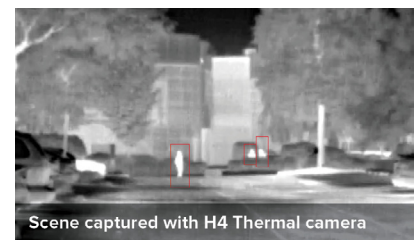


H4 Thermal Camera with Self-Learning Video Analytics

The outdoor rated Avigilon H4 Thermal camera detects intruders while ignoring foliage and other visible obscurants, such as smoke and dust. It provides exceptional performance with the combination of thermal imaging and Avigilon's patented self-learning video analytics. The bullet-style, multi-environment design is outdoor ready and well suited for a wide range of applications such as perimeter protection for industrial sites and critical infrastructure, transportation and government.



Operating beyond the visible spectrum, the H4 Thermal camera line is designed to detect the movement of people and vehicles even in areas with poor visibility, challenging lighting conditions, absolute darkness and partly camouflaged scenes without the need for additional light sources. Through Avigilon self-learning video analytics, operators receive notification of detected activity that may require further investigation, helping them take decisive action when needed.

The H4 Thermal camera has a resolution of a 320x256 with an uncooled thermal sensor and a durable, vandal resistant, IP66 and IK10 rated housing built for extended life in challenging weather and climate conditions.

KEY FEATURES

- 320x256 resolution uncooled thermal sensor
- Patented Advanced Video Pattern Detection and Teach by Example Technology
- Combined thermal imaging and Avigilon self-learning analytics provide greater accuracy and reduce false alarms in complex lighting, environmental or weather conditions without the need for additional light sources.
- Detect and classify objects regardless of lighting, darkness or extreme environments such as weather, dust, debris, smoke or foliage.
- Available with 4.3mm, 9.1mm or 18 mm F1.0 athermalized lens
- Wifi camera configuration support
- Advanced image processing to enhance details and optimize images for a variety of scene conditions and dynamic range
- HDSM SmartCodec™ Technology lowers bandwidth and storage usage
- Built for challenging outdoor environment providing continuous operating temperature of up to 65C, IP66 certified for comprehensive dust and water ingress protection and IK10 impact rating.
- ONVIF® compliant

Specifications

| | | 320S-H4A-THC-BO50 | 320S-H4A-THC-BO24 | 320S-H4A-THC-BO12 |
|--------------------------|-------------------------------|---|--|----------------------------|
| IMAGE PERFORMANCE | Image Sensor | 320x256 Uncooled VOx Microbolometer | | |
| | Pixel Pitch | 12µm | | |
| | Spectral Range | 8µm to 14µm | | |
| | Aspect Ratio | 5:4 | | |
| | Imaging Rate | 8.6Fps | | |
| | Dynamic Range | -40 °C to 225 °C (-40 °F to 437 °F) [may vary based on operating temperature] | | |
| | Resolution Scaling | 320x256, can be scaled up to 640x512 | | |
| | 3D Noise Reduction Filter | Yes | | |
| | Sensitivity | NETD <60mK | | |
| | Image Uniformity Optimization | Automatic Flat Field Correction (FFC) - Thermal and Temporal | | |
| LENS | Lens | 4.3mm, F1.0, Athermalized | 9.1mm, F1.0, Athermalized | 18.0mm, F1.0, Athermalized |
| | Angle of View (H x V) | 45.9° x 36.5° | 21.6° x 17.0° | 10.8° x 8.4° |
| IMAGE CONTROL | Image Compression Method | H.264 (MPEG-4 Part 10/AVC), Motion JPEG | | |
| | Streaming | Multi-stream H.264 & MJPEG | | |
| | Bandwidth Management | Idle Scene Mode, HDSM SmartCodec Technology | | |
| | Motion Detection | Pixel and Classified Objects | | |
| | Tamper Detection | Yes | | |
| | Privacy Zones | Up to 64 Zones | | |
| | Audio Compression Method | G.711 PCM 8kHz | | |
| | Audio Input/Output | Line level input and output | | |
| | 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 (*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 | | |
| | Protocols | IPv4, IPv6, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, 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 | | |
| | MECHANICAL | Dimensions (LxWxH) | 126 mm x 281 mm x 91 mm; 4.97" x 11.08" x 3.58" (including mounting bracket) | |
| Weight: | | Camera | 1.72kg (3.79 lbs) | |
| | | Mounting Bracket | 0.21 kg (0.46 lbs) | |
| Body | | Aluminium | | |
| Housing | | Surface mount, tamper resistant | | |
| Finish | | Powder coat, RAL 9003 | | |
| Adjustment Range | | ±175° pan, ±90° tilt, ±175° azimuth | | |
| Onboard Storage | | SD/SDHC/SDXC slot – minimum class 4; class 6 or better recommended | | |
| ELECTRICAL | | Power Consumption | 8W | |
| | Power Source | VDC: 12V +/- 10%, 8W min. VAC: 24V +/- 10%, 15VA min. PoE:IEEE802.3af Class 3 compliant | | |
| | RTC Backup Battery | 3V manganese lithium | | |
| ENVIRONMENTAL | Operating Temperature | -40 °C to +65 °C (-40 °F to 149 °F) | | |
| | Storage Temperature | -10 °C to +70 °C (14 °F to 158 °F) | | |
| | Humidity | 0 - 93% non-condensing | | |
| CERTIFICATIONS | Certifications/Directives | UL, cUL, CE, ROHS, WEEE, RCM | | |
| | Safety | UL 62368-1, CSA 62368-1, IEC/EN 62368-1 | | |
| | Environmental | UL/CSA/IEC 60950-22, IEC 60529 IP66 Rating, IK10 Impact Rating | | |
| | 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 50130-4 | | |
| | Directives | RoHS, Reach (SVHC), WEEE | | |

