

SX1CH-G Series

Explosion Proof Fixed Thermal Camera Housing



SX1CH-G

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



Vandal-proof IK10
ratings



Operating
Temperature -40°C to
60°C



IP 66 / 68



Options for thermal
camera available

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 Germanium glass
Overall Dimension (WxHxD)	<i>Please refer to overall dimension drawings of each model.</i>
Internal Usable Size for Camera Module	Ø105 x 250 mm
Cable Entry	2 x M25
Weight	Approximate 25KG
Electrical	
Operating Voltage	AC110-240V (0.5A - 1.10A), 50/60Hz
Power Consumption	Max 110W (110V), Max 120W (240V)
Thermostatically Controlled Heater	T°C on: <10°C, T°C off: >10°C
Optional	
Built in Fiber Optic Module	Single Mode or Multi Mode (-SM or -MM model, please refer to below ordering info)
Accessories	
Standard	Sunshield, Swivel Joints
Optional	Wall Bracket

Thermal Camera/Lens

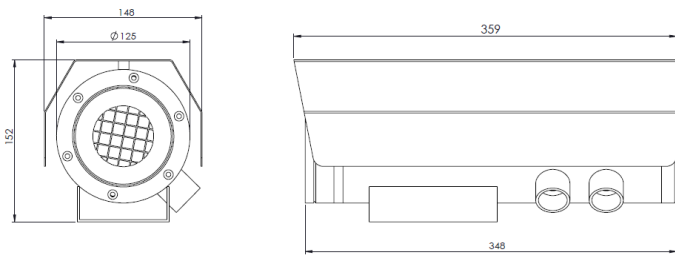
	384	640
Type	Uncooled FPA	
Resolution	384x288	640x480
Pixel pitch	17µm	
NETD	≤80mK@F1, 300K, 50Hz	
Field Frequency	50Hz	
Spectral range	8 - 14 µm	
Lens	Options: 9mm, 13mm, 25mm, 37mm, 42mm	Options: 7.5mm, 9mm, 15mm, 18mm, 30mm, 37mm
Brightness/Gain Adjustment	Yes	
Polarity Inversion	Reverse color	
Digital Zoom	Up to 4x Zoom	
Image Enhancement	Yes	
Calibration	Manually calibrate, automatically calibrate when powers on calibrate punctually when normally works	
Rolling-over/mirror	On/Off	

Display	Varieties of pseudo color labels (firefighting color, iron hot, red hot, amber, white hot, black hot, etc.)
Focus	Manually/Automatically
Pan & Tilt Control	Yes
Storage	Support Micro SD, up to 64G, local storage, NAS (NFS, SMB support) / FTP protocol
OSD	Time, date, channel number, channel name and custom text, temperature measurement information
Recording Models	Mobile Surveillance, Alarm Recording (Gray, highest temperature, areas, alarming cross the lines, etc.), network disconnect recording, timing recorded
Raw Thermal Image Output	25 frame/second, in the back end manually capture the signal frame raw image and data, the raw image can be analyzed and measured temperature
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.264, Motion JPEG
Resolution	640x480 / 384x288
Max Frame Rate	H.264 : 30fps MJPEG : 640x480: 15fps
Video Quality Modulation	H.264 : Compression degree, target bite rate degree control
Bit Rate Control Way	H.264 : CBR or VBR
IP	IPv4
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, ICMP, IGMP, ARP, DNS, DDNS
Safety	HTTPS(SSL) Login Verification, Class Login Verification, IP address filter, user access log, 802.1x ID Verification
On-board Storage	Micro SD : Download the moving recorded image from SD card NAS: Support to record to NAS
Applied Program Interface	ONVIF Profile S
Web Browser	Microsoft Internet Explorer (Version 9~11)
Temperature measurement range	-20°C to 180°C
Accuracy	±2°C or ±2%
Mode	Supports 3 movable points, 3 movable areas (highest temperature, lowest temperature, average temperature measurement)
Emissivity Correction	0.01 to 1.0 adjustable
Alarm Output	Switch output
Protocol Output	SDK alarm protocol output, ONVIF alarm information output

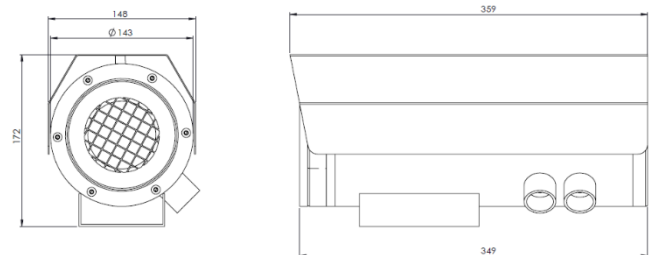
Resolution	Lens (mm)	FOV
640×480	Fixed	
	9	62.3° x 48.8°
	25	24.6° x 18.5°
	37	16.7° x 12.6°
	Motorized	
	13	45.4° x 34.8°
	25	24.6° x 18.5°
384×288	Fixed	
	9	39.9° x 30.4°
	18	20.6° x 15.5°
	37	10.1° x 7.6°
	Motorized	
	7.5	47.0° x 36.2°
	15	24.6° x 18.5°
	30	12.4° x 9.3°

Lens Comparison Table

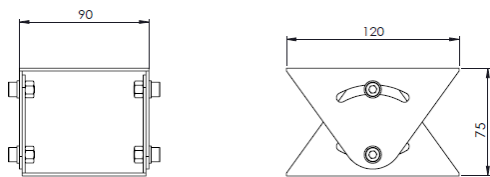
Outline Dimensions (mm)



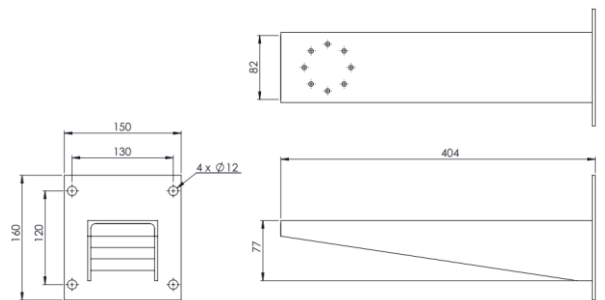
SX1CH-G Outline Dimensions



SX1CH-GL Outline Dimensions



SJ-SX1CH - Swivel Joints Outline Dimensions



WB-SX1CH - Wall Bracket Outline Dimensions

Model & Ordering Code

SX1CH - X - X - X - X

Built-in Fiber Optic Module Options

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

Thermal Camera Focal Length Options

7.5 : 7.5 mm motorized lens
 13 : 13 mm motorized lens
 15 : 15 mm motorized lens
 25 : 25 mm motorized lens
 30 : 30 mm motorized lens
 42 : 42 mm motorized lens
 F9 : 9 mm fixed lens
 F18 : 18 mm fixed lens
 F25 : 25 mm fixed lens
 F37 : 37 mm fixed lens

**Please refer lens comparison table above.*

Thermal Camera Module Options

384 : 384x288 resolution
 640 : 640x480 resolution

Camera Station Options

G : With Germanium Window and Front Guard
 GL : Large Diameter (143 mm) with Germanium Window and Front Guard

Standard Accessories

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

Optional Accessories

WB-SX1CH : Wall Bracket