H5A MODULAR CAMERA



5 MP

The Avigilon H5A Modular Camera is designed for areas with limited space or that require a discreet and unobtrusive monitoring solution, such as ATMs, police interview rooms, retail checkout counters, building entrances and more. The camera's flexible imager modules can easily be positioned in different orientations to help capture the most optimal view of people or scenes of interest for investigations. It comes equipped with Next-Generation Video Analytics for enhanced object detection and classification, Unusual Activity Detection, and supports Facial Recognition and Avigilon Appearance Search technologies to expedite response times for critical events.



FEATURES



NEXT-GENERATION VIDEO ANALYTICS

Detects more objects with expanded object classifications and greater accuracy for faster responses, even in crowded scenes.



FLEXIBLE INSTALLATION

Detachable cables with multiple length options are available to help reduce installation times and enable flexible positioning of the imager modules for ideal scene coverage.



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.



DUST & WATER RESISTANCE¹

IP66 rating for resistance from dust and water.



FIPS 140-2 COMPLIANT²

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



SMALL & DISCREET FORM FACTORS

Lightweight form factors allow for easy installation in practically any environment, including tight spaces and discreet applications, such as behind false walls or ceilings.



ONVIF® COMPLIANT

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



CUSTOMIZABLE DESIGN

A modular design offers you the ability to mix and match different resolutions and/or form factors to suit your site's coverage needs.



WIDE DYNAMIC RANGE

Captures high-quality image details in scenes with strong backlight.



SEAMLESS CONNECTIVITY WITH AVIGILON CONTROL CENTER (ACC)

Connects with ACC™ software to bring you the right information to take action with a full suite of Al-powered capabilities at your fingertips.

ONVIF is a trademark of Onvif, Inc.

- ¹Available on Micro Bullet Imager Module only.
- 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 - MAIN UNIT

IMAGE CONTROL	. AND PERFORMA	NCE				
Image Compression	Method	H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG				
Bandwidth Management		HDSM SmartCodec technology; Idle scene mode				
Streaming		Multi-stream H.264, Multi-stream H.265, Motion JPEG				
Max Image Rate (Based on	High Frame Rate: (50 Hz/60 Hz)	(≤ 6 MP) 25 fps/30 fps (8 MP) 25 fps/24 fps (10 MP) 20 fps/24 fps				
combined resolution of one or two imagers)	Full Feature Mode: (50 Hz/60 Hz)	(≤ 5 MP) 25 fps/30 fps (6 MP) 25 fps/24 fps (8 MP) 20 fps/20 fps (10 MP) 12.5 fps/15 fps				
Dynamic Range		Up to 120 dB				
Motion Detection		Pixel motion; Selectable sensitivity and threshold. Classified object detection				
Tamper Detection		Yes				
Electronic Shutter Co	ontrol	Automatic, Manual (1/7.5 to 1/8000 sec)				
Flicker Control		60 Hz, 50 Hz				
White Balance		Automatic, Manual				
Backlight Compensa	tion	Adjustable				
Privacy Zones		Up to 64 zones				
AUXILIARY						
Audio Compression N	Method	G.711 PCM 8 kHz, Opus				
Audio Input/Output		Line level input and output				
External I/O Terminal	ls	Alarm In, Alarm Out				
NETWORK		1				
Network		100BASE-TX				
Cabling Type		CAT5E cabling for PoE Coaxial cabling for imager modules				
Connector		RJ-45 for PoE HD BNC for imager modules				
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)				
Protocols		IPv4, IPv6, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMPv2, 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 x microSD/microSDHC/microSDXC slots - video speed class card required. Class V10 or better recommended. One of the two SD card slots is available for onboard storage.				
MECHANICAL						
	Body Only	105 mm x 123 mm x 34 mm; 4.13 " x 4.84 " x 1.34 "				
Himpheinne						
Dimensions (LxWxH)	Including HD BNC Connector	114 mm x 123 mm x 34 mm; 4.50 " x 4.84 " x 1.34 "				