SUPPORTED 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. |

CLASSIFIED OBJECT DETECTION RANGE

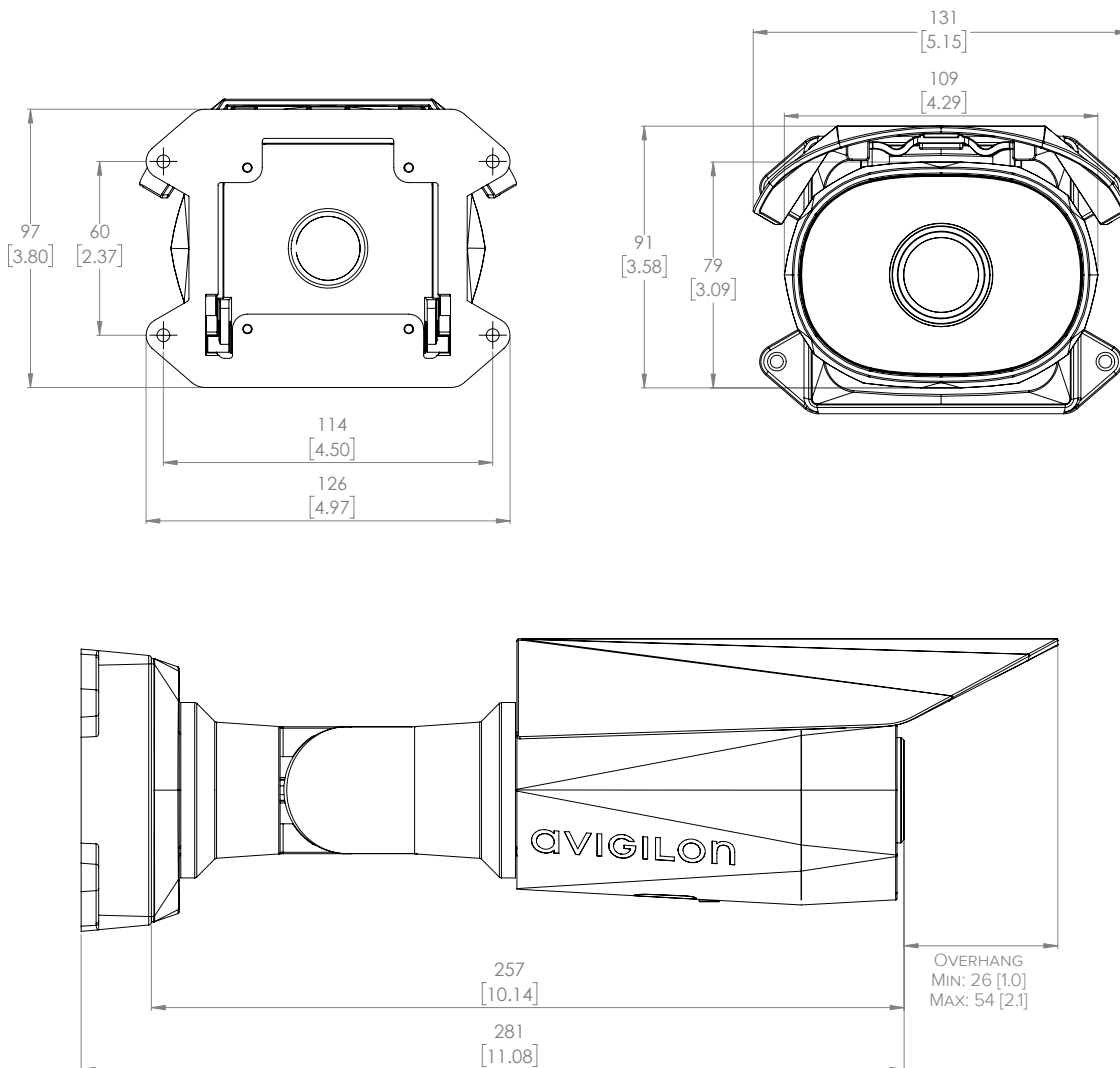
| FOCAL LENGTH | VIEWING ANGLE (H X V) | HUMAN | VEHICLE |
|--------------|-----------------------|-------------|-------------|
| 4.3 mm | 45.9° x 36.5° | 68m (224') | 80m (263') |
| 9.1 mm | 21.6° x 17.0° | 150m (493') | 160m (525') |
| 18 mm | 10.8° x 8.4° | 220m (722') | 225m (739') |

