26 W with 24 VDC 37 VA with 24 VAC PoE+ | With IR: 52 W with 24 VDC 74 VA with 24 VAC PoE++ or 60 W PoE* Without IR: 26 W with 24 VDC 37 VA with 24 VAC PoE+ |
| External Power | 24 VDC \pm 10 %; 24 VAC rms \pm 10 %, 50 or 60 Hz | | |
| PoE* | 25.5 W PoE+, IEEE 802.3at Type 2 PoE Plus | With IR: High Power 51 W PoE++* Without IR: 25.5 W PoE+, IEEE, 802.3at Type 2 PoE Plus | |

| MECHANICAL | IN-CEILING | SURFACE MOUNT | PENDANT MOUNT |
|------------------------------|--|--|---|
| Dimension | 299 mm x 163 mm (11.77" x 6.42"), below mounting surface: 299 mm x 76 mm (11.77" x 2.99") | 299 mm x 115 mm (11.77" x 4.53") | 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 | 5.2 kg (11.5 lbs) | With IR: 7 kg (15.4 lbs) Without IR: 5.8 kg (12.8 kg) | With wall arm and IR: 8.4 kg (18.5 lbs) With wall arm only: 7.3 kg (16.1 lbs) With NPTA adapter and IR: 7.8 kg (17.2 lbs) With NPTA adapter only : 6.7 kg (14.8 lbs) |
| Body | Aluminum, Plastic dome trim | Aluminum | Aluminum |
| Finish | Plastic, Injection Molded, Close to RAL9002 | Cast, Powder Coated, Close to RAL9002 | Cast, Powder Coated, Close to RAL9002 |
| Environmental | Not applicable | IK10 Impact Rating and IP66 Weather Rating | |
| 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 | -10 °C to +70 °C (14 °F to 158 °F) | | | |
| Humidity | 0 - 95% non-condensing | | | |

| PER SENSOR | |
|------------|-------------------------|
| Tilt | +7° to 96° from horizon |

| PER SENSOR | |
|------------|--|
| Pan | +/-120° (depending on position of image sensors) |
| Azimuth | +/-180° |

*High power PoE may not be compatible with all switches or injectors. High power PoE is compatible with Cisco® UPoE, up to 60 W over 4 pairs, or with the high PoE products listed in the **Accessories** section. Contact Avigilon sales or Avigilon technical support for more information.

| CERTIFICATIONS | IN-CEILING | SURFACE MOUNT | PENDANT MOUNT |
|---------------------------|--|---|---------------|
| Certifications/Directives | UL, cUL, CE, ROHS, WEEE, RCM, EAC, BIS, KC, UKCA, NOM | | |
| Safety | UL 62368-1, CSA 62368-1, IEC/EN 62368-1 | | |
| Environmental | UL 2043 Plenum | UL/CSA/IEC 60950-22 IEC 60529 IP66 Rating IK10 Impact Rating IEC 60068 2-6 IEC 60068 2-27 Vibration and Shock | |
| Electromagnetic Emissions | FCC Part 15 Subpart B Class B, IC ICES-003 Class B, EN 55032 Class B, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3 | | |
| Electromagnetic Immunity | EN 55024, EN 61000-6-1, EN 50121-4 (when used with CM-AC-FERR1 on aux power) | | |
| Directives | RoHS, Reach (SVHC), WEEE | | |

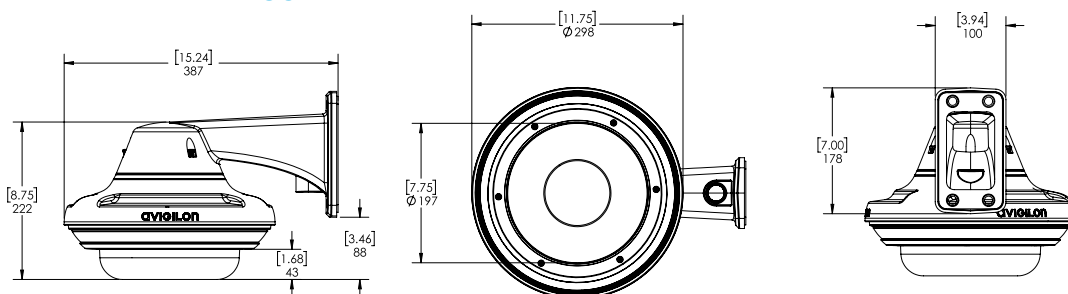
SUPPORTED RULE BASED VIDEO ANALYTIC EVENTS

| | |
|-------------------------------|--|
| 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 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. |