MECHANICAL	
Body	Aluminum
Housing	Stainless steel (bracket)
Finish	Black
ELECTRICAL	
Power Consumption	13 W Max
Power Source	VDC: 12 V +/-10%, 11.5 W min PoE: IEEE 802.3af Class 3 compliant
Power Connector	2-pin terminal block
RTC Battery Backup	3V manganese lithium
ENVIRONMENTAL	
Operating Temperature	-10 °C to +60 °C (14 °F to 140 °F)
Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)
Humidity	0 - 100% RH
CERTIFICATIONS	
Certifications/Directives	UL, cUL, CE, UKCA, ROHS, RCM
Safety	UL 62368-1, CSA 62368-1, IEC/EN 62368-1
Electromagnetic Emissions	FCC Part 15 Subpart B Class A, ICES-003 Class A, EN 55032 Class A, EN 61000-3-2, EN 61000-3-3
Electromagnetic Immunity	EN 55035, EN 61000-6-1
Environmental	IEC 60068-2-27, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-1, IEC 60068-2-2
Warranty	5-year limited warranty. Extended warranty not available.

SPECIFICATIONS - IMAGER

IMAGE PERFORMANCE		3.0 MP	5.0 MP				
Image Sensor		1/2.7 " Progressive Scan 1/2.7 " Progressive Scan					
Imaging Area (H x V)		5.4 mm x 3.9 mm; 0.213 " x 0.154 "					
Max Image Rate		(50 Hz/60 Hz): 25 fps/30 fps					
Streaming Resolutions	Primary Stream:	Right Angle: 2128 x 1368, 1920 x 1080, 1360 x 2128, 1088 x 1920 Micro Bullet: 2128 x 1536, 1920 x 1080, 1536 x 2128, 1088 x 1920	Micro Bullet: 2688 x 1944, 2128 x 1536, 2560 x 1440, 1920 x 1080, 1952 x 2688, 1536 x 2128, 1440 x 2560, 1088 x 1920				
	Secondary Stream:	Right Angle: 1248 x 800, 832 x 536, 672 x 432, 528 x 336, 400 x 256 1280 x 720, 720 x 480, 640 x 360, 512 x 288, 384 x 216 800 x 1248, 528 x 832, 432 x 672, 336 x 528, 256 x 400 720 x 1280, 480 x 720, 368 x 640, 288 x 512, 240 x 424 Micro Bullet: 1248 x 904, 832 x 600, 672 x 480, 528 x 384, 400 x 288 1280 x 720, 720 x 480, 640 x 360, 512 x 288, 384 x 216 912 x 1248, 608 x 832, 480 x 672, 384 x 528, 288 x 400	Micro Bullet: 1248 x 904, 832 x 600, 672 x 480, 528 x 384, 400 x 288 1280 x 720, 720 x 480, 640 x 360, 512 x 288, 384 x 216 912 x 1248, 608 x 832, 480 x 672, 384 x 528, 288 x 400 720 x 1280, 480 x 720, 368 x 640, 288 x 512, 240 x 424				
		720 x 1280, 480 x 720, 368 x 640, 288 x 512, 240 x 424					
Dynamic Range	WDR Off:	Up to 82 dB					
Dynamic nango	WDR On:	Up to 120 dB					
3D Noise Reductio	n Filter	Yes					
LENS		RIGHT ANGLE	MICRO BULLET				
Lens		3.7 mm fixed pinhole aperture	2.8 mm fixed				
Minimum Illuminat	ion	0.1 lux					
Horizontal Angle of	f View (HFOV)	92 ° 110 °					
Vertical Angle of V	liew (VFOV)	53 °	80 °				
Max Aperture		F2.5	F2.0				
Control		Fixed					
IMAGE CONTR		1					
Electronic Shutter	Control	Automatic, Manual (1/7.5 to 1/8000 sec)					
Iris Control		Fixed					
Day/Night Control		Automatic, Manual					
Flicker Control		60 Hz, 50 Hz					
White Balance	4:	Adjustable					
Backlight Compens	sation	Adjustable					
Privacy Zones		Up to 64 zones					
CONNECTOR							
Cabling Type		Coaxial cable					
Connector		HD BNC					
MECHANICAL		RIGHT ANGLE	MICRO BULLET				
Dimensions	Imager Module Body Only	45 mm x 25 mm x 20 mm; 1.77 " x 0.98 " x 0.79 "	42 mm x 30 mm diameter; 1.65 " x 1.18 " diameter				
(LxWxH)	Including HD BNC Connector	54 mm x 25 mm x 20 mm; 2.13 " x 0.98 " x 0.79 "	50 mm x 30 mm diameter; 1.97 " x 1.18 " diameter				

