H4 Edge Solution (ES) Camera Line

The H4 Edge Solution Camera line combines high-definition imaging, self-learning video analytics, network video recorder functionality, and embedded Avigilon Control Center™ video management software to create an all-in-one intelligent surveillance solution.

Onboard Solid-State Drive (SSD) storage

The H4 Edge Solution Camera records video directly to an onboard solid-state drive, eliminates the need for a separate network video recorder, and reduces installation and system costs.

Avigilon Control Center (ACC Software) Built-in

The H4 Edge Solution Camera line provides unique flexibility and versatility, with deployment options ranging from standalone installation, multi-camera solutions, to seamless integration into a conventional network video surveillance system.

As an Internet of Things device, the solution acts as both a camera and out-of-the-box video management software platform, providing a uniquely easy-to-install and cost-effective surveillance solution.

KEY FEATURES

- 1-3 megapixel models
- Factory installed and licensed with ACC Video Management software running on the camera
- Up to 256 GB on-board Solid-State Drive (SSD)
- Up to 30 days of video retention
- Self-learning video analytics
- Patented Advanced Video Pattern Detection and Teach by Example Technology
- Patented High Definition Stream Management (HDSM)™ Technology maintains image quality while reducing bandwidth
- Idle Scene Mode lowers the bandwidth and storage usage if there are no motion events detected in the scene
- Wifi camera configuration support
- Avigilon LightCatcher™ technology provides exceptional image quality in low light environments
- Triple Exposure Ultra Wide Dynamic Range
- Factory pre-configured image preset modes for maximum image performance in a variety of lighting conditions

Specifications

		1.0 MP	2.0 MP	3.0 MP
IMAGE PERFORMANCE	Image Sensor	1/2.8" progressive scan CMOS		
	Aspect Ratio	16:9		4:3
	Active Pixels (H x V)	1280 x 720	1920 x 1080	2048 x 1536
	Imaging Area (H x V)	4.8 mm x 2.7mm; 0.189" x 0.106"		5.12 mm x 3.84 mm ; 0.202" x 0.151"
	Minimum Illumination	0.08 lux (F1.6) in color mode; 0.016 lux (F1.6) in monochrome mode		
	Image Rate – High Framerate	30 fps	30 fps	30 fps
	Image Rate – Full Feature		12 fps	12 fps
	Dynamic Range	67 dB		
	Dynamic Range (WDR enabled)	120 dB triple exposure (20 fps or less); 100 dB dual exposure (30 fps)	120 dB triple exposure (Full Feature Mode). WDR is disabled in High Framerate Mode	
	Resolution Scaling	Down to 768 x 432		
	Camera Operating Mode	N/A	High Framerate = Camera will prioritize maximum image rate over other features. WDR is disabled. Full Feature = Camera will prioritize feature capabilities over image rate.	
ONBOARD STORAGE	Solid-State Drive (SSD)	128 G	256 G	256 G
	Retention Rate	Up to 30 days (2 Mbps stream based on 30% motion duty cycle)		
LENS	Lens	4.7 - 84.6 mm F1.6 P-Iris, remote focus and zoom		
	Angle of View	3.3° – 55°		3.5° – 59°
IMAGE CONTROL	Image Compression Method	H.264 (MPEG-4 Part 10/AVC), Motion JPEG		
	Streaming	Multi-stream H.264 and Motion JPEG		
	Bandwidth Management	HDSM and Idle Scene Mode		
	Motion Detection	Selectable sensitivity and threshold		
	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/output, A/V mini-jack (3.5 mm)		
	Video Output	(1.0 - 2.0 MP only) NTSC/PAL, A/V mini-jack (3.5 mm)		
	External I/O Terminals	Alarm In, Alarm Out		
	USB Port	USB 2.0 Micro		
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		
	Device Management Protocols	SNMP v2c, SNMP v3		
MECHANICAL	Dimensions (LxWxH)	168 mm x 76 mm x 67 mm; 6.6" x 3.0" x 2.6"		
	Weight	0.62 kg (1.4 lbs)		
	Camera Mount	1/4"-20 UNC (top and bottom)		
ELECTRICAL	Power Consumption	8 W		
	Power Source	VDC: 12 V +/- 10%, 8 W min	VAC: 24 V +/- 10%, 12 VA min	PoE: IEEE802.3af Class 3 compliant
	Power Connector	2-pin terminal block		
	RTC Backup Battery	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 - 95% non-condensing		

