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

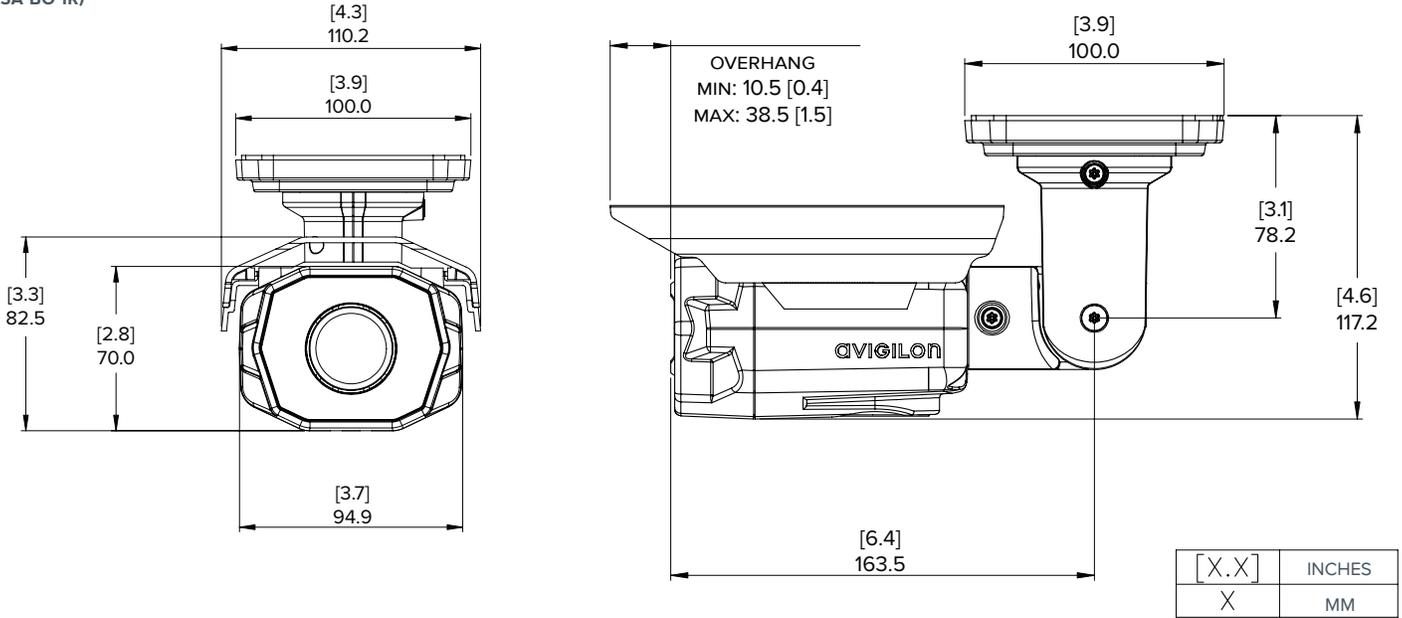ONVIF compliant with version 2.2.0 of the Analytics Service Specification

Specifications

		1.0 MP	2.0 MP	3.0 MP
IMAGE PERFORMANCE	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)		4.92 mm (H) x 3.69 mm (V); 0.194" (H) x 0.145" (V)
	Illuminator Technology	High-power IR LEDs		
	IR Illumination — 3-9 mm lens:	850 nm wavelength, 30 m (100 ft) max. distance of IR illumination at 0 lux with auxiliary power or PoE		
	IR Illumination — 9-22 mm lens:	850 nm wavelength, 60 m (200 ft) max. distance of IR illumination at 0 lux with auxiliary power or PoE		
	Minimum Illumination — 3-9 mm lens:	0.1 lux (F1.2) in color mode; 0 lux in monochrome mode with IR		
	Minimum Illumination — 9-22 mm lens:	0.2 lux (F1.6) in color mode; 0 lux in monochrome mode with IR		
	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)
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°		33° - 94°
	Angle of View — 9-22 mm lens:	13° - 28°		15° - 31°
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		
	External I/O Terminals	Alarm In, Alarm Out		
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	Dimensions (LxWxH)	241.7 mm x 94.9 mm x 70 mm; 9.5" x 3.7" x 2.8"		
	Weight	1.15 kg (2.5 lbs)		
	Body	Aluminum		
	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 Consumption	22 W with external power or IEEE802.3at Class 4 PoE Plus	12.95 W with IEEE 802.3af Class PoE	
	Power Source	VDC: 12 V +/- 10%, 22 W min VAC: 24 V +/- 10%, 28 VA min	PoE: IEEE802.3af Class 3 compliant PoE+: IEEE802.3at Class 4 PoE Plus	
	RTC Backup Battery	3V Manganese Lithium		
ENVIRONMENTAL	Operating Temperature	-40 °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 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 EN 61000-6-3		
	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 EN 61000-4-11		

