

# Outdoor Dome Cameras with Self-Learning Video Analytics

AVIGILON

Avigilon offers the broadest range of high definition cameras in the industry – 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 the best solution for your security needs.

The innovative HD outdoor dome cameras are just one way Avigilon can help provide the very best monitoring and protection.



The HD dome camera with self-learning video analytics brings together Avigilon's world renowned camera technology with video analytics. The combination of instant and accurate object detection and classification alerts, with the identification performance of high-definition video, provides users with an unmatched level of perimeter protection to keep both personnel and assets safe.

The HD outdoor dome camera is a great solution for monitoring both daytime and nighttime outdoor activities. It features an integrated lens for remote focus and zoom control with excellent low light performance. P-Iris control also allows the camera to automatically set its iris position to maximize image quality in all lighting conditions, while onboard storage capabilities let you manage storage directly on the camera using a standard SD memory card.

## KEY FEATURES

Patented Advanced Video Pattern Detection and Teach by Example Technology

Self-Learning Video Analytics

Available with 3-9 mm or 9-22 mm P-Iris lens with remote focus and zoom

Up to 30 images per second

Triple Exposure Ultra Wide Dynamic Range (3 Megapixel)

Avigilon's LightCatcher™ technology provides unsurpassed image quality in low light environments

SD card slot for onboard storage support

H.264 and Motion JPEG compression

Zoom and content adaptive integrated IR (Infrared) LEDs provide uniform illumination in the dark, even at 0 lux, up to a maximum of 15 m (50 ft) away

Power over Ethernet, 24 VAC or 12 VDC power input

Vandal resistant construction and IP66 compliant

ONVIF compliant with version 2.2.0 of the Analytics Service Specification

# Specifications

## IMAGE PERFORMANCE

|                      | 1.0 MP   | 2.0 MP   | 3.0 MP  |
|----------------------|--|--|---|
| Image Sensor         | 1/2.8" progressive scan CMOS                     |  |   |
| Active Pixels        | 1280 (H) x 720 (V)                               | 1920 (H) x 1080 (V)  | 2048 (H) x 1536 (V)   |
| Imaging Area         | 4.8 mm (H) x 2.7 mm (V); 0.189" (H) x 0.106" (V) |  | 5.12 mm (H) x 3.84 mm (V); 0.202" (H) x 0.151" (V)              |
| Minimum Illumination | 3-9 mm lens:                                     | 0.1 lux (F1.2) in color mode; 0.01 lux (F1.2) in monochrome mode |   |
|                      | 9-22 mm lens:                                    | 0.2 lux (F1.6) in color mode; 0.02 lux (F1.6) in monochrome mode |   |
| Dynamic Range        | 100 dB Dual Exposure True WDR                    |  | 120 dB Triple Exposure Ultra WDR                                |
| Image Rate           | 30 fps (all resolutions)                         |  | 20 fps (at full resolution); 30 fps (at 1920 x 1080 or smaller) |
| Resolution Scaling   | Down to 768 x 432                                |  | Down to 768 x 432   |

## LENS

|               |  |           |           |
|---------------|--|-----------|-----------|
| Lens          | 3-9 mm, F1.2, P-Iris, remote focus and zoom  |           |           |
|               | 9-22 mm, F1.6, P-Iris, remote focus and zoom |           |           |
| Angle of View | 3-9 mm lens:                                 | 32° - 91° | 34° - 97° |
|               | 9-22 mm lens:                                | 13° - 28° | 15° - 30° |

## IMAGE CONTROL

|                            |   |
|----------------------------|---|
| Image Compression Method   | H.264 (MPEG-4 Part 10/AVC), Motion JPEG                                   |
| Streaming                  | Multi-stream H.264 and Motion JPEG  |
| 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              | 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, A/V mini-jack (3.5 mm)                       |
| Video Output               | (1MP and 2MP only) NTSC/PAL, A/V mini-jack (3.5 mm)                       |
| External I/O Terminals     | Alarm In, Alarm Out   |
| IR Illumination (option)   | 850 nm wavelength, 15 m (50 ft) max. distance of IR illumination at 0 lux |

## 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 (*bounding boxes and scene descriptions not available with third-party VMS) |
| Security            | Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication  |
| Protocol            | IPv4, 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   |

