

# Unity H6SL Camera Line

2 MP

3 MP

5 MP

8 MP

5-YEAR WARRANTY

Versatility meets high-performance in the analytics-enabled Avigilon H6SL Camera Line for Avigilon Unity Video. Available as a bullet or dome form factor, these cameras can fit into an extensive range of indoor and outdoor applications in education, commercial, government, retail and hospitality sectors for optimal protection of people and property. It comes equipped with Next-Generation Video Analytics to proactively detect critical events and provide you with superior situational awareness of your site. Even in challenging lighting conditions, the Unity H6SL empowers you to see your site with sharp and clear images.



## Features



### Next-Generation Video Analytics

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



### Adaptive IR Options

Maximizes image quality in low-light or no-light areas.



### Wide Dynamic Range

Captures clear details in scenes with both very bright and dark areas.



### ONVIF® Conformant

ONVIF Profile S and T conformance enables easy integration with existing ONVIF infrastructures. Profile G conformance supports search, playback and retrieval of recordings on the edge, while Profile M allows for cross-functionality with third-party analytic solutions.



### Impact, Water, Dust & Corrosion Protection

Protects against impact, water, windblown dust and a degree of corrosion with IK10, IP66/67 and NEMA Type 4X ratings.<sup>1</sup>



### Long-Range Lens & Microphone Options

Offers long-range lens options for optimal site coverage. Provides the option to add a microphone accessory on the indoor dome variant for greater evidentiary detail.



### Quick & Easy Installation

The camera's modular design allows it to snap into various indoor mounting options for fast and easy installations.



### FIPS 140-2 Cryptography With Integrated TPM & Secure Boot

Brings increased data security with FIPS-compliant encryption enabled on cameras<sup>2</sup>, an onboard TPM<sup>3</sup> to secure cryptographic keys and Secure Boot.

<sup>1</sup> IK10 rating available on all models; IP66/67 and NEMA 250 Type 4X rating available on outdoor models only.

<sup>2</sup> Optional purchase of FIPS Level 1 camera license (CAM-FIPS).

<sup>3</sup> FIPS 140-2 Level 3-compliant trusted platform module (TPM).

ONVIF is a trademark of Onvif, Inc.

# Specifications

Image Performance		2.0 MP	3.0 MP	5.0 MP	8.0 MP (4K Ultra HD)
Image Sensor		1/2.8" progressive scan CMOS			1/1.8" CMOS
Imaging Area (H × V)		5.57 mm × 3.13 mm 0.219" × 0.123"	5.18 mm × 3.89 mm 0.204" × 0.153"	7.68 mm x 4.32 mm 0.302" x 0.170"	
Aspect Ratio		16:9	4:3	16:9	
Dynamic Range	WDR Off	83 dB			
	WDR On	126 dB	130 dB		
Camera Operating Mode		Full Feature/No Video Analytics		Full Feature/No Video Analytics/High Framerate	
Max Frame Rate		(50 Hz/60 Hz): 50 fps/60 fps		(50 Hz/60 Hz): 25 fps/30 fps	
Streaming Resolutions <sup>1</sup>	Primary Stream	1920x1080, 1440x1080	2048x1536, 2048x1152, 1792x1344	2592x1944 2240x1680 2560x1440 1920x1080	3840x2160, 3200x1800, 2880x2160, 3072x1728, 2560x1920, 1920x1080
	Secondary Stream	1920x1080, 1440x1080, 1280x960, 1280x720, 960x720, 800x600, 768x432, 640x480, 640x360, 512x288, 384x288, 384x216	1760x1320, 1920x1080, 1600x1200, 1280x960, 1280x720, 960x720, 768x432, 640x480, 640x360, 512x384, 512x288, 384x288, 384x216	1600x1200, 1440x1080, 1920x1080, 1280x960, 1280x720, 800x600, 768x432, 640x480, 640x360, 512x384, 512x288, 384x288, 368x264, 384x216	1920x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 800x600, 768x432, 640x480, 640x360, 512x384 512x288, 384x288
	Tertiary Stream	640x360, 512x384, 512x288, 384x216	640x480, 640x360, 512x384, 384x288, 384x216	640x360, 512x384, 512x288, 384x288, 368x264, 384x216	640x360, 512x384
Bandwidth Management		HDSM SmartCodec™ technology; Idle scene mode			
3D Noise Reduction Filter		Supported			
Signal-to-Noise Ratio (SNR)		> 50 dB			

<sup>1</sup> Available stream options may vary based on the combination of resolution and frame-rates selected for the individual streams, as well as the camera operating mode.