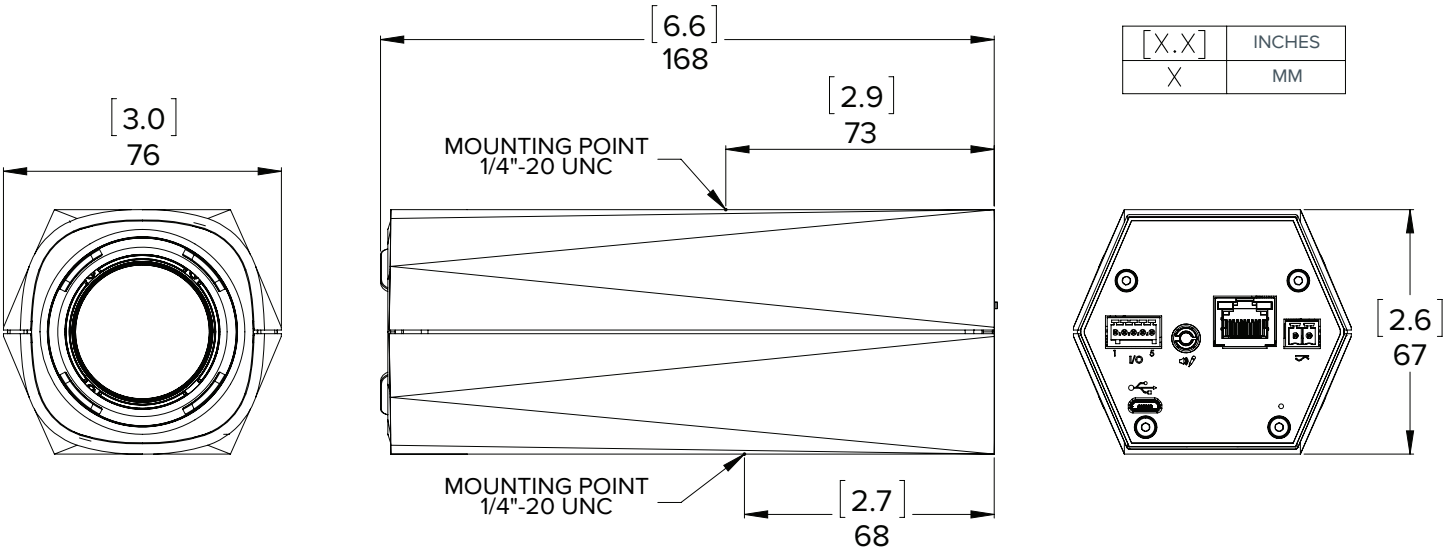
CERTIFICATIONS	Certifications	UL	cUL	CE	ROHS	WEEE	RCM	KC	EAC
	Safety	UL 60950-1				CSA 60950-1		IEC/EN 60950-1	
	Electromagnetic Emissions	FCC Part 15 Subpart B Class B		IC ICES-003 Class B		EN 55022 Class B	EN 61000-6-3	EN 61000-3-2	EN 61000-3-3 KN 32
	Electromagnetic Immunity	EN 55024				EN 61000-6-1		KN 35	

SUPPORTED VIDEO ANALYTICS 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.

SUPPORTED ACC FEATURES

System	• 1 camera per server (connection to self) • 2 simultaneous client connections (override supported) • Site supports up to 200 cameras and a total of 100 defined users. H4 ES Cameras can be part of a site with 15 other H4 ES Cameras, ACC ES HD Recorders, or ACC servers
Recording Rate	12 Mbps
Stream Out Rate	24 Mbps
Client	• Saved Views • Editable Site View • Maps • Intelligent Virtual Matrix • Web pages • Collaborative investigations
Recording, Searching and Playback	• Hourly configurable recording schedule • Thumbnail search • Intelligent motion search • Event search • Live export • Alarm search • Video archiving
Integrations	All 3rd party integrations via the ACC SDK Plus: • CommScope iPatch • DDS Amadeus 5 • RS2 AccessIt! • DSX
Additional Features	• Email event notification • Unlimited rule triggers • Digital input email trigger • Failover connections • Manual digital output trigger • Alarm escalation • Audio recording and talkdown • *Redundant recording *Depending on level of site activity (site, camera, analytics, etc), redundant recording to a secondary server may exhibit a degradation in performance.

Outline Dimensions



Ordering Information

	MP	WDR	LIGHTCATCHER	ANALYTICS	STORAGE	LENS	DAY/NIGHT
1.0C-H4A-12G-B1	1.0	✓	✓	✓	128 G	4.7 - 84.6 mm	✓
2.0C-H4A-25G-B1	2.0	✓	✓	✓	256 G	4.7 - 84.6 mm	✓
3.0C-H4A-25G-B1	3.0	✓	✓	✓	256 G	4.7 - 84.6 mm	✓

H4-AC-WIFI2-NA	USB Wifi Adapter
H4-AC-WIFI2-EU	USB Wifi Adapter
CM-AC-AVIO1	3.5 mm Jack with 1.8 m Fly Wire

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