SUPPORTED VIDEO ANALYTICS EVENTS

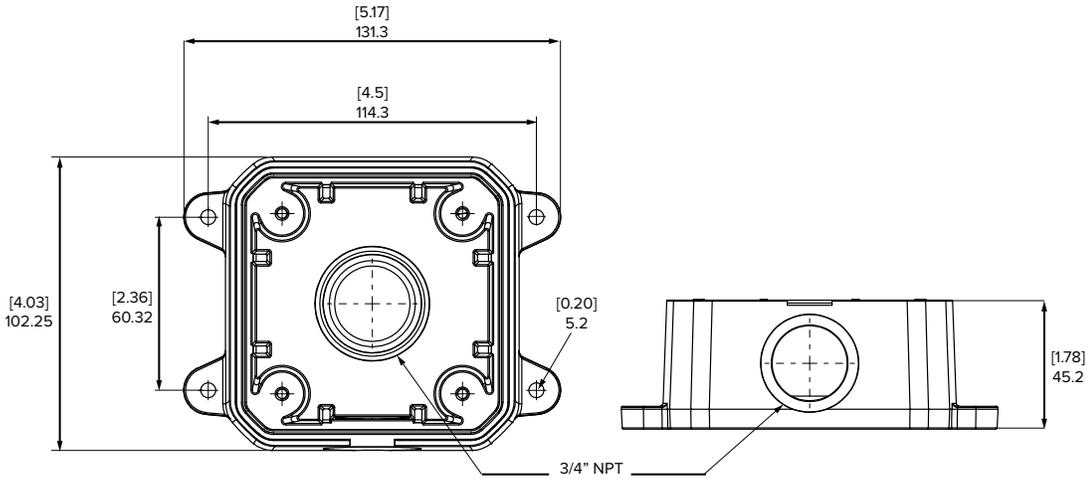|	
Objects in Area	The event is triggered when the selected object type moves into the region of interest. If the number of objects is exceeded, a new event is not triggered until the number of objects falls below the defined value.
Object Loitering	The event is triggered when the selected object type 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

HD Bullet Camera

(H3A-BO-IR)

[4.3]
110.2

[3.9]
100.0

[3.3]
82.5

[2.8]
70.0

[3.7]
94.9

OVERHANG
MIN: 10.5 [0.4]
MAX: 38.5 [1.5]

[3.9]
100.0

[3.1]
78.2

[4.6]
117.2

[6.4]
163.5

avigilon

[X.X]	INCHES
X	MM

HD Bullet Camera Junction Box

(H3-BO-JB)

[5.17]
131.3

[4.5]
114.3

[4.03]
102.25

[2.36]
60.32

[0.20]
5.2

[1.78]
45.2

3/4" NPT

Ordering Information

1.0C-H3A-BO1-IR	1.0 Megapixel WDR 3-9 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology
1.0C-H3A-BO2-IR	1.0 Megapixel WDR 9-22 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-BO1-IR	2.0 Megapixel WDR 3-9mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology
2.0C-H3A-BO2-IR	2.0 Megapixel WDR 9-22 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-BO1-IR	3.0 Megapixel WDR 3-9 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology
3.0C-H3A-BO2-IR	3.0 Megapixel WDR 9-22 mm HD Bullet Camera with Self-Learning Video Analytics and LightCatcher Technology
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