Lens and IR Illumination (Dome)		2.0 MP	3.0 MP	5.0 MP	8.0 MP(4K Ultra HD)
IR Illumination Max Distance (high power 850 nm LEDs)		30 m (100 ft), full tele 20 m (65 ft), full wide			40 m (131 ft), full tele 25 m (82 ft), full wide
Minimum Illumination (at 33 ms shutter speed)		With IR: 0 lux in monochrome mode; Without IR: 0.01 lux in color mode; 0.005 lux in monochrome mode	With IR: 0 lux in monochrome mode; Without IR: 0.04 lux in color mode; 0.02 lux in monochrome mode		With IR: 0 lux in monochrome mode; Without IR: 0.02 lux in color mode; 0.01 lux in monochrome mode
Horizontal Angle of View		101° - 31°	95° - 28°		103° - 47°
Vertical Angle of View		53° - 17°	69° - 21°		54° - 26°
Max Aperture		F1.6			F1.3
Lens Control		Remote Zoom and Focus, Autofocus, IR Cut Filter			

Lens and IR Illumination (Bullet)		2.0 MP	3.0 MP	5.0 MP	8.0 MP(4K Ultra HD)
IR Illumination Max Distance (high power 850 nm LEDs)	3.4-10.5 mm	50 m (164 ft), full tele 30 m (100 ft), full wide	40 m (131 ft), full tele 20 m (65 ft), full wide		N/A
	10.9-29 mm	N/A	70 m (230 ft), full tele 30 m (100 ft), full wide		N/A
	4.4 - 9.3 mm	N/A			50 m (164 ft), full tele 30 m (100 ft), full wide
Minimum Illumination (at 33 ms shutter speed)	3.4-10.5 mm	With IR: 0 lux in monochrome mode; Without IR: 0.01 lux in color mode; 0.005 lux in monochrome mode	With IR: 0 lux in monochrome mode; Without IR: 0.04 lux in color mode; 0.02 lux in monochrome mode		N/A
	10.9-29 mm	N/A	With IR: 0 lux in monochrome mode; Without IR: 0.04 lux in color mode; 0.02 lux in monochrome mode		N/A
	4.4 - 9.3 mm	N/A			With IR: 0 lux in monochrome mode; Without IR: 0.02 lux in color mode; 0.01 lux in monochrome mode
Horizontal Angle of View	3.4-10.5 mm	101° - 31°	95° - 28°		N/A
	10.9-29 mm	N/A	28° - 10°		N/A
	4.4 - 9.3 mm	N/A			103° - 47°
Vertical Angle of View	3.4-10.5 mm	53° - 17°	69° - 21°		N/A
	10.9-29 mm	N/A	21° - 7°		N/A
	4.4 - 9.3 mm	N/A			54° - 26°
Max Aperture	3.4-10.5 mm	F1.6			N/A
	10.9-29 mm	F1.7			N/A
	4.4 - 9.3 mm	N/A			F1.3
Lens Control		Remote Zoom and Focus, Autofocus, IR Cut Filter			

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: Selectable sensitivity and threshold. Classified object detection.
Electronic Shutter Control	Automatic, Manual (1/7.5 to 1/30000 sec)
Day/Night Control	Automatic, Manual
Flicker Control	50 Hz, 60 Hz
Iris Control	P-Iris
White Balance	Automatic, Manual
Backlight Compensation	Adjustable
Image Rotation	0°,90°, 180°, 270° including Corridor Mode
Privacy Zones	Up to 64 zones

Network	
Network	100BASE-TX
Cabling Type	CAT5
Network	RJ45 Connector
ONVIF	ONVIF® compliance Profile S, Profile T, Profile G, and Profile M ( <a href="http://www.onvif.org">www.onvif.org</a> )
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), onboard FIPS 140-2 L3 certified TPM, Secure

Network	
	Boot, signed and encrypted firmware, CC EAL6+
Protocols	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMPv3, ICMP, DHCP, Zeroconf, HSTS, QoS, DSCP
Streaming Protocols	RTP/UDP, RTP/UDP multicast, RTP/RTSP/TCP, RTP/RTSP/HTTP/TCP, RTP/RTSP/HTTPS/TCP, HTTP, SRTP
Device Management Protocols	SNMP v2c, SNMP v3

