

H4 Multisensor Camera Line

The H4 Multisensor camera line combines Avigilon self-learning video analytics with exceptional coverage, featuring 3 or 4 individually configurable camera sensors that can be positioned to monitor virtually any area. With up to 32 MP effective resolution, the H4 Multisensor can provide the image quality needed to cover larger areas with excellent detail. Combining support for H.265 video compression along with Avigilon’s HDSM SmartCodec™ technology, the H4 Multisensor camera has the ability to maintain high-image quality with less 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.

KEY FEATURES AND BENEFITS

- Self-learning video analytics on all sensors
- Increased range of sensor positioning
- High efficiency video encoding using H.265
- Up to 32 MP total resolution
- Wide Dynamic Range and LightCatcher technology on all resolutions
- IP66 and IK10 rated on outdoor models
- Avigilon’s HDSM SmartCodec technology
- Content Adaptive IR Technology up to 30m (98ft)
- Interchangeable Camera Mounts

| | 3-Sensor Model | | | 4-Sensor Model | | |
|------------------|----------------|-------|-------|----------------|-------|-------|
| Total Resolution | 9 MP | 15 MP | 24 MP | 12 MP | 20 MP | 32 MP |
| Max Coverage | 180°–270° | | | 360° | | |

Specifications

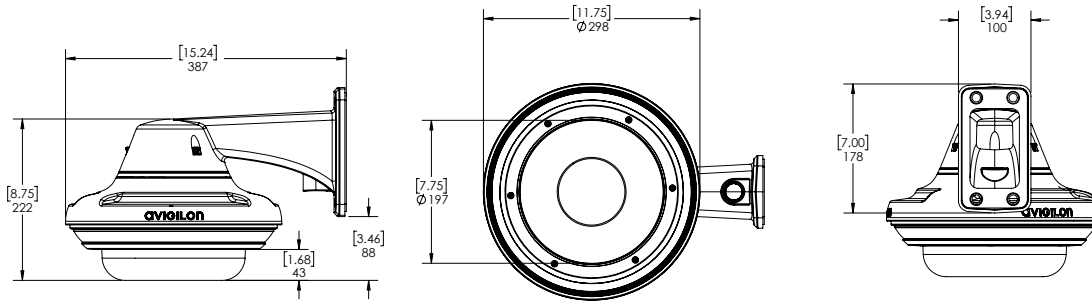
| | | 3.0 MP | 5.0 MP | 4K (8.0 MP) | |
|--|---|---|---|--|--|
| IMAGE PERFORMANCE (per image sensor) | Image Sensor | 1/2.8" progressive scan CMOS | 1/2.8" progressive scan CMOS | 1/2.5" progressive scan CMOS | |
| | Active Pixels | 2048 (H) x 1536 (V) | 2592 x 1944 | 3840 x 2160 | |
| | 3 x image sensor, max resolution | 6144 (H) x 1536 (V) | 7776 x 1944 | 11520 x 2160 | |
| | 4 x image sensor, max resolution | 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) | 30m (98 ft) maximum distance at 0 lux | | | |
| | Minimum Illumination | 2.8mm: 0.025 lux (F1.2) in color mode 0.005 lux (F1.2) in mono mode 0 lux with optional IR illuminator 4mm: 0.05 lux (F1.6) in color mode 0.010 lux (F1.6) in mono mode 0 lux with optional IR illuminator | | 0.2 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 | Yes | Yes | |
| | Image Rate—Analytics Enabled on All Sensors | | | | |
| | 3x Image Sensor (60 Hz/50 Hz) | 24 / 25 fps | 15 / 17 fps | 12 / 13 fps | |
| | 4x Image Sensor (60 Hz/50 Hz) | 20 / 20 fps | 13 / 13 fps | 8 / 8 fps | |
| | Image Rate—High Framerate Mode | | | | |
| 3x Image Sensor (60 Hz/50 Hz) | 30 / 25 fps | 20 / 20 fps | 15 / 14 fps | | |
| 4x Image Sensor (60 Hz/50 Hz) | 20 / 20 fps | 15 / 14 fps | 10 / 10 fps | | |
| LENS (per image sensor) | Lens and Horizontal Field of View | 2.8mm f1.2 – 103° 4mm f1.6 – 72° Remote focus | 2.8mm f1.2 – 103° 4mm f1.6 – 72° Remote focus | 4mm f1.8 – 101° 5.2mm f1.8 – 70° Remote focus | |
| | 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 | | | | |
| NETWORK | Network | Gigabit Ethernet, 1000BASE-TX | | | |
| | Cabling Type | CAT5E | | | |
| | Connector | RJ-45 | | | |
| | API | ONVIF® compliance Profile S and Profile T (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, 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 | | | |
| | PERIPHERALS | | | | |
| | USB Port | USB 2.0 | | | |
| Onboard Storage | MicroSD/microSDHC/microSDXC slot – class 10/UHS-1 or better recommended | | | | |