## MECHANICAL

|                  | SURFACE MOUNT OUTDOOR DOME CAMERA                                  | PENDANT DOME CAMERA             |
|------------------|--|---------------------------------|
| Dimensions (ØxH) | 152 mm x 109 mm; 6.0" x 4.3"                                       | 167 mm x 157 mm; 6.6" x 6.2"    |
| Weight           | 1.28 kg (2.82 lbs)   | 2.1 kg (4.6 lbs)                |
| Dome Bubble      | Polycarbonate, clear   |                                 |
| Body             | Aluminum   |                                 |
| Housing          | Surface mount, vandal resistant                                    | Pendant mount, vandal resistant |
| Finish           | Powder coat, cool gray 2   |                                 |
| Adjustment Range | 360° pan, 180° tilt (122° tilt with -IR option), 180° azimuth      |                                 |
| Onboard Storage  | SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended |                                 |

## ELECTRICAL

|                    |   |                                    |
|--------------------|---|------------------------------------|
| Power Consumption  | 9 W (10 W for -IR option)   |                                    |
| Power Source       | VDC: 12 V +/- 10%, 9 W min (10 W min with -IR option)<br>VAC: 24 V +/- 10%, 12 VA min (13 VA min with -IR option) | PoE: IEEE802.3af Class 3 compliant |
| Power Connector    | 2-pin terminal block  |                                    |
| RTC Backup Battery | 3V Manganese Lithium  |                                    |

## ENVIRONMENTAL

|                       |                                     |
|-----------------------|-------------------------------------|
| Operating Temperature | -30 °C to +50 °C (-22 °F to 122 °F) |
| Storage Temperature   | -40 °C to +70 °C (-40 °F to 158 °F) |
| Humidity              | 0 - 95% non-condensing              |

## CERTIFICATIONS

|                           |                               |              |                                     |              |                     |              |              |
|---------------------------|-------------------------------|--------------|-------------------------------------|--------------|---------------------|--------------|--------------|
| Safety                    | UL 60950-1                    | CSA 60950-1  | IEC/EN 60950-1                      | CE           | ROHS                | WEEE         | RCM          |
| Environmental             | IK10 Impact Rating            |              | Meets IEC 60529 IP66 Weather Rating |              | IEC/UL/CSA 60950-22 |              |              |
| Electromagnetic Emissions | FCC Part 15 Subpart B Class B |              | IC ICES-003 Class B                 |              | EN 55022 Class B    |              |              |
| Electromagnetic Immunity  | EN 55024                      | EN 61000-6-1 | EN 61000-4-2                        | EN 61000-4-3 | EN 61000-4-4        | EN 61000-4-5 | EN 61000-4-6 |

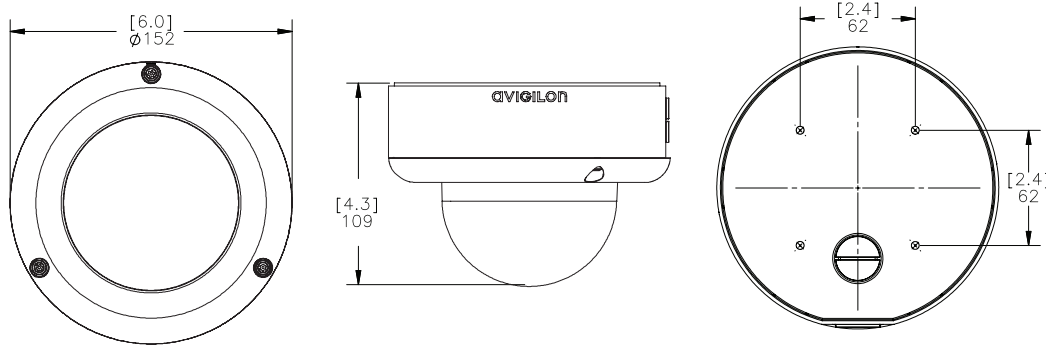
## SUPPORTED VIDEO ANALYTICS EVENTS

|                               |   |
|-------------------------------|---|
| Objects in Area               | The event is triggered when the selected object type moves into the region of interest. If the number of objects is exceeded, a new event is not triggered until the number of objects falls below the defined value.   |
| Object Loitering              | The event is triggered when the selected object type stays within the region of interest for an extended amount of time. The event is reset when the object leaves the region of interest.  |
| Objects Crossing Beam         | The event is triggered when the specified number of objects have crossed the directional beam that has is configured over the camera's field of view. The beam can be unidirectional or bidirectional. If the number of objects is exceeded, a new event is not triggered until the event timesout. |
| 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