Peripherals	
Onboard Storage	microSD/microSDHC/microSDXC slot – video speed class card required. Class V10 or better recommended. 1.5 TB card tested.
USB Port	USB 2.0

Auxiliary I/O	
Audio Compression Method	G.711 PCM 8 kHz, Opus
Audio Input/Output	Line level I/O
External I/O Terminals	Alarm In, Alarm Out
Microphone (Indoor Dome)	Optional Microphone accessory sold separately for Indoor Dome Camera only

Mechanical (Dome)	Surface Mount	In-Ceiling Mount	Pendant Mount
Dimensions	D 156 mm × H 116 mm; D 6.1" × H 4.6"	D 174 mm × H 165 mm; D 6.9" × H 6.5"	D 156 mm × H 161 mm; D 6.2" × H 6.3"
Weight	0.81 kg	0.80 kg	1.07 kg
Max. Ceiling Thickness	N/A	25 mm (1.0")	N/A
Dome Bubble	Polycarbonate		
Body	Polycarbonate		
Housing	Polycarbonate		
Finish	Plastic, injection molded, Pantone 427C		
Adjustment Range	360° pan, 30°–95° tilt (recommended), 8°–95° tilt (maximum), ±180° azimuth		

Mechanical (Bullet)		3.4-10.5 mm	10.9-29 mm	4.4 - 9.3 mm
Dimensions (L x W x H)	Camera with junction box	296 mm × 126 mm × 106 mm; 11.7" × 5.0" × 4.2"		
Weight		1.31 kg (1.78 kg with junction box)		
Body		Aluminum		
Housing		Aluminum		
Finish		Powder coat, close to Pantone 427C		
Adjustment Range		±175° pan, ±90° tilt, ±175° azimuth		

Electrical		
Power Source	PoE: IEEE 802.3af Class 3 compliant, 12VDC Aux (Available on Bullet only)	
IR Illuminator Behaviour	Dome	IR illuminator will turn off if the temperature is 60°C (140°F) or higher. The illuminator will operate at 50% power if the temperature is between 40°C (104°F) and 52 °C (117°F). Hysteresis: 2°C (3.6°F).
	Bullet	IR illuminator will turn off if the temperature is 60°C (140°F) or higher.
RTC Battery Backup	3V manganese lithium	
PoE	Dome	10 W max (8 W with no IR or IR disabled)
	Bullet	13 W max
Memory	1GB RAM, 512MB Flash	

Environmental	Indoor Dome	Outdoor Dome	Bullet
Operating Temperature	-10°C to +60°C (14°F to 140°F)	-40°C to +60°C (-40°F to 140°F)	-40°C to +60°C (-40°F to 140°F)
Storage Temperature	-10°C to +70°C (14°F to 158°F)		
Absolute Maximum Temperature	74°C (165°F) per NEMA TS2 (Temp.) para 2.2.7.2 - 2.2.7.7		
Humidity	0 - 95% non-condensing		

Certifications	Indoor Dome	Outdoor Dome	Bullet
Certifications/Approvals	UL, cUL, CE, UKCA, ROHS, RCM, NOM, KC, BIS		
Safety	UL/CSA/EN/IEC 62368-1, IEC 62471		
Environmental	IEC/EN 62262 Impact (IK 10), IEC 60529 IP52 rating	IEC/EN 62262 (IK 10), IEC 60529 IP66, IP67 rating, Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27	IEC/EN 62262 (IK 10), IEC 60529 IP66, IP67 rating, Type 4X, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27
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, EN 50130-4, EN 50121-4		
Warranty	5-year warranty		

## 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.
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™ or Avigilon Unity Video

Avigilon Control Center (ACC) Versions Supported Features	
ACC Enterprise Edition Version 6.14.12 or higher	All supported analytic events with two types of classified objects: person or vehicle.
ACC Enterprise Edition Version 7.2 or higher	All supported analytic events with people and vehicles and all vehicle sub-types as classified objects.

Analytic capabilities on the H6SL Camera Line include Unusual Activity Detection, Classified Object Detection and Advanced Analytic Event configurations (e.g. Objects in Area).

