

H5A Fisheye Camera

8 MP

12 MP

The Avigilon H5A Fisheye Camera is a cost-effective and easy-to-install solution that provides 360° panoramic views of large areas from a single vantage point, bringing superior situational awareness without any blind spots. Proudly made in North America, facilities such as schools, retailers, commercial offices and manufacturing plants can leverage the camera's high-resolution video to monitor processes and optimize operational efficiencies, along with its analytics and AI capabilities to proactively detect critical events and enhance the productivity of security teams.



Features



360° PANORAMIC VIEWS

Provides 360° coverage from a single vantage point to help lower overall video security deployment costs.



NEXT-GENERATION VIDEO ANALYTICS

Detects more people with greater accuracy, even in crowded scenes, to support faster responses.



H.264 AND H.265 WITH HDSM SMARTCODEC™ TECHNOLOGY

Optimizes compression levels for regions in a scene to help maximize bandwidth savings and keep internet connectivity costs down.



WATER & IMPACT RATED²

IP66/67 rating for water resistance and IK10 impact rating for vandal resistance.



LOW-PROFILE & EASY-TO-INSTALL DESIGN

Offers unobtrusive monitoring and a paintable front plate¹ that can be customized to fit in with interior aesthetics, backed by an easy installation.



WIDE DYNAMIC RANGE

Captures details in scenes with both very bright and very dark areas to maximize image quality.



FIPS 140-2 COMPLIANT

Brings increased data security with FIPS-compliant cryptography enabled on cameras³.



ADAPTIVE IR TECHNOLOGY²

Provides optimal brightness in scenes with low-light for high-resolution image detail.



ONVIF® COMPLIANT

Native ONVIF Profile S, T, and G compliance allows easy integration with existing ONVIF infrastructures.



AUDIO RECORDING CAPABILITIES

Built-in microphone offers an optional audio recording capability for additional evidentiary detail.

Preliminary Specifications - Subject to Change

¹ Available on in-ceiling mount only.

² Available on surface mount only.

³ Optional purchase of FIPS Level 1 camera license or CRYPTR microSD hardware-based encryption and key management for FIPS Level 3 support and certification.

Specifications

		8.0 MP	12.0 MP	
IMAGE PERFORMANCE	Image Sensor	1/1.8" Progressive Scan CMOS	1/2.3" Progressive Scan CMOS	
	Active Pixels (H x V)	2048 × 2048	3008 × 3008	
	Imaging Area (H x V)	4.096 mm × 4.096 mm	4.662 mm × 4.662 mm	
	Max Image Rate	(50 Hz/60 Hz): 25 fps/30 fps		
	Dynamic Range	WDR Off	TBD	TBD
		WDR On	TBD	TBD
	Camera Operating Modes	N/A	Full feature mode or High framerate mode (Analytics are disabled in High framerate mode)	
	Bandwidth Management	HDSM SmartCodec technology; Idle scene mode		
3D Noise Reduction Filter	Yes			
LENS	Lens	1.4 mm	1.6 mm	
	IR Illumination (high power 850 nm LEDs)	20 m (65 ft) max. distance at 0 lux		
	Minimum Illumination	With IR	0 lux	0 lux
		Without IR	0.10 lux in monochrome mode; 0.20 lux in color mode	0.19 lux in monochrome mode; 0.38 lux in color mode
	Field of View	360°		
	Max Aperture	F2.0		
Control	Fixed iris			
IMAGE CONTROL	Image Compression Method	H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG		
	Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG		
	Motion Detection	Pixel motion and classified object detection		
	Tamper Detection	Yes		
	Electronic Shutter Control	Automatic, Manual (1/6 to 1/8000 sec)		
	Iris Control	Fixed		
	Day/Night Control	Automatic, Manual		
	Flicker Control	60 Hz, 50 Hz		
	White Balance	Automatic, Manual		
	Backlight Compensation	Adjustable		
	Privacy Zones	Up to 64 zones		
NETWORK	Network	100BASE-TX		
	Cabling Type	CAT5e		
	Connector	RJ-45		
	ONVIF	ONVIF compliance Profile S, Profile T, and Profile G (www.onvif.org)		
	Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, FIPS 140-2 L1 (with optional camera license), FIPS 140-2 L3 (with optional accessory)		
	Protocol	IPv6, 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		
	Device Management Protocols	SNMP v2c, SNMP v3		
PERIPHERALS	Onboard Storage	2 × microSD/microSDHC/microSDXC slot – class 10/UHS-1 or better recommended. Currently one of the two SD card slots is available for onboard storage.		
AUXILIARY I/O	Audio Input/Output	Line level input and output and built-in microphone (can be enabled)		
	Audio Compression Method	Opus, G.711 PCM 8 kHz		
	External I/O Terminals	Alarm In, Alarm Out		
MECHANICAL		SURFACE MOUNT	IN-CEILING MOUNT	
	Dimensions (L×W×H)	145.5 mm × 145.5 mm × 62 mm; 5.72" × 5.72" × 2.44"	200.6 mm × 200.6 mm × 14.2 mm; 7.9" × 7.9" × 0.56"	
	Max. Ceiling Thickness	N/A	1.25"	
	Weight	Camera	0.52 kg; 1.13 lbs	0.595 kg; 1.31 lbs
		Mounting Plate	0.085 kg; 0.18 lbs	N/A
		With NPT Adapter	TBD	N/A
	Dome Bubble	Polycarbonate, clear		
	Body	Aluminum		
	Housing	Surface mount		
	Finish	Cool grey		
ELECTRICAL	Power Consumption	With IR: 25.5 W; Without IR: 11 W	11 W	
	Power Source	VDC: 12 V ±10%, 26 W min (With IR) PoE+: IEEE 802.3at Class 4 (Without IR) PoE: IEEE 802.3af Class 3	VDC: 12 V ±10%, 11 W min PoE: IEEE 802.3af Class 3	
	Power Connector	2-pin terminal block		
	RTC Backup Battery	3V manganese lithium		

