

H5 Pro Camera

8 MP

16 MP

26 MP

40 MP

61 MP

The new Avigilon H5 Pro camera captures the best-in-class image details over vast areas, providing maximum coverage options through our most powerful and innovative ultra high definition cameras yet. Avigilon's 10K HD Pro camera is the security industry's first single-sensor 10K (61 megapixel) camera. It delivers stunning image detail, simultaneously providing maximum scene coverage, while minimizing bandwidth and storage consumption through our patented High Definition Stream Management™ (HDSM) 2.0 technology. HDSM™ 2.0 patented technology drastically reduces server-client bandwidth requirements and makes optimal use of computing and storage resources.

With the high resolution, a single H5 Pro has the ability to do the job that multiple cameras would normally achieve. Budget-sensitive projects can also take advantage of the camera's optimal low light performance and still gain the benefits of this camera by deploying a lower resolution H5 Pro to suit smaller projects, such as a small storefront.



Features



NEXT-GENERATION VIDEO ANALYTICS*

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



FOCUS OF ATTENTION WITH ACC™ 7

Leverages AI and video analytics technologies to determine what information is important and should be presented to security operators.



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

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



MADE IN NORTH AMERICA AND 5 YEAR WARRANTY

Manufactured in North America* using globally-sourced materials and North American expertise, Avigilon stands behind the quality of its products. Backed by a 5 year warranty.



TRUE WIDE DYNAMIC RANGE

Available in all resolutions, capture details in scenes with both very bright and dark areas.



LIGHTCATCHER™ TECHNOLOGY

Offers exceptional detail in areas with low lighting.



ONVIF® COMPLIANT

Built on an open platform with ONVIF S and G compliance to allow integration with other security solutions.



MULTIPLE LENS OPTIONS

Choose from various lens types, including long zoom, for flexible coverage options.

ONVIF is a trademark of Onvif, Inc.

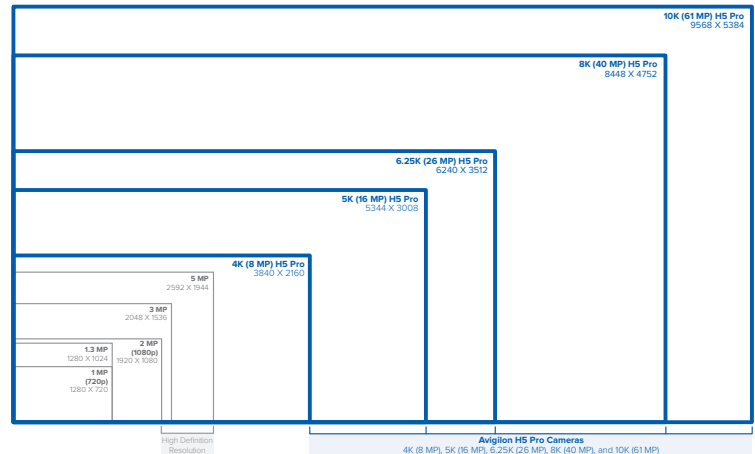
* Analytics supported on 8, 16, 26, and 40 MP models.
26 MP cameras must have Full Feature mode enabled for analytics.

* With manufacturing facilities in both the United States and Canada, our "Made In North America" claim only applies to products from our Plano, Texas and Richmond, British Columbia facilities.

Specifications

		8 MP (4K ULTRA HD)	16 MP	26 MP	40 MP	61 MP	
IMAGE PERFORMANCE	Image Sensor	27.2 mm (Type 1.8) progressive scan CMOS				43.3 mm (Type 2.7) progressive scan CMOS	
	Max Resolution (H x V) and Aspect Ratio	(16:9) 3840 × 2160	(16:9) 5344 × 3008 (3:2) 4944 × 3296	(16:9) 6240 × 3512 (3:2) 6240 × 4160	(16:9) 8448 × 4752 (3:2) 7776 × 5184	(16:9) 9568 × 5384 (3:2) 9568 × 6376	
	Minimum Illumination	0.004 lux (at F1.4)					
	Dynamic Range	WDR Off	70 dB				
		WDR On	120 dB				
	Max Image Rate	WDR Off	(50 Hz/60 Hz) 25 fps/24 fps	(50 Hz/60 Hz) 25 fps/24 fps	16:9: (50 Hz/60 Hz) 16.7 fps/17.1 fps 3:2: (50 Hz/60 Hz) 14.3 fps/15 fps	10 fps	3:2: 7 fps 16:9: (50 Hz/60 Hz) 8.3 fps/8.6 fps
		WDR On	(50 Hz/60 Hz) 16.7 fps/17.1 fps	(50 Hz/60 Hz) 16.7 fps/17.1 fps			
	Analytics	Yes			Yes, in Full Feature Mode	Yes	Not supported
Camera Operating Mode	N/A			Full Feature = Camera will prioritize analytics over other features. H.265 will be disabled.	N/A		
3D Noise Reduction Filter	Yes						