The detection ranges may vary in different weather conditions.

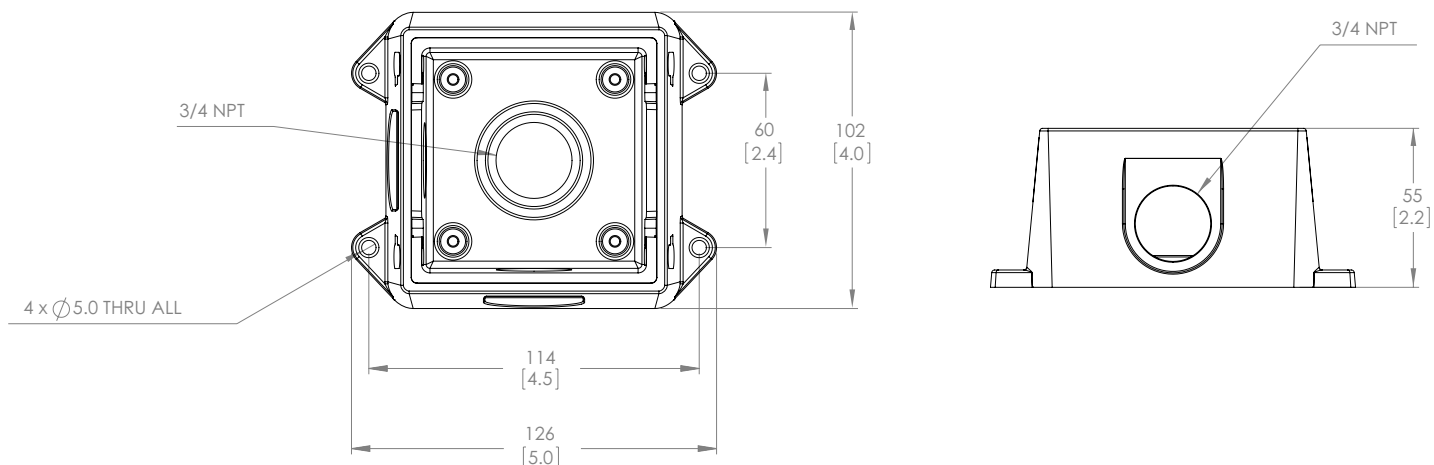
Outline Dimensions

Camera

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



Junction Box



Ordering Information

| Camera Part number | Resolution | NETD | Lens | HDSM SmartCodec Technology |
|--------------------|------------|---------|--------|----------------------------|
| 320S-H4A-THC-BO50 | 320 x 256 | < 60 mK | 4.3 mm | ✓ |
| 320S-H4A-THC-BO24 | 320 x 256 | < 60 mK | 9.1 mm | ✓ |
| 320S-H4A-THC-BO12 | 320 x 256 | < 60 mK | 18 mm | ✓ |

| | |
|----------------|--|
| H4-BO-JBOX1 | Junction box for H4A-BO H4 HD Bullet Cameras |
| H4-MT-POLE1 | Aluminum pole mounting bracket for H4 HD Pendant Dome Cameras and H4 HD Bullet Cameras |
| H4-MT-CRNR1 | Aluminum corner mounting bracket for H4 HD Pendant Dome Cameras and H4 HD Bullet Cameras |
| H4-AC-WIFI2-NA | USB Wifi Adapter |
| H4-AC-WIFI2-EU | USB Wifi Adapter |