Preliminary Specifications - Subject to Change

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

CERTIFICATIONS		SURFACE MOUNT	IN-CEILING MOUNT
	Certifications/Directives	UL, cUL, CE, ROHS, RCM	
	Safety	UL 62368-1, CSA 62368-1, IEC/EN 62368-1, IEC 62471	
	Environmental	IK10 Impact Rating, IP66 and IP67 Weather Rating	N/A
	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 55035, EN 61000-6-1		

SUPPORTED VIDEO ANALYTICS EVENTS IN CEILING MOUNT ORIENTATION	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.

* Analytics are supported when the camera is installed in the ceiling-mounted orientation mode.

SUPPORTED CLASSIFIED OBJECT TYPES	Object Types in Indoor Mode*	Person
--	------------------------------	--------

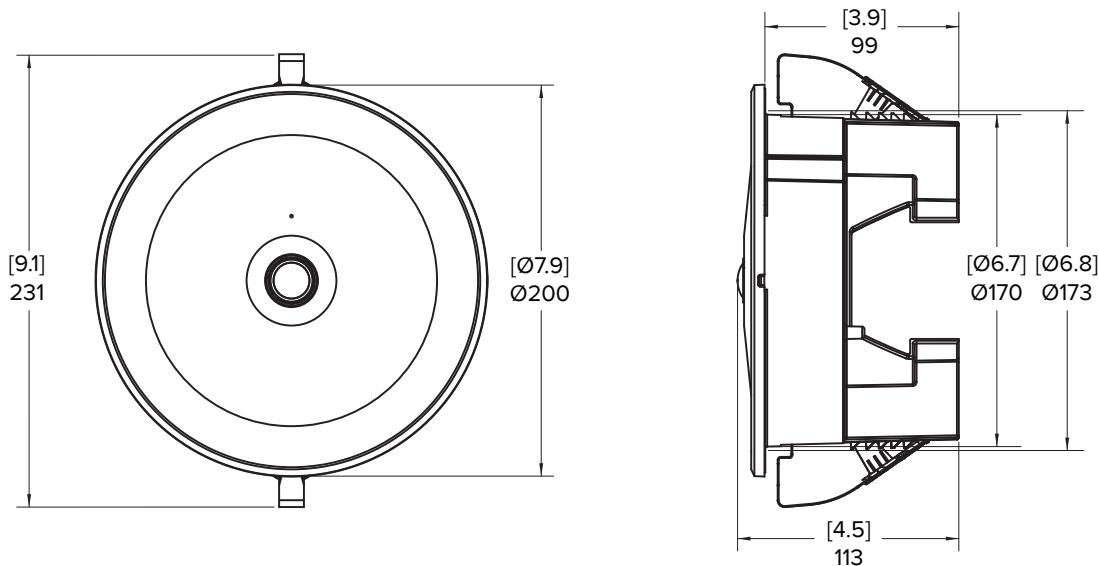
* Analytics are supported when the camera is installed in the ceiling-mounted orientation mode.

AVIGILON CONTROL CENTER (ACC) VERSIONS SUPPORTED FEATURES	ACC Version 6.14.24 or higher	H.265 supported. Fisheye dewarping is not supported on ACC versions earlier than 6.14.24. Analytics are only supported on ACC 7 systems.
	ACC Version 7.12.4 or higher	All supported analytic events with people as classified objects. H.265 supported. Fisheye dewarping is not supported on ACC versions earlier than 7.12.2.