IMAGE CONTROL	Video Compression	H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG ¹
	Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG ¹
	Bandwidth Management	HDSM SmartCodec technology; Idle scene mode
	Motion Detection	Pixel and Unusual Activity Detection (UAD)
	Electronic Shutter Control	Automatic, Manual (1/7.5 to 1/8000 sec)
	Iris Control	² Automatic, Manual
	Flicker Control	50 Hz, 60 Hz
	White Balance	Automatic, Manual
	Backlight Compensation	Adjustable
	Privacy Zones	Up to 64 zones
	Audio Compression Method	Opus, G.711 PCM 8 kHz



¹ Motion JPEG streaming is limited to 16 MP resolution.
² Dependent on selected lens capability.

PERIPHERALS	Onboard Storage	2× microSD/microSDHC/microSDXC slot – video speed class card required. Class V10 or better recommended. Currently one of the two SD card slots is available for onboard storage.					
	Audio Input/Output	Line level input and output, A/V mini-jack (3.5 mm)					
	External I/O Terminals	Alarm In, Alarm Out					

NETWORK	Network	1000-BASE-T / 100-BASE-TX or 1000-BASE-SX / 1000-BASE-LX via SFP					
	Cabling Type	CAT5e or Optical Fiber ³					
	Connector	RJ-45 or SFP ³					
	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					
	ONVIF ⁴	ONVIF compliance Profile S and G (www.onvif.org).					
	Device Management Protocol	SNMP v2c, SNMP v3					

³ Camera supports one network connection at a time, either RJ-45 (CAT5e) or SFP (optical fiber).
⁴ 40 and 61 MP cameras can enable ONVIF compatibility, which will provide a single 32 MP primary stream that is compatible with 3rd party VMS integration.

MECHANICAL	Dimensions (L x W x H)	142 mm x 87 mm 82 mm; 5.6" x 3.4" x 3.2"					
	Weight	0.50 kg (1.1 lb)					
	Body	Aluminium					
	Finish	Black, Power Coat					
	Mount	¼"-20 UNC (top and bottom)					

ELECTRICAL	Power Consumption	18 W max (camera only)					
	Power Source	VDC: 12 V +/- 10%, 18 W	VAC: 24 V +/- 10%, 21 VA	PoE+: IEEE802.3at Class 4 compliant			
	Power Connector	2-pin terminal block					
	RTC Backup Battery	3V Manganese Lithium					

ENVIRONMENTAL	Operating Temperature	-25 °C to +60 °C (-13 °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	EAC	KC	BIS
	Safety	UL 62368-1		CSA 62368-1		IEC/EN 62368-1		IEC 62471		
	Electromagnetic Emissions	FCC Part 15 Subpart B Class B		IC ICES-003 Class B		EN 55032 Class B		EN 61000-6-3		
	Electromagnetic Immunity	EN 55035				EN 61000-6-1				

