

SX1CH-AVI Series

Explosion Proof Fixed Camera Housing

Integrated with Avigilon Camera Module + optional built-in edge analytics



SX1CH



SX1CH-W



SX1CH-LEDW

Main Features



Marine grade
AISI316L Stainless
Steel material



Ex II 2 G Ex db op pr
IIC T6 Gb / Ex II 2 D Ex
tb op pr IIIC T80°C Db,
IP 66 / 68



Multiple lens options
available



Option for LED
illuminator
available



Option for IEEE
802.3bt PoE++
(90Watt)



Intelligent Video
Analytics for Human,
Vehicle & Object
Detection



(Optional) Advanced
Analytics Fire or
Smoke Detection



(Optional) Simplify
Unified Intelligent
Platform

Technical Data

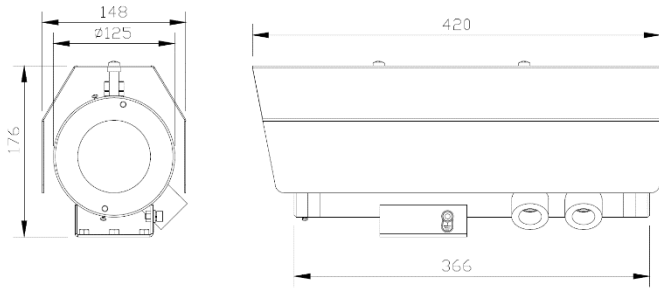
General	
Certification	Ex II 2 G Ex db op pr IIC T6 Gb / Ex II 2 D Ex tb op pr IIIC T80°C Db
Protection Level	IP 66 / 68, TVS 6000V Lightning Protection, Surge Protection and Voltage Transient Protection
Operating Temperature	-40°C to 60°C
Relative Humidity	≤95%
Mechanical	
Body Material	AISI316L Stainless Steel
Sight Glass Material	Window with hardened mineral clear tempered glass
	Window with Germanium glass (for SX1CH-G and SX1CH-GL models)
Overall Dimension (WxHxD)	<i>Please refer to overall dimension drawings of each model.</i>
Weight	Approximate 25KG
Internal Usable Size for Camera Module	Ø80 x 155 mm
Cable Entry	2 x M25
Electrical	
Operating Voltage	AC110-240V (0.5A - 1.10A), 50/60Hz Optional: IEEE 802.3at PoE+
Power Consumption	Max 110W (110V), Max 120W (240V)
Thermostatically Controlled Heater	T°C on: <10°C, T°C off: >10°C
Optional	
Wiper Mechanism	Available for SX1CH-W and SX1CH-LEDW model
LED Illumination	Up to 200 meters (Available for SX1CH-LED and SX1CH-LEDW model)
Built in Fiber Optic Module	Single Mode or Multi Mode or Dual Mode (-SM or -MM or -DM model, please refer to below ordering info)
Accessories	
Standard	Sunshield, Swivel Joints
Optional	Wall Bracket

	Self-learning Video Analytics Range					
	2MP, 18x Zoom	2MP	4MP (9)	4MP (22)	6MP	8MP [4K]
Sensor	1/2.8"				1/1.8"	
Focal Length (mm)	4.7 – 84.6	3.3 – 9	3.3 – 9	9 – 22	4.9 – 8	4.9 – 8
Focus	F1.6	F1.3	F1.3	F1.6	F1.8	
Effective Pixels (HxV)	(16:9) 1920 x 1080		(16:9) 2560 x 1440 (4:3) 2304 x 1728		(16:9) 3200 x 1800 (3:2) 3027 x 2048	(16:9) 3840 x 2160
Horizontal Angle of View	(16:9) 4.1° – 60°	(16:9) 34° – 99°	(16:9) (4:3) 34° – 92°	(16:9) 14° – 31° (4:3) 11° – 24°	(16:9) 52° – 92° (3:2) 41° – 73°	(16:9) 52° – 92°
Max Image Rate	(50 Hz/60 Hz): 25 fps/30 fps		WDR off (50 Hz/60 Hz): 25 fps/30 fps WDR on (50 Hz/60 Hz): 20 fps/20 fps		(50 Hz/60 Hz): 25 fps/30 fps	
Day/Night Control	Automatic, Manual					
Illumination Requirement	Color: 0.039Lux B/W: 0.02Lux	Color: 0.027Lux B/W: 0.014Lux	Color: 0.03Lux B/W: 0.015Lux	Color: 0.058Lux B/W: 0.029Lux	Color: 0.055Lux B/W: 0.028Lux	
Image Compression Method	H.264 HDSM SmartCodec, H.265 HDSM SmartCodec, Motion JPEG					
Protocols	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, Zeroconf, ARP					
Analytics Events	Objects in Area, Loitering, Crossing Beam, Object Appears or Enters Area, Object Not Present in Area, Objects Enter Area, Objects Leave Area, Object Stops in Area, Direction Violated, Tamper Detection					
Advanced Analytics	(optional upon request) Fire Detection or Smoke Detection					
Intelligent Platform	(optional upon request) Simplify Unified Intelligent Platform Integration					

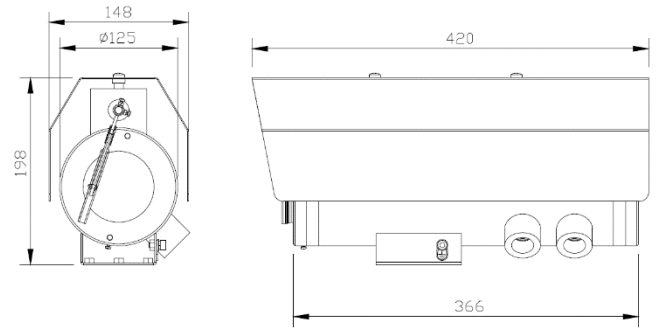
*Analog camera and other camera module options are available upon request.