Appearance Search, Face Recognition, and other ACC server analytics are not available for use with the H6SL Camera Line.

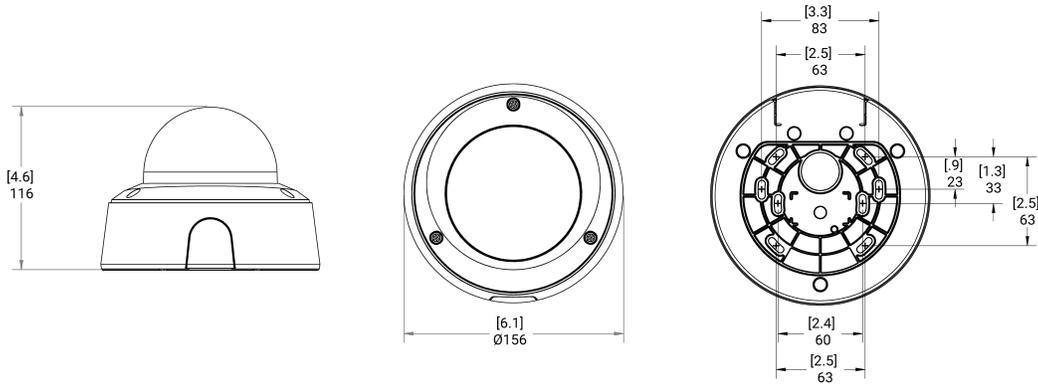
Analytics capabilities, including detection range, may vary by camera line. Consult the Avigilon Self-Learning Video Analytics Design Guide for details specific to the H6SL Camera Line.

# Outline Dimensions

[X.X]	INCHES
X	MM

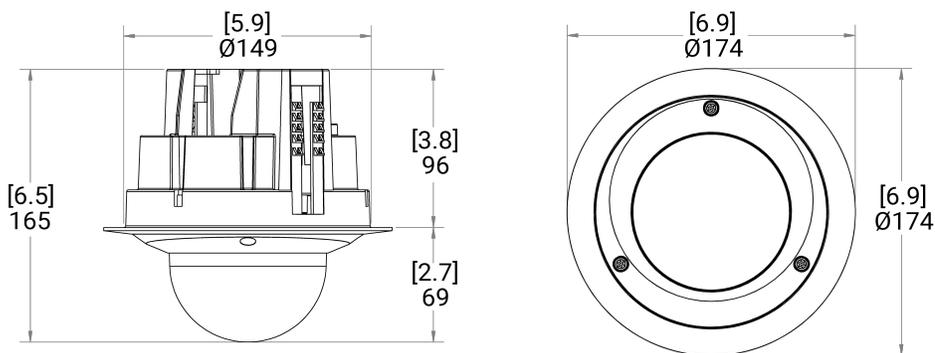
## Dome Camera with Surface Mount

(H6SL Dome Camera + Provided Surface Mount)



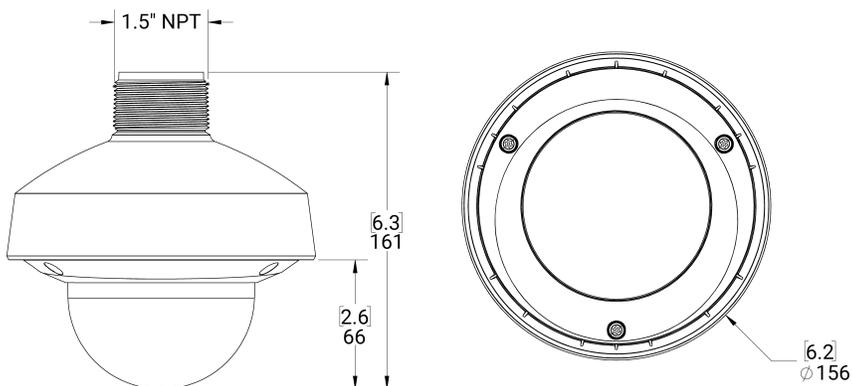
## Dome Camera with In-ceiling Mount

(H6SL Dome Camera + SLSPCIL-1001)