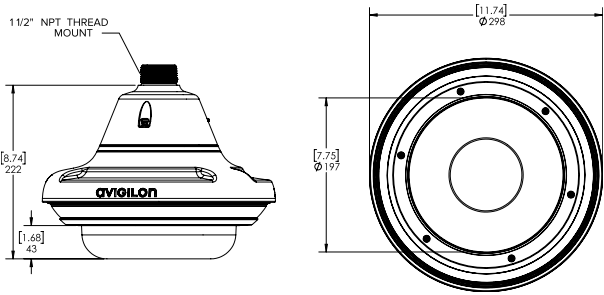
OUTLINE DIMENSIONS

PENDANT WALL MOUNT

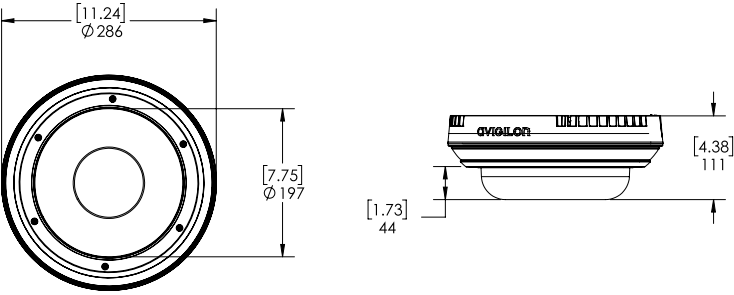
| | |
|-------|--------|
| [X.X] | INCHES |
| X | MM |