## Surface Mount Outdoor Dome Camera

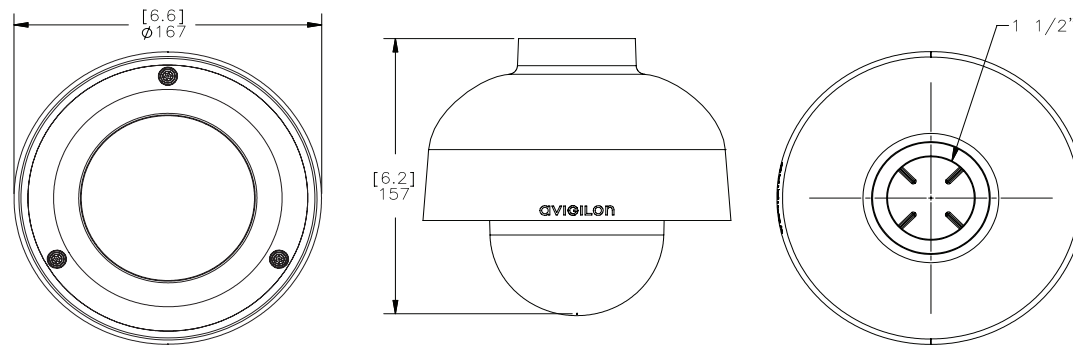
(H3A-DO)



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

## Pendant Dome Camera

(H3A-DP)



# Ordering Information

### SURFACE MOUNT OUTDOOR DOME CAMERAS

|                 |   |
|-----------------|---|
| 1.0C-H3A-DO1    | 1.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Outdoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology                    |
| 1.0C-H3A-DO1-IR | 1.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Outdoor Dome Camera with IR Illuminator and Self-Learning Video Analytics and LightCatcher Technology |
| 1.0C-H3A-DO2    | 1.0 Megapixel WDR Day/Night H.264 HD 9-22 mm Outdoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology                   |
| 2.0C-H3A-DO1    | 2.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Outdoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology                    |
| 2.0C-H3A-DO1-IR | 2.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Outdoor Dome Camera with IR Illuminator and Self-Learning Video Analytics and LightCatcher Technology |
| 2.0C-H3A-DO2    | 2.0 Megapixel WDR Day/Night H.264 HD 9-22 mm Outdoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology                   |
| 3.0C-H3A-DO1    | 3.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Outdoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology                    |
| 3.0C-H3A-DO1-IR | 3.0 Megapixel WDR Day/Night H.264 HD 3-9 mm Outdoor Dome Camera with IR Illuminator and Self-Learning Video Analytics and LightCatcher Technology |
| 3.0C-H3A-DO2    | 3.0 Megapixel WDR Day/Night H.264 HD 9-22 mm Outdoor Dome Camera with Self-Learning Video Analytics and LightCatcher Technology                   |
| H3-DOP-SMOKE    | Dome Camera Cover with Smoked Bubble  |
| H3-DOP-CLEAR    | Dome Camera Cover with Clear Bubble   |

### PENDANT DOME CAMERAS

|               |  |
|---------------|--|
| 1.0C-H3A-DP1  | 1.0 Megapixel WDR Day/Night H.264 HD 3-9mm Pendant Dome Camera with Self-Learning Video Analytics and LightCatcher Technology  |
| 1.0C-H3A-DP2  | 1.0 Megapixel WDR Day/Night H.264 HD 9-22mm Pendant Dome Camera with Self-Learning Video Analytics and LightCatcher Technology |
| 2.0C-H3A-DP1  | 2.0 Megapixel WDR Day/Night H.264 HD 3-9mm Pendant Dome Camera with Self-Learning Video Analytics and LightCatcher Technology  |
| 2.0C-H3A-DP2  | 2.0 Megapixel WDR Day/Night H.264 HD 9-22mm Pendant Dome Camera with Self-Learning Video Analytics and LightCatcher Technology |
| 3.0C-H3A-DP1  | 3.0 Megapixel WDR Day/Night H.264 HD 3-9mm Pendant Dome Camera with Self-Learning Video Analytics and LightCatcher Technology  |
| 3.0C-H3A-DP2  | 3.0 Megapixel WDR Day/Night H.264 HD 9-22mm Pendant Dome Camera with Self-Learning Video Analytics and LightCatcher Technology |
| H3-DOP-SMOKE  | Dome Camera Cover with Smoked Bubble   |
| H3-DOP-CLEAR  | Dome Camera Cover with Clear Bubble  |
| MNT-PEND-WALL | Indoor/Outdoor Pendant Mount Bracket   |
| MNT-AD-POLE-B | Aluminum pole mounting bracket for Dome Cameras and HD Bullet Cameras using Pendant Mount Brackets                             |
| MNT-AD-CORNER | Aluminum corner mounting bracket for Dome Cameras and HD Bullet Cameras using Pendant Mount Brackets                           |