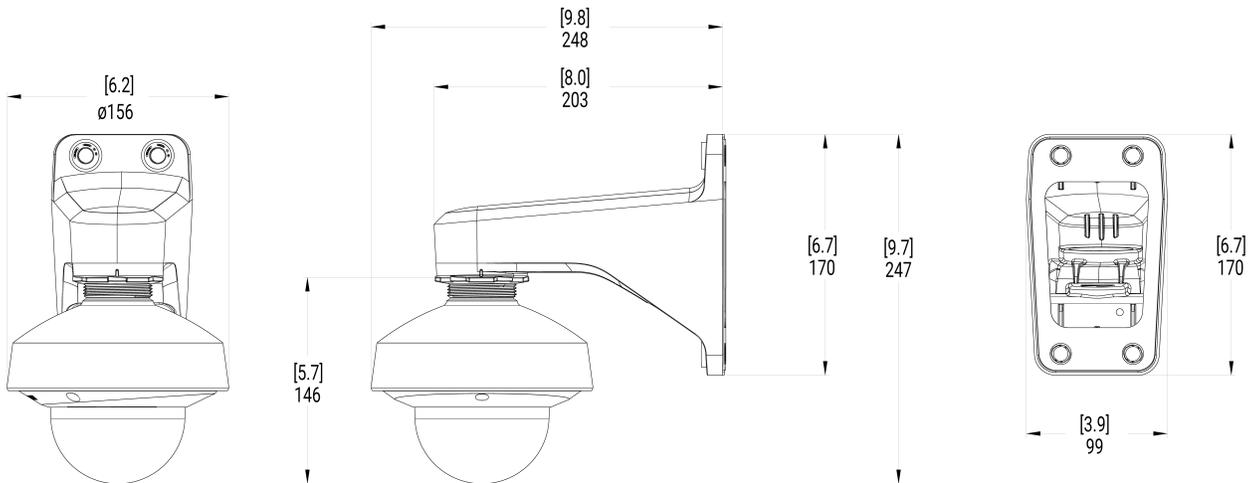
## Dome Camera with NPT Adapter

(H6SL Dome Camera + H6SL-MT-NPTA1)

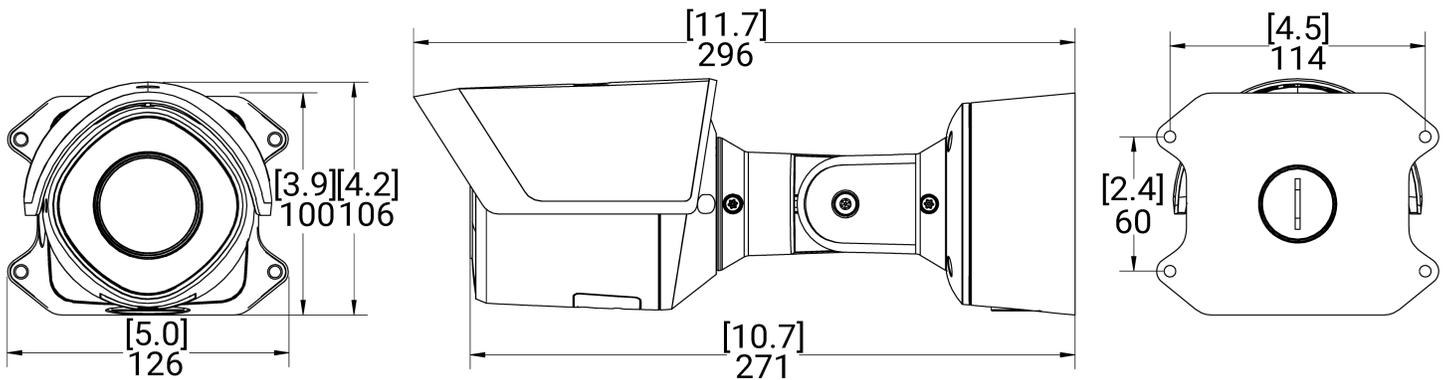


## Dome Camera with NPT Adapter and Pendant Wall Mount

(H6SL Dome Camera + H6SL-MT-NPTA1 + WLMT-1021)