*Thermal camera options are available for G model. Please contact us for the details

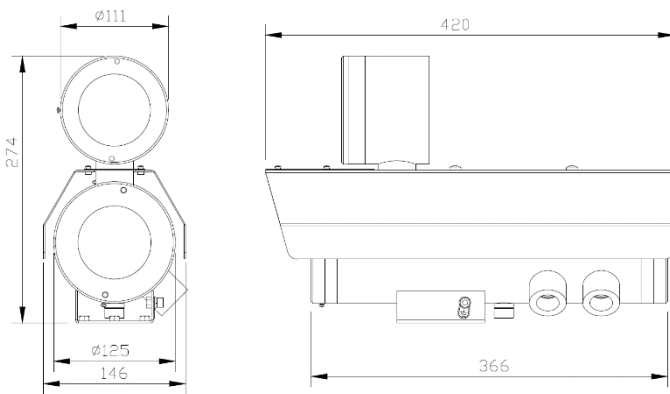
Outline Dimensions (mm)



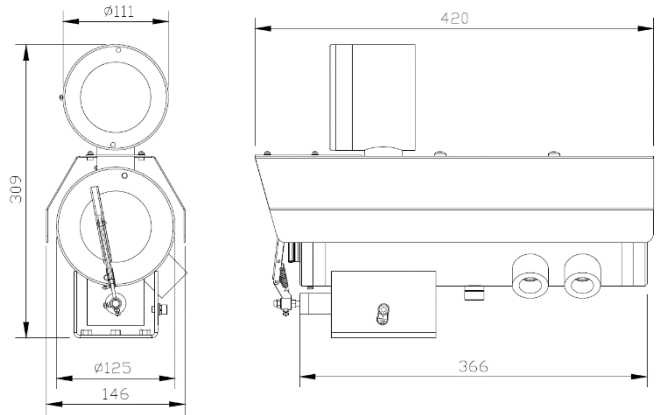
SX1CH Outline Dimensions



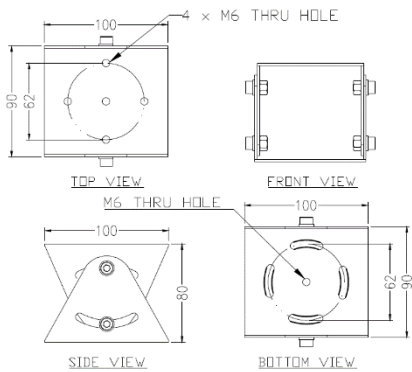
SX1CH-W Outline Dimensions



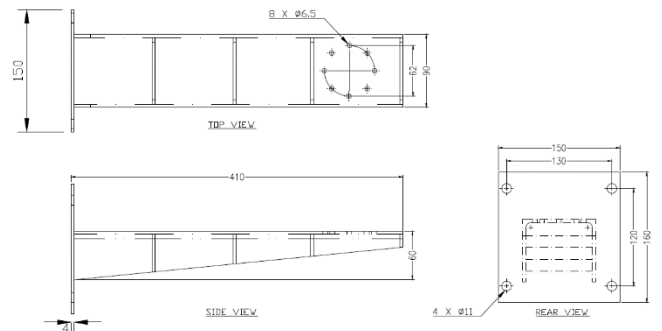
SX1CH-LED Outline Dimensions



SX1CH-LEDW Outline Dimensions



SJ-SX1CH - Swivel Joints Outline Dimensions



WB-SX1CH - Wall Bracket Outline Dimensions

Model & Ordering Code

SX1CH - X - AVI - X - X - X

POE Options

Blank : No additional option
POE : POE+

Built-in Fiber Optic Module Options

Blank : No additional option
SM : Single Mode
MM : Multi Mode
DM : Dual Mode

Camera Module Options

18x2M : 2MP, 18x Zoom, IP with Self-learning Video Analytics
2M : 2MP, IP with Self-learning Video Analytics
4M (9) : 4MP (3.3-9mm), IP with Self-learning Video Analytics
4M (22) : 4MP (9-22mm), IP with Self-learning Video Analytics
6M : 6MP, IP with Self-learning Video Analytics
8M : 8MP, IP with Self-learning Video Analytics

Additional Options

Blank : No additional option
W : Fitted with wiper mechanism
LED : With LED Illuminator
LEDW : With LED Illuminator and Wiper

Standard Accessories

SCH-SX1CH : Sunshield for Camera Housing (for SX1 series without LED illuminator)
SCH-SX1CH-LED : Sunshield for Camera Housing with LED illuminator (for SX1CH-LED and SX1CH-LEDW)
SJ-SX1CH : Swivel Joints

Optional Accessories

WB-SX1CH : Wall Bracket