Specifications

| | IN-CEILING MOUNT | SURFACE MOUNT | PENDANT MOUNT | |
|--------------------------------------|--|--|---|--|
| MECHANICAL | Dimension | Ø299 mm x 163 mm (Ø11.77" x 6.42"), below mounting surface: Ø299 mm x 76 mm (Ø11.77" x 2.99") | Ø299 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: Ø299 mm x 248 mm (Ø11.77" x 9.76") |
| | Weight | 5.2 kg (11.5 lbs) | With IR: 7 kg (15.4 lbs) Without IR: 5.8 kg (12.8 lbs) | 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, cool grey | Powder coat, cool grey | Powder coat, cool grey |
| | Environmental | Not applicable | IK10 Impact Rating and IP66 Weather Rating | |
| | Optional IR Illuminator Ring | Not available | Optional accessory, 30m (98 ft) IR range | |
| | PER SENSOR | | | |
| | Tilt | +7° to 96° from horizon | | |
| Pan | +/-120° (depending on position of image sensors) | | | |
| Azimuth | +/-180° | | | |
| ELECTRICAL | 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 60W 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 60W POE Without IR: 26 W with 24 VDC 37 VA with 24 VAC POE+ |
| | External Power | 24 VDC ± 10%; 24 VAC rms ± 10%, 50 or 60Hz | | |
| | PoE | 25.5W PoE+, IEEE 802.3at Type 2 PoE Plus | With IR: 51W PoE++ Without IR: 25.5W PoE+, IEEE 802.3at Type 2 PoE Plus | |
| | ENVIRONMENTAL | | | |
| Operating Temperature Range | -10 °C (14 °F) to 50 °C (122 °F) | | -40 °C (-40 °F) to 60 °C (140 °F) | |
| Storage Temperature | -10 °C to 70 °C (14 °F to 158 °F) | | | |
| Humidity | 0-95% non-condensing | | | |
| CERTIFICATIONS | Certifications | UL, cUL, CE, ROHS, WEEE, RCM, EAC | | |
| | 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 55032 Class B, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3 | | |
| | Electromagnetic Immunity | EN 55024, EN 61000-6-1 | | |
| | Directives | RoHS, Reach (SVHC), WEEE | | |
| | SUPPORTED RULE BASED VIDEO ANALYTIC EVENTS (PER SENSOR) | | | |
| 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. | | | |