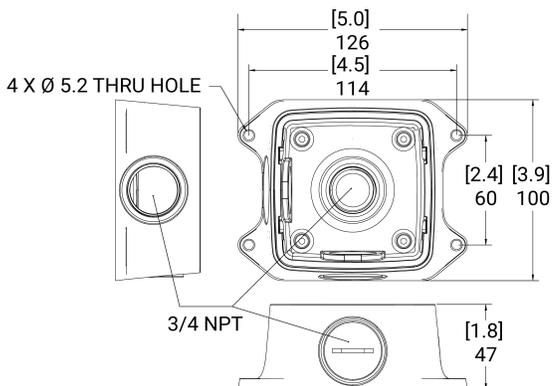


## Bullet Camera



## Bullet Junction Box

(Provided With Camera)



# Ordering Information

## Bullet Camera

Model Number	MP	WDR	Analytics	Lens	IR	IP66/IP67, Type4x	SmartCodec	LIGHTCATCHER™ Technology
2.0C-H6SL-B01-IR	2.0	✓	✓	3.4-10.5 mm	✓	✓	✓	✓
3.0C-H6SL-B01-IR	3.0	✓	✓	3.4-10.5 mm	✓	✓	✓	✓
3.0C-H6SL-B02-IR	3.0	✓	✓	10.9-29 mm	✓	✓	✓	✓
5.0C-H6SL-B01-IR	5.0	✓	✓	3.4-10.5 mm	✓	✓	✓	✓
5.0C-H6SL-B02-IR	5.0	✓	✓	10.9-29 mm	✓	✓	✓	✓
8.0C-H6SL-B01-IR	8.0	✓	✓	4.4-9.3 mm	✓	✓	✓	✓

## Dome Camera

Model Number	MP	WDR	Analytics	Lens	IR	IP66/IP67, Type4x	SmartCodec	LIGHTCATCHER™ Technology
2.0C-H6SL-D1	2.0	✓	✓	3.4-10.5 mm			✓	✓
2.0C-H6SL-D1-IR	2.0	✓	✓	3.4-10.5 mm	✓		✓	✓
2.0C-H6SL-D01-IR	2.0	✓	✓	3.4-10.5 mm	✓	✓	✓	✓
3.0C-H6SL-D1	3.0	✓	✓	3.4-10.5 mm			✓	✓
3.0C-H6SL-D1-IR	3.0	✓	✓	3.4-10.5 mm	✓		✓	✓
3.0C-H6SL-D01-IR	3.0	✓	✓	3.4-10.5 mm	✓	✓	✓	✓
5.0C-H6SL-D1	5.0	✓	✓	3.4-10.5 mm			✓	✓
5.0C-H6SL-D1-IR	5.0	✓	✓	3.4-10.5 mm	✓		✓	✓
5.0C-H6SL-D01-IR	5.0	✓	✓	3.4-10.5 mm	✓	✓	✓	✓
8.0C-H6SL-D01-IR	8.0	✓	✓	4.4-9.3 mm	✓	✓	✓	✓

## Accessories

Part Number	Description
WLMT-1021	Wall Mount Arm for 1.5" NPT Pendant
PLMT-1001	Pole Mount Adapter for WLMT-1021 and H6SL Bullet Camera
CRNMT-1001	Corner Mount for WLMT-1021 and H6SL Bullet Camera
USB-AC56-NA-MSI	USB WiFi Adapter Install Kit (North America)
USB-AC56-EU-MSI	USB WiFi Adapter Install Kit (Europe)
SLSPCIL-1001	In-ceiling mounting adapter for H6SL Dome Camera
H6SL-MT-NPTA1	Pendant NPT adapter for H6SL Dome Camera
DCLPNL-1001	Metal ceiling panel for suspended ceiling installations
H6SL-DO-SHLD1	Weathershield for H6SL Dome Camera
ACMICR-1001	Microphone accessory for Indoor H6SL Dome Camera
H6SL-DD-CLER1	Clear lower dome for H6SL Outdoor Dome Camera
H6SL-DD-SMOK1	Smoked lower dome for H6SL Outdoor Dome Camera
H6SL-DI-CLER1	Clear lower dome for H6SL Indoor Dome Camera
H6SL-DI-SMOK1	Smoked lower dome for H6SL Indoor Dome Camera
CNCVR-1001	Adapter 3/4 inch conduit for H6SL Dome Camera, 5-pack
CAM-FIPS	Camera license to enable FIPS Level 1 cryptographic mode

# Support

Learn more and find additional documentation at [avigilon.com](https://avigilon.com) or email [sales@avigilon.com](mailto:sales@avigilon.com) for specific product support.



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