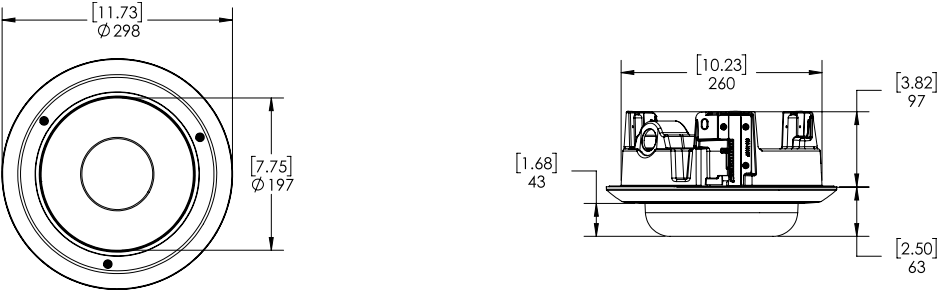
PENDANT NTP MOUNT



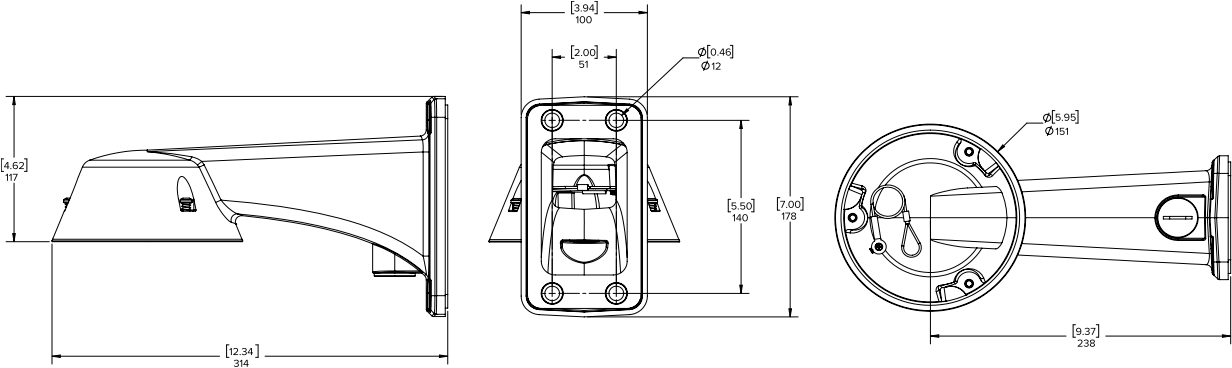
SURFACE MOUNT



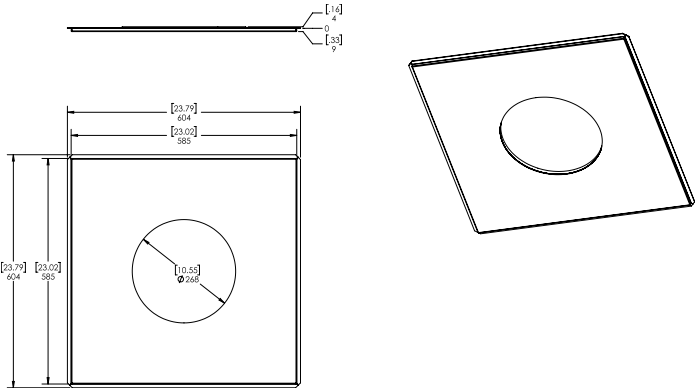
IN-CEILING MOUNT



WALL MOUNT







METAL CEILING PANEL



ORDERING INFORMATION

The variety of mounting options for the H4 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 • H4AMH-AD-PEND1 • H4AMH-DO-COVR1 or H4AMH-DO-COVR1-SMOKE • IRPTZ-MNT-WALL1 • Optional, H4AMH-AD-IRIL1 |
| PENDANT NPT MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H4AMH-AD-PEND1 • H4AMH-DO-COVR1 or H4AMH-DO-COVR1-SMOKE • IRPTZ-MNT-NPTA1 • Optional, H4AMH-AD-IRIL1 |
| SURFACE MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H4AMH-AD-DOME1 • H4AMH-DO-COVR1 or H4AMH-DO-COVR1-SMOKE • Optional, H4AMH-AD-IRIL1 |
| IN-CEILING MOUNT |  | Order one of: <ul style="list-style-type: none"> • Camera module • H4AMH-AD-CEIL1 • H4AMH-DC-COVR1 or H4AMH-DC-COVR1-SMOKE • Optional, H4AMH-DC-CPNL1 if ceiling panel is needed |

CAMERA MODULES

With the modular design of the H4 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-H4A-3MH-270 | 3x3 MP, WDR, LightCatcher, 2.8 mm, Camera Only |
| 9C-H4A-3MH-180 | 3x3 MP, WDR, LightCatcher, 4 mm, Camera Only |
| 15C-H4A-3MH-270 | 3x5 MP, WDR, LightCatcher, 2.8 mm, Camera Only |
| 15C-H4A-3MH-180 | 3x5 MP, WDR, LightCatcher, 4 mm, Camera Only |
| 24C-H4A-3MH-270 | 3x4K (8 MP), WDR, LightCatcher, 4 mm, Camera Only |
| 24C-H4A-3MH-180 | 3x4K (8 MP), WDR, LightCatcher, 5.2 mm, Camera Only |
| 12C-H4A-4MH-360 | 4x3 MP, WDR, LightCatcher, 2.8 mm, Camera Only |
| 20C-H4A-4MH-360 | 4x5 MP, WDR, LightCatcher, 2.8 mm, Camera Only |
| 32C-H4A-4MH-360 | 4x4K (8 MP), WDR, LightCatcher, 4 mm, Camera Only |

MOUNTING ADAPTERS AND DOME COVERS

The H4 Multisensor modular design provides pendant, surface, or in ceiling mounting adapters and a choice of two dome covers compatible with all the H4 Multisensor camera modules.