MECHANICAL	RIGHT ANGLE	MICRO BULLET		
Weight	0.028 kg (0.06 lbs) 0.043 kg (0.09 lbs)			
Body	Aluminum			
Housing	Plastic			
Finish	Black			

ENVIRONMENTAL	RIGHT ANGLE MICRO BULLET			
Operating Temperature	-30 °C to +60 °C (-22 °F to 140 °F)			
Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)			
Humidity 0 - 100% RH				
Environmental	N/A	IP66 Rating		

ANALYTICS SPECIFICATIONS

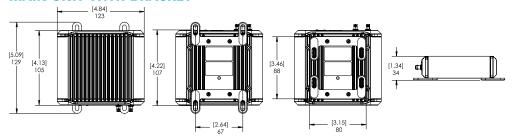
SUPPORTED RULE BASED VIDEO	ANALYTIC EVENTS (PER IMAGER)					
Objects in Area	The event is triggered when the selected object type moves into the region of interest.					
Object Loitering	The event is triggered when the selected object type stays within the region of interest for an extended amount of time.					
Object 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	This 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 left 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 movies in the prohibited direction of travel.					
Tamper Detection	The event is triggered when the scene unexpectedly changes.					
SUPPORTED CLASSIFIED OBJECT	TYPES					
Object Types in Outdoor Mode	Vehicle, sub-types: Car, Truck, Bicycle, Motorcycle, Bus Person					
Object Types in Indoor Mode	Person					
TEACH BY EXAMPLE						
Teach By Example	Yes, when used with Avigilon Control Center™					

AVIGILON CONTROL CENTER (ACC) VERSIONS SUPPORTED FEATURES*							
ACC Version 6.14.26 or higher	All supported analytic events with two types of classified objects: person or vehicle. Appearance search when paired with appropriate server hardware. H.265 supported.						
ACC Version 7.14.6 or higher	All supported analytic events with people and vehicles and all vehicle sub-types as classified objects. Appearance search when paired with appropriate server hardware. H.265 supported.						

^{*}Indoor Close-up analytic mode is only supported on ACC 7.14.12 and later. Each main unit consumes only one ACC channel license whether one or two imagers are connected.

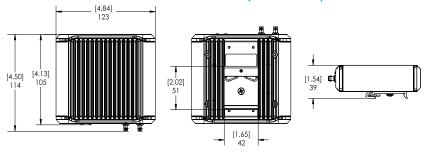
OUTLINE DIMENSIONS

MAIN UNIT WITH BRACKET

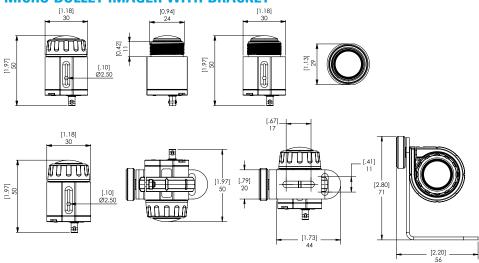


[X.X]	INCHES
Х	MM

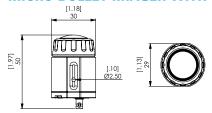
MAIN UNIT WITH DIN RAIL MOUNT (OPTIONAL)



