HD Bullet Camera
with Self-Learning Video Analytics

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 Bullet camera is just one way Avigilon can help provide the very best monitoring and protection.

The HD Bullet 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. Equipped with built-in adaptive infrared (IR) illumination, our HD Bullet cameras increase in-the-dark detection and visibility without using a visible light source.

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
- Integrated IR (Infrared) LEDs provide uniform illumination in the dark, even at 0 lux, up to maximum of 200 ft (60 m) away
- Zoom and content adaptive IR provides the most effective illumination at all zoom positions, while maintaining optimum scene illumination
- PoE (Power over Ethernet) enables operating temperatures of -40°C to 50°C (-40°F to 122°F) with no auxiliary power required.
- Additional configuration Ethernet port for easy installation
- Vandal resistant construction and IP66 compliant
- ONVIF compliant with version 2.2.0 of the Analytics Service Specification
### Specifications

<table>
<thead>
<tr>
<th>IMAGE PERFORMANCE</th>
<th>1.0 MP</th>
<th>2.0 MP</th>
<th>3.0 MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image Sensor</td>
<td>12.8&quot; progressive scan CMOS</td>
<td></td>
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</tr>
<tr>
<td>Active Pixels</td>
<td>1280 (H) x 720 (V)</td>
<td>1920 (H) x 1080 (V)</td>
<td>2048 (H) x 1536 (V)</td>
</tr>
<tr>
<td>Imaging Area</td>
<td>4.8 mm (H) x 2.7 mm (V); 0.185&quot; (H) x 0.106&quot; (V)</td>
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<tr>
<td></td>
<td>4.92 mm (H) x 2.69 mm (V); 0.194&quot; (H) x 0.105&quot; (V)</td>
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</tr>
<tr>
<td>Illuminator Technology</td>
<td>High-power IR LEDs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR Illumination</td>
<td>3-9 mm lens: 850 nm wavelength, 30 m (100 ft) max. distance of IR illumination at 0 lux with auxiliary power or PoE</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>9-22 mm lens: 850 nm wavelength, 60 m (200 ft) max. distance of IR illumination at 0 lux with auxiliary power or PoE</td>
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</tr>
<tr>
<td>Minimum Illumination</td>
<td>3-9 mm lens: 0.1 lux (F1.2) in color mode; 0 lux in monochrome mode with IR</td>
<td></td>
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<tr>
<td>Dynamic Range</td>
<td>100 dB Dual Exposure True WDR</td>
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</tr>
<tr>
<td></td>
<td>120 dB Triple Exposure Ultra WDR</td>
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<tr>
<td>Image Rate</td>
<td>30 fps (all resolutions)</td>
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<tr>
<td></td>
<td>20 fps (at full resolution; 30 fps (at 1920 x 1080 or smaller)</td>
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</tbody>
</table>

### LENS

<table>
<thead>
<tr>
<th>Lens</th>
<th>3-9 mm, F1.2, P-Iris, remote focus and zoom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle of View</td>
<td>32° - 91° for 3-9 mm lens; 13° - 28° for 9-22 mm lens</td>
</tr>
<tr>
<td>Image Compression Method</td>
<td>H.264 (MPEG-4 Part 10/AVC), Motion JPEG</td>
</tr>
</tbody>
</table>

### EVENTs

- Objects Enter Area
- Objects Leave Area
- Objects Not Present in Area
- Objects Appear or Enter Area
- Objects Crossing Beam
- Objects Not Moving
- Objects Stopped in Area
- Objects Not Moving
- Objects Not Present in Area
- Objects Enter Area
- Objects Leave Area
- Direction Violated
- Tamper Detection
- Objects Crossing Direction
- Object Loitering
- Objects Not Present in Area
- Objects Appear in Area
- Objects Not Present in Area
- Objects Appear or Leave Area
- Object Not Present in Area

### NETWORK

- Network: 100BASE-TX
- Cabling Type: CAT5
- Connector: RJ-45
- ONVIF: ONVIF compliant with version 1.2, 2.0, Profile S and 2.2.0 of the Analytics Service Specification
- Connector: RJ-45
- Streaming Protocols: RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP

### MECHANICAL

- Dimensions (LxWxH): 230.7 mm x 95.0 mm x 70 mm; 9.1" x 3.7" x 2.8"
- Weight: 1.15 kg (2.5 lbs)
- Housing: Surface mount, tamper resistant
- Finish: Powder coat, cool gray 2
- Adjustment Range: ±175° pan, -45° to +90° tilt, ±175° azimuth
- Onboard Storage: SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended

### ELECTRICAL

- Power Source: VDC: 12 V +/- 10%, 22 VA min
- Power Consumption: 22 W with external power or IEEE802.3at Class 4 PoE Plus
- Power: 12.95 W with IEEE 802.3af Class PoE
- RTC Backup Battery: 3V Manganese Lithium

### ENVIRONMENTAL

- Operating Temperature: 0 °C to +50 °C (-40 °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, cUL-US, IC:60950-1, IEC:60950-1, IEC 62471
- Environmental: IK08 Impact Rating
- Electromagnetic Emissions: FCC Part 15 Subpart B Class B, IC:ICES-003 Class B, EN 55022 Class B, EN 61000-3-3, EN 61000-3-2, EN 61000-6-3
- Electromagnetic Immunity: EN 55024, EN 61000-6-1, IEC/EN 61000-6-2

### SUPPORTED VIDEO ANALYTICS EVENTS

- The event is triggered when the selected object type moves into the region of interest.
- The event is triggered when the selected object type stays within the region of interest for an extended amount of time.
- The event is triggered when the number of objects exceeds the defined value.
- The event is triggered when no objects are present in the region of interest.
- The event is triggered when an object moves in the prohibited direction of travel.
- The event is triggered when the scene unexpectedly changes.
- If the number of objects is exceeded, a new event is not triggered until the number of objects falls below the defined value.
- If the number of objects is exceeded, a new event is not triggered until the selected event times out.
Outline Dimensions

HD Bullet Camera

**HD Bullet Camera Junction Box**

**Ordering Information**

<table>
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<tr>
<th>Code</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1.0C-H3A-BO1-IR</td>
<td>1.0 Megapixel WDR 3-9 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology</td>
</tr>
<tr>
<td>1.0C-H3A-BO2-IR</td>
<td>1.0 Megapixel WDR 9-22 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology</td>
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**HD Bullet Camera Junction Box**

H3-BO-JB Junction box for the H3-BO-IR HD Bullet Cameras

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