Analytics Specifications

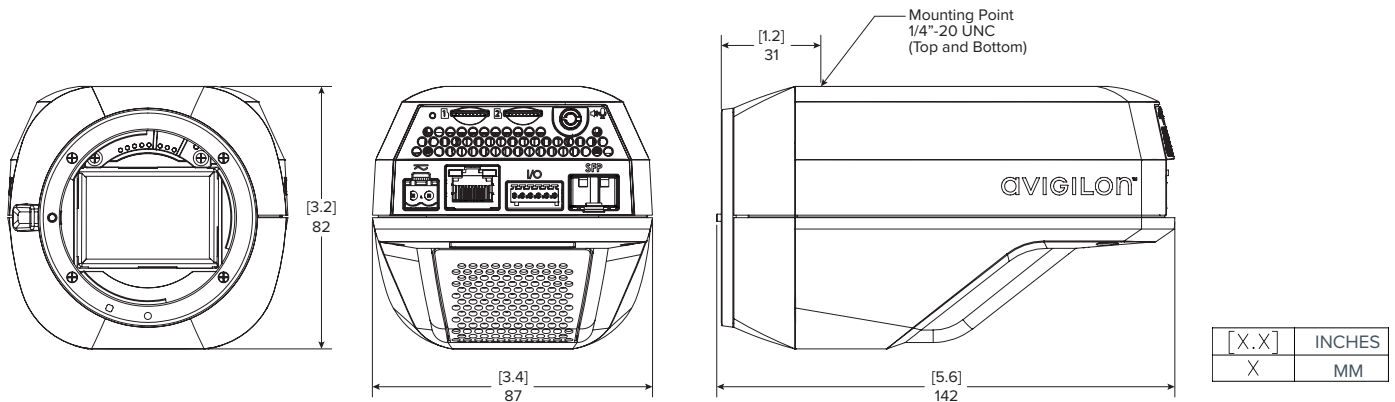
SUPPORTED ANALYTICS EVENTS	
Objects in Area	The event is triggered when the selected object type moves into the region of interest.
Object Loitering	The event is triggered when the selected object type moves into the region of interest and then stays for an extended amount of time.
Objects Crossing Beam	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 moves into a region of interest and then stops moving for the specified threshold time.
Direction Violated	The event is triggered when an object moves in the prohibited direction of travel.

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 6.14.12 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 7.2 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.
ACC Version 7.10.4 or higher	Improved support for decoding performance for multiple H5 Pro cameras on the ACC Client.

Outline Dimensions



Ordering Information

	MP	WDR	LightCatcher Technology	HDSM SmartCodec
8C-H5PRO-B	8.0	✓	✓	✓
16C-H5PRO-B	16.0	✓	✓	✓
26C-H5PRO-B	26.0	✓	✓	✓
40C-H5PRO-B	40.0	✓	✓	✓
61C-H5PRO-B	61.0	✓	✓	✓

Lens Compatibility

Description	Horizontal Field of View	ES-HD-HWS-LG			ES-HD-CWS-LG		ES-HD-HS-XL
		8 MP – 26 MP Pro Camera	40 MP – 61 MP Pro Camera	Outdoor HD Large Enclosure with Heater	Outdoor HD Large Enclosure with Cooling Fan	Outdoor HD Extra Large Enclosure	
LEF2814SI	Sigma 28mm f/1.4	45.7°	65.3°	✓	✓	○	
LEFS3014SI	Sigma 30mm f/1.4	42.9°	N/A	✓	✓	○	
LEF3514TA	Tamron 35mm f/1.4	37.3°	54.3°	✓	✓	○	
LEF4028CA	Canon 40mm f/2.8	32.9°	48.3°	✓	✓	○	
LEF5014SI	Sigma 50mm f/1.4	28.6°	39.5°	✓	✓	○	
LEF9028TA	Tamron 90mm f/2.8	15.0°	22.6°	✓	✓	○	
LEF163528CA2	Canon 16-35mm f/2.8	37.3° – 72.8°	54.3° – 96.6°	✓*	✓*	○*	
LEFS183518SI	Sigma 18-35mm f/1.8	37.3° – 66.5°	N/A	✓	✓	○	
LEF247028TA2	Tamron 24-70mm f/2.8 VC	19.1° – 52.4°	28.8° – 73.6°	✓*	✓*	○	
LEF7020028TA	Tamron 70-200mm f/2.8 VC	6.8° – 19.1°	10.3° – 28.8°	✓	✓	✓	
LEF1506005TA	Tamron 150-600mm f/5-6.3 VC	2.2° – 9.0°	3.4° – 13.7°			✓	

* Partial occlusion may be present at wide angles on the 40 MP and 61 MP H5 Pro camera variants.

○ Compatible ✓ Recommended

Enclosures

Part Number	Description	Operating Temperature Range	Cold Start
ES-HD-HWS-LG	IP66-rated large housing with heater and wall arm	-40 °C to +55 °C (-40 °F to 131 °F)	Startup delay at temperatures lower than -10 °C (14 °F)
ES-HD-CWS-LG	Large housing with cooling fan and wall arm	-25 °C to +60 °C (-13 °F to 140 °F)	N/A
ES-HD-HS-XL	IP66-rated extra large housing with heater. Wall arm sold separately	-40 °C to +60 °C (-40 °F to 140 °F)	Startup delay at temperatures lower than -10 °C (14 °F)

OPTIONAL CAMERA LICENSES AND ACCESSORIES

CAM-FIPS	Camera license to enable FIPS Level 1 cryptographic mode on any H5A camera
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