| DISPLAY PART NUMBER | DESCRIPTION |
|----------------------|---|
| H4AMH-AD-DOME1 | Outdoor surface mount adapter, must order either a H4AMH-DO-COVR1 or H4AMH-DOCOVR1- SMOKE. |
| H4AMH-AD-PEND1 | Outdoor pendant mount adapter, must order one of IRPTZ-MNT-WALL1 or IRPTZ-MNTNPTA1 and one of H4AMH-DO-COVR1 or H4AMH-DO-COVR1-SMOKE. |
| IRPTZ-MNT-WALL1 | Pendant wall arm adapter, for use with H4AMH-AD-PEND1 or H4 IRPTZ. |
| IRPTZ-MNT-NPTA1 | Pendant NPT adapter for use with H4AMH-AD-PEND1 or H4 IRPTZ. |
| H4-MT-POLE1 | Aluminum pole mounting bracket, compatible with IRPTZ-MNT-WALL1. |
| H4-MT-CRNR1 | Aluminum corner mounting bracket, compatible with IRPTZ-MNT-WALL1. |
| H4AMH-AD-CEIL1 | In-ceiling adapter, must order either a H4AMH-DC-COVR1 or H4AMH-DC-COVR1-SMOKE. |
| H4AMH-DO-COVR1 | Dome bubble and cover, for outdoor surface mount or pendant mount, clear. |
| H4AMH-DO-COVR1-SMOKE | Dome bubble and cover, for outdoor surface mount or pendant mount, smoked. Not recommended for lowlight applications. |
| H4AMH-DC-COVR1 | Dome bubble and cover, for in-ceiling mount, clear. |
| H4AMH-DC-COVR1-SMOKE | Dome bubble and cover, for in-ceiling mount, smoked. Not recommended for lowlight applications. |
| H4AMH-DC-CPNL1 | Metal ceiling panel. |

OPTIONAL IR ILLUMINATOR

The optional IR Illuminator is available for the H4 Multisensor when mounted in a pendant or surface mount adapter.

| DISPLAY PART NUMBER | DESCRIPTION |
|---------------------|---|
| H4AMH-AD-IRIL1 | Optional IR illuminator ring, up to 30 m (100 ft), for use with H4AMH-DO-COVR1. |

OPTIONAL INJECTORS AND SWITCHES

| DISPLAY PART NUMBER | DESCRIPTION |
|---------------------|--|
| ES-PS-S4 | Managed switch, 5 port, Outdoor IP66, -40 °C (-40 °F) to 50 °C (122 °C), Gigabit Ethernet, AC power input. 1x SFP uplink and 4 port RJ45. Maximum PoE power allocation: Up to 4 ports of PoE+ each, or 2 ports of 60 W PoE each. In 60 W PoE mode, compatible with H4 PTZ, H4 IR PTZ and H4 Multisensor. |
| ES-PS-MNT-POLE1 | Pole mount bracket for ES-PS-S4 switch. |
| POE-INJ2-60W-NA | Indoor single port Gigabit PoE++ 60 W, North American power cord included. May also be used in European Union, Japan, Australia, New Zealand, Mexico, China, South Korea, Russia, Argentina, Saudi Arabia, Kuwait, UAE and Brazil. Temperature range of the PoE injector is -10 °C to +45 °C (14 °F to 113 °F). |
| POE-INJ2-PLUS | Indoor single port PoE+ injector. Injector operational temperature range -20 °C to +40 °C (-4 °F to 104 °F). |

OPTIONAL CAMERA LICENSES AND ACCESSORIES

| DISPLAY PART NUMBER | DESCRIPTION |
|---------------------|---|
| CM-AC-FERR1 | Ferrite clamp for use with aux power cable when meeting EN 50121-4 requirements. Pack of 5. |

SUPPORT

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



Feb 2022 | Rev 11

© 2022, Motorola Solutions, Inc. 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. AVIGILON, the AVIGILON logo, AVIGILON CONTROL CENTER, ACC, HDSM SmartCodec and LIGHTCATCHER are trademarks of Avigilon Corporation. AVIGILON, the AVIGILON logo, AVIGILON CONTROL CENTER, ACC, HDSM SmartCodec and LIGHTCATCHER are trademarks of Avigilon Corporation. The absence of the symbols ™ and ® in proximity to each trademark in this document or at all is not a disclaimer of ownership of the related trademark. All other trademarks are the property of their respective owners.

sales@avigilon.com | avigilon.com