Outline Dimensions

In-Ceiling Mount Dome Camera

(H5A-FE-DC)

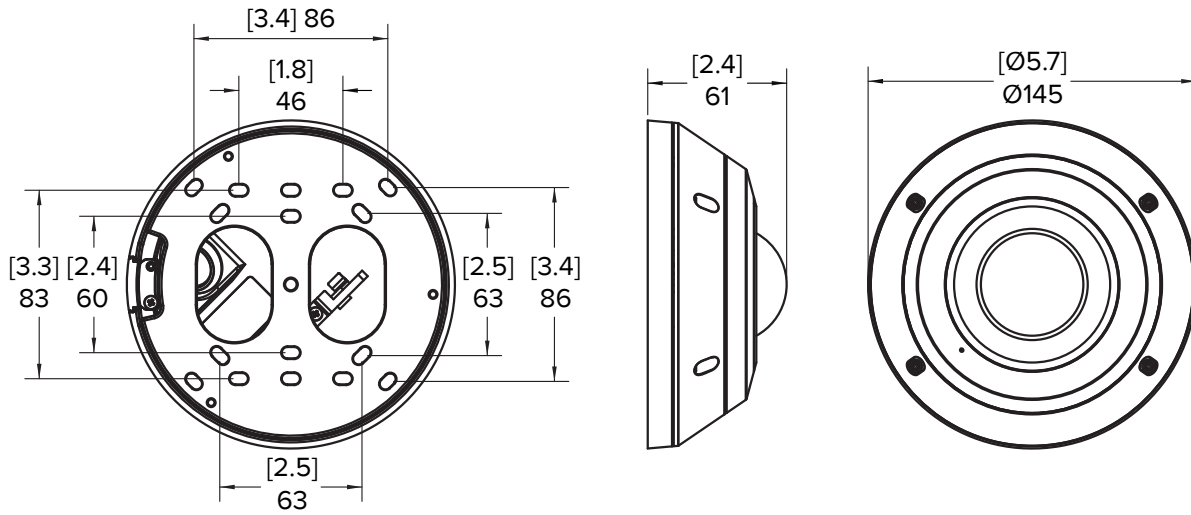


Preliminary Specifications - Subject to Change

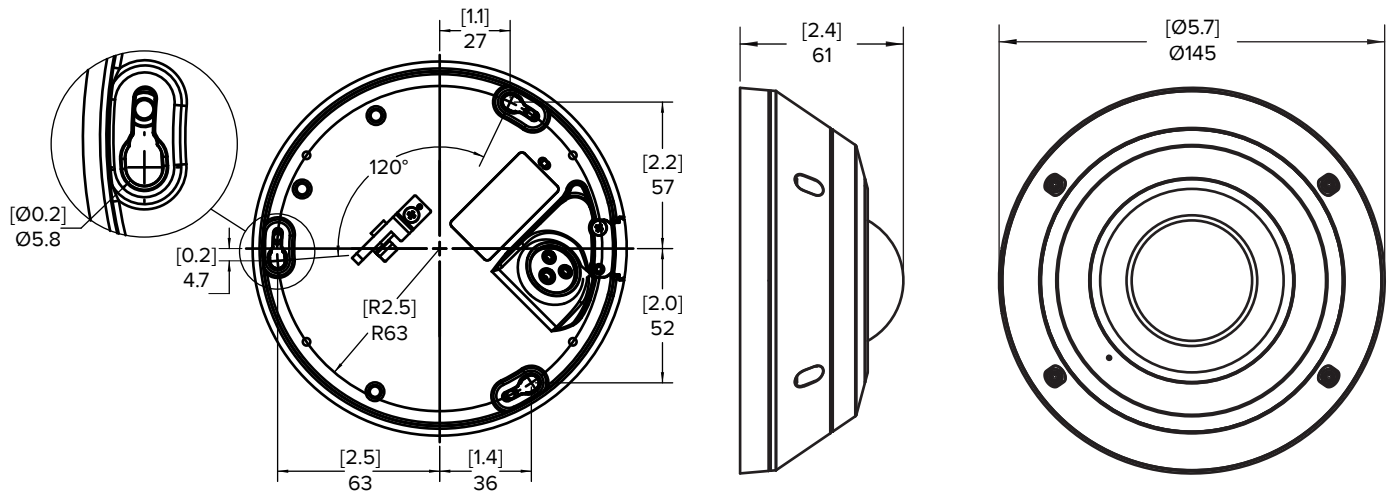
[X.X]	INCHES
X	MM

Surface Mount Dome Camera

(H5A-FE-DO) WITH MOUNTING PLATE

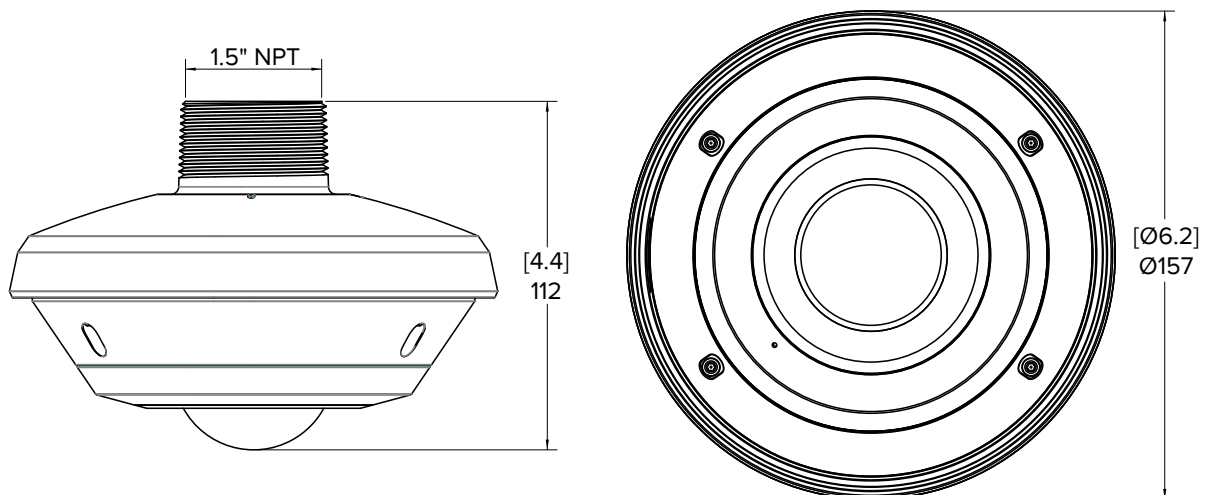


(H5A-FE-DO) WITHOUT MOUNTING PLATE



Pendant Mount Dome Camera

(H5A-FE-DO) WITH H5A-FE-MT-NPTA1



Preliminary Specifications - Subject to Change

Ordering Information

SURFACE MOUNT DOME CAMERAS	MP	WDR	LIGHTCATCHER TECHNOLOGY	ANALYTICS*	LENS	IR	IP66/IP67	HDSM SMARTCODEC
8.0C-H5A-FE-DO1	8.0	✓	✓	✓	Fisheye 1.4 mm		✓	✓
8.0C-H5A-FE-DO1-IR	8.0	✓	✓	✓	Fisheye 1.4 mm	✓	✓	✓
12.0W-H5A-FE-DO1	12.0	✓		✓	Fisheye 1.6 mm		✓	✓
12.0W-H5A-FE-DO1-IR	12.0	✓		✓	Fisheye 1.6 mm	✓	✓	✓

* Analytics are supported when the camera is installed in the ceiling-mounted orientation mode.

SURFACE MOUNT ACCESSORIES DESCRIPTION

H5A-FE-MT-NPTA1	NPT adapter for the H5A Fisheye surface mount camera
