H4 HD Indoor Dome Camera with Self-Learning Video Analytics

Avigilon offers a broad range of high definition cameras – from 1 – 5 MP and 4 – 7K (based on horizontal resolution) – and are available in a variety of formats, including dome, panoramic and fixed. Whether it’s a small storefront that requires a few cameras or a large complex system requiring complete coverage of numerous areas, you can trust that you’re getting an exceptional solution for your security needs.

The innovative H4 HD indoor dome cameras are just one way Avigilon can help provide effective monitoring and protection.

The H4 HD indoor dome cameras are a great solution for monitoring both daytime and nighttime activities. Embedded with self-learning video analytics, the H4 HD cameras seamlessly integrate with Avigilon Control Center (ACC)*, allowing security personnel to respond proactively and mitigate an incident before damage is done. They feature an integrated lens for remote focus and zoom control and are ONVIF compliant for easy integration. Avigilon’s indoor dome cameras are equipped with new Triple Exposure Ultra-Wide Dynamic Range (WDR) and patented LightCatcher™ technology, ensuring you receive excellent image detail. P-Iris control also allows the cameras to automatically set their iris position to enhance image quality in all lighting conditions, while onboard storage capabilities let you manage storage directly on the cameras using a standard SD memory card. These cameras are extremely versatile and can work in almost any location, including banks, schools, retail outlets, municipal grounds and buildings, hotels, bars and restaurants.

**KEY FEATURES**

- 1-5 megapixel and 4K Ultra HD (8 MP) resolution
- Patented Advanced Video Pattern Detection and Teach by Example Technology
- Self-learning video analytics
- Patented High Definition Stream Management (HDSM)™ Technology
- Wifi camera configuration support
- Available with 3-9 mm F1.3, 4.3-8 mm F1.8, or 9-22 mm F1.6 P-Iris lens with remote focus and zoom
- Zoom and content adaptive integrated IR (Infared) LEDs provide uniform illumination in the dark, even at 0 lux, up to a maximum of 30 m (98 ft) away
- Avigilon LightCatcher technology provides exceptional image quality in low light environments (1-5 MP models)
- Triple Exposure Ultra Wide Dynamic Range (1-3 MP models)
- ONVIF compliant with version 2.2.0 of the Analytics Service Specification
- Factory pre-configured image preset modes for maximum image performance in a variety of lighting conditions
- Idle Scene Mode lowers bandwidth and storage usage if there are no motion events detected in the scene
- Full Feature or High Framerate camera operating modes (4K Ultra HD model)
- Vandal resistant construction
Specifications

**IMAGE CONTROL**

Image Compression Method
- H.264 (MPEG-4 Part 10/AVC), Motion JPEG

Streaming
- Multi-stream H.264 and Motion JPEG

Bandwidth Management
- (1.0 - 2.0 MP) HDSM; (5.0 MP and 4K Ultra HD) HDSM 2.0; (ALL) Idle Scene Mode

Motion Detection
- Pixel and Classified Objects

Camera Tampering Detection
- Yes

Electronic Shutter Control
- Automatic, Manual (1/6 to 1/8000 sec)

Iris Control
- Automatic, Manual

Day/Night Control
- Automatic, Manual

Flicker Control
- 50 Hz, 60 Hz

White Balance
- 50 Hz, 60 Hz

Backlight Compensation
- Adjustable

Privacy Zones
- Up to 64 zones

Audio Compression Method
- G.711 PCM 8 kHz

Audio Input/Output
- Line level input/output, A/V mini-jack (3.5 mm)

Video Output
- (1.0 - 2.0 MP only) NTSC/PAL, A/V mini-jack (3.5 mm)

External I/O Terminals
- Alarm In, Alarm Out

USB Port
- USB 2.0

**NETWORK**

Network
- 100BASE-TX

Cabling Type
- CAT5

Connector
- RJ-45

ONVIF
- ONVIF compliant with version 1.02, 2.00, Profile S and 2.2.0 of the Analytics Service Specification

Security
- Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication

Protocol
- IPv4, HTTP, HTTPS, SOAP, DNS, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf, ARPL

Streaming Protocols
- RTP/UDP, RTSP/UDP multicast, RTPIRTPSP/HTTP, RTP/RTSP/HTTP, RTP/RTSP/UDP, HTTPS/TCP, HTTP

Device Management Protocols
- SNMP v2c, SNMP v3

**MECHANICAL**

Dimensions (LxWxH)
- Surface Mount: 163 mm x 163 mm x 118 mm (6.4" x 6.4" x 4.7")
- In-Ceiling: 181 mm x 181 mm x 164 mm (7.1" x 7.1" x 6.5")

Weight
- 0.95 kg (2.09 lbs)

Dome Bubble
- Polycarbonate, clear

Body
- Plastic, Aluminum

Housing
- Surface mount, tamper resistant

Finish
- Plastic, gray

Adjustment Range
- 360° pan, 9° - 95° tilt (30° - 95° tilt with -IR option), 180° azimuth

Onboard Storage
- SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended

**ELECTRICAL**

Power Consumption
- 7 W (9 W for -IR option)

Power Source
- VDC: 12 V +/- 10%, 7 W min (9 W min with -IR option)

Power Connector
- 2-pin terminal block

RTC Backup Battery
- 3V manganese thionium

**ENVIRONMENTAL**

Operating Temperature
- -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
**Outline Dimensions**

Surface Mount Dome Camera

(H4A-D)

![Surface Mount Dome Camera Diagram](image)

In-Ceiling Dome Camera

(H4A-DC)

![In-Ceiling Dome Camera Diagram](image)

**CERTIFICATIONS**

<table>
<thead>
<tr>
<th>Certifications</th>
<th>UL</th>
<th>cUL</th>
<th>CE</th>
<th>ROHS</th>
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<td>CSA 60950-1</td>
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**SUPPORTED VIDEO 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 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.

**Safety**

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- CSA 60950-1
- IEC/EN 60950-1
- IEC 62471 (for -IR option)

**Environmental**

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### Ordering Information

#### H4 HD Camera Series

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<th>LIGHTCATCHER</th>
<th>ANALYTICS</th>
<th>LENS</th>
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H4A-DD-SMOK1 Indoor Dome Camera Cover with Smoked Bubble
H4A-DD-SMOK1-1 Black Indoor Dome Camera Cover with Smoked Bubble
H4A-DD-SMOK1-2 Black Indoor Dome Camera Cover with Smoked Bubble
H4A-DD-CLER1 Indoor Dome Camera Cover with Clear Bubble
H4A-DD-CLER1-1 Black Indoor Dome Camera Cover with Clear Bubble
H4A-DD-CLER1-2 Black Indoor Dome Camera Cover with Clear Bubble
H4A-DD-SDWL1 Indoor Dome Camera Sidewall Knockout Plug, Pack of 5
H4A-DD-SDWL1-1 Indoor Black Dome Camera Sidewall Knockout Plug, Pack of 5
H4A-AC-GROM1 Camera Sealing Grommet, Pack of 10
H4-AC-WIFI1-NA USB Wifi Adapter
CM-AC-AVIO1 3.5 mm Jack with 1.8 m Fly Wires