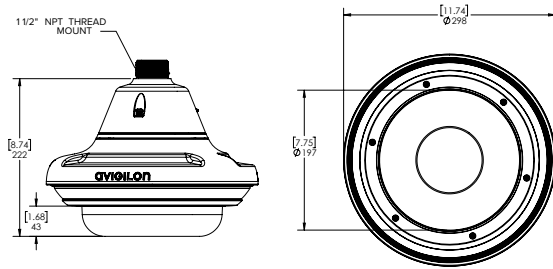
Outline Dimensions

Pendant Wall Mount

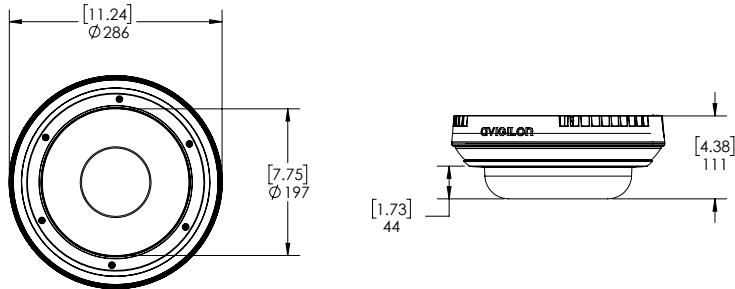


| | |
|-------|--------|
| [X.X] | INCHES |
| X | MM |

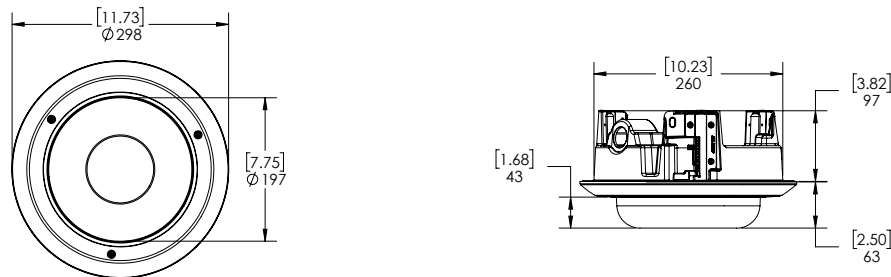
Pendant NPT Mount



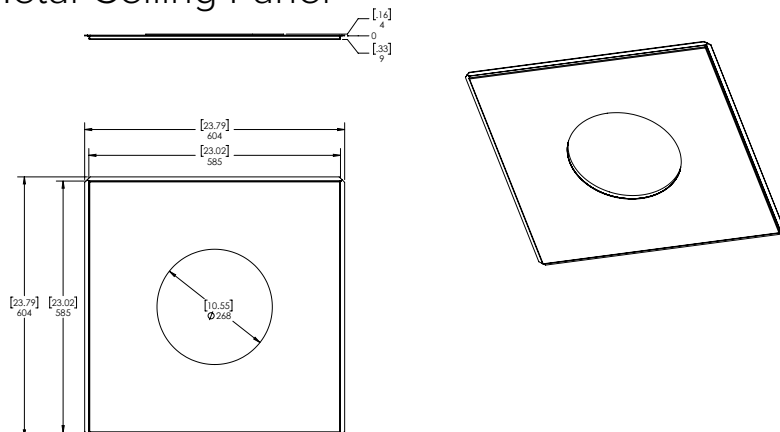
Surface Mount



In-ceiling 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:
- 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:
- 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:
- Camera module
 - H4AMH-AD-DOME1
 - H4AMH-DO-COVR1 or H4AMH-DO-COVR1-SMOKE
 - Optional, H4AMH-AD-IRIL1

IN-CEILING MOUNT



- Order one of:
- Camera module
 - H4AMH-AD-CEIL1
 - H4AMH-DC-COVR1 or H4AMH-DC-COVR1-SMOKE
 - Optional, H4AMH-DC-CPNL1 if ceiling panel 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 | 3×3 MP, WDR, LightCatcher, 2.8mm, Camera Only |
| 9C-H4A-3MH-180 | 3×3 MP, WDR, LightCatcher, 4mm, Camera Only |
| 15C-H4A-3MH-270 | 3×5 MP, WDR, LightCatcher, 2.8mm, Camera Only |
| 15C-H4A-3MH-180 | 3×5 MP, WDR, LightCatcher, 4mm, Camera Only |
| 24C-H4A-3MH-270 | 3×4K (8 MP), WDR, LightCatcher, 4mm, Camera Only |
| 24C-H4A-3MH-180 | 3×4K (8 MP), WDR, LightCatcher, 5.2mm, Camera Only |
| 12C-H4A-4MH-360 | 4×3 MP, WDR, LightCatcher, 2.8mm, Camera Only |
| 20C-H4A-4MH-360 | 4×5 MP, WDR, LightCatcher, 2.8mm, Camera Only |
| 32C-H4A-4MH-360 | 4×4K (8 MP), WDR, LightCatcher, 4mm, 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-DO-COVR1-SMOKE. |
| H4AMH-AD-PEND1 | Outdoor pendant mount adapter, must order one of IRPTZ-MNT-WALL1 or IRPTZ-MNT-NPTA1 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 for H4 pendant style cameras or H4 HD bullet cameras. |
| H4-MT-CRNR1 | Aluminum corner mounting bracket for H4 pendant style cameras or H4 HD bullet cameras. |
| 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 30m (100ft), 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 60W PoE each. In 60W 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++ 60W, 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). When used with the H4 IR PTZ, the camera will operate in a reduced temperature range from -10 °C to +50 °C (14 °F to 122 °F). |
| POE-INJ2-PLUS | Indoor single port POE+ injector. Injector operational temperature range -20°C to +40°C (-4°F to 104°F). |