CM-MT-WALL1	Pendant wall mount, compatible with H5A-FE-MT-NPTA1
H4-MT-CRNR1	Aluminum corner mounting bracket, compatible with CM-MT-WALL1
H5A-FE-DD-CLER1	Package of 3 dome replacement parts for H5A fisheye surface mount camera

IN-CEILING MOUNT INDOOR DOME CAMERAS	MP	WDR	LIGHTCATCHER TECHNOLOGY	ANALYTICS*	LENS	IR	IP66/IP67	HDSM SMARTCODEC
8.0C-H5A-FE-DC1	8.0	✓	✓	✓	Fisheye 1.4 mm			✓
12.0W-H5A-FE-DC1	12.0	✓		✓	Fisheye 1.6 mm			✓

* Analytics are supported when the camera is installed in the ceiling-mounted orientation mode.

IN-CEILING MOUNT ACCESSORIES DESCRIPTION

H5A-FE-DC-CPNL1	Metal ceiling panel to reinforce the existing ceiling tile in suspended ceiling installations
-----------------	---

OPTIONAL CAMERA LICENSES AND ACCESSORIES

CAM-FIPS	Camera license to enable FIPS Level 1 cryptographic mode on any H5A camera
CAM-FIPS-L3-CRYPTR	CRYPTR microSD hardware-based encryption and key management for FIPS Level 3 support and certification