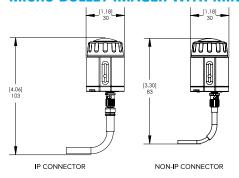
MICRO BULLET IMAGER WITH BRACKET



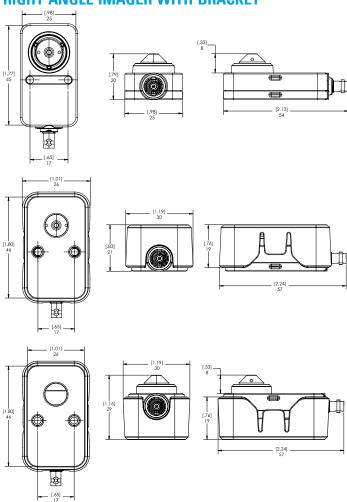
MICRO BULLET IMAGER WITH SIDE RAIL MOUNT



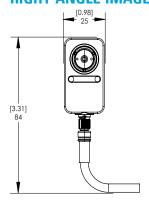
MICRO BULLET IMAGER WITH MIN. CABLE LENGTH



RIGHT ANGLE IMAGER WITH BRACKET



RIGHT ANGLE IMAGER WITH MIN. CABLE LENGTH



ORDERING INFORMATION

The variety of mounting options for the H5A Modular provides maximum flexibility to combine different imager modules and cable configurations.



IMAGER MODULES

With the modular design of the H5A Modular, either camera module can be connected to the H5A Modular Camera Main Unit for maximum versatility and optimal installation.

	FORM FACTOR	MP	WDR	ANALYTICS	LENS	IP66	HDSM SMARTCODEC	LIGHTCATCHER TECHNOLOGY
3C-H5MOD-RP4	Right Angle	3.0	✓	✓	3.7 mm, Fixed Pinhole		✓	√
3C-H5M0D-MB2	Micro Bullet	3.0	√	✓	2.8 mm, Fixed	√	✓	✓
5C-H5M0D-MB2	Micro Bullet	5.0	√	✓	2.8 mm, Fixed	√	✓	√

CAMERA MAIN UNIT

DISPLAY PART NUMBER	DESCRIPTION
H5A-M0D-2P	H5A Modular Camera Main Unit

CAMERA IMAGER

DISPLAY PART NUMBER	DESCRIPTION
3C-H5MOD-RP4	3 MP Pinhole Right Angle Imager (H5A Modular)
3C-H5M0D-MB2	3 MP Fixed Lens Micro Bullet Imager (H5A Modular)
5C-H5MOD-MB2	5 MP Fixed Lens Micro Bullet Imager (H5A Modular)

CAMERA CABLES

DISPLAY PART NUMBER	DESCRIPTION
CBL2M-1001	2 m (6 ft) HD BNC Cable for H5A Modular Camera Imager
CBL5M-1001	5 m (16 ft) HD BNC Cable for H5A Modular Camera Imager

OPTIONAL MOUNTING ADAPTERS

DISPLAY PART NUMBER	DESCRIPTION
BRKTMD-1001	Din rail mount for H5A Modular Camera Main Unit
BRKTMD-1011	Replacement L Bracket for Micro Bullet Imager H5A Modular
BRKTMD-1021	Replacement Flat Bracket for Right Angle Imager H5A Modular
BRKTMD-1031	Replacement Trimring Bracket for Micro Bullet Imager H5A Modular

OPTIONAL LICENSES AND ACCESSORIES*

DISPLAY PART NUMBER	DESCRIPTION
CAM-FIPS	Camera license to enable FIPS Level 1 cryptographic mode on any H5A camera
CAM-FIPS-CRYPTR-L3	MSI CRYPTR SD with camera license to enable FIPS Level 3 cryptographic mode on H5A cameras

 $[\]ensuremath{^{*}\text{Only}}$ one license required per main unit whether one or two imagers are connected.

 $sales@avigilon.com \ | \ \underline{avigilon.com}$

SUPPORT

Learn more and find additional documentation at avigilon.com or email sales@avigilon.com for specific product support.





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