

SX1PTZ-G-VXT Series

Explosion Proof PTZ Thermal Camera Station
Integrated with Ventionex Thermal Camera Module



SX1PTZ-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



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



IP 66 / 68



Option 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	Stainless steel 316L material	
Sight Glass Material	Window with Germanium glass	
Pan & Tilt Speed	Variable speed option: 0.1 ⁰ /s to 45 ⁰ /s	
Pan & Tilt Movement	Pan: 360° continuously	Tilt: -90° ~ +90°
Overall Dimension (WxHxD)	Please refer to overall dimension drawings of each model.	
Internal Usable Size for Camera Module	G Series: Ø80 x 213 mm; GL Series: Ø95 x 213 mm	
Cable Entries	1 x M25 (optional additional cable entry upon request)	
Weight	Approximate 38KG	
Electrical		
Operating Voltage	AC110-240V (0.5A - 1.10A), 50/60Hz Optional: IEEE 802.3bt PoE++(90W)	
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 for Camera Housing	
Optional	Wall Bracket, Sunshield for Pan & Tilt Body, Pole Top Mounting Adapter	

Thermal Camera/Lens

	384	640
Video		
Type	Uncooled FPA microbolometer	
Resolution	384x288	640x480
Pixel pitch	17μm	
NETD	≤50mK@f1.0, 300K, 30Hz	
Field Frequency	50Hz	
Spectral range	8 ~ 14 μm	
Lens		
Focal Length Options	Motorized focus lens: 4.8mm, 8mm(f0.8), 12mm, 20mm, 35mm, 50mm	
Focus Control (Motorized focus lens only)	Motorized focus by pressing “focus +/-” button	

Operational		
OSD	Off / On (English: 20 characters, 5 Lines)	
Pan & Tilt Control	Yes	
Frame Frequency	25 / 30Hz	
Brightness	Manual adjustment (0~100)	
Gain Control	Manual adjustment (0~100)	
Image Enhancement	On / Off (Edge enhancement only)	
Digital Noise Reduction (DNR)	SSNR (2D) Noise Filter (Off / On)	
Rotate Image	Flip: On / Off, Mirror: On / Off	
Intelligent Video Analytics	Motion Detection	
Alarm Triggers	Temperature Alarm, Motion Detection	
Built-in Motion Detection	Off / On (3 Zones, Rectangular)	
Temperature Alarm Events	Up to 10 rectangular ROIs, temperature setting in each ROI in max., min., or average	
Built-in Motion Detection	Off / On (3 Zones, Rectangular)	
Detection Mode (Thermal Core)	Normal Temperature Range	-20 °C ~ 120 °C
	High Temperature Range	0 °C ~ 500 °C
Measurement accuracy in lab condition	±2°C or ±2% of temperature reading (Thermal camera with normal temperature detection mode has better accuracy than camera with high temp. mode)	
Application	Fire prevention, Preventive maintenance, Intrusion detection (human, animal) and other general analysis application	
Network		
Ethernet	RJ45 (10/100BASE-T)	
Video Compression Format	H264 (MPEG-4 Part 10/AVC) : Main/Baseline/High Motion JPEG	
Resolution	720x756, 640x480, 584x288, 720x480, 520x240	
Max. Frame Rate	[H264] Max 30fps at all resolutions, [MJPEG] Max 15fps@640x480	
Bitrate Control Method	CBR or VBR, Motion JPEG: VBR (Bitrate Range: 128K ~ 1M)	
Streaming Capability	Multiple Streaming (Up to 3 profiles) Max. Users Number: 10 (total bitrate), Max. Profile Count: 4, Fixed Profile (Default): 2	
IP	IPv4, IPv6	
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, ICMP, IGMP, ARP, DNS, DDNS, SMTP	
Security	IP Address Filtering User access Log HTTPS(SSL) Login Authentication, Digest Login Authentication, 802.1X Authentication	
Streaming Method	Unicast / Multicast	
Max. User Access	Max. 10 users access	
API	ONVIF Profile S Ver 2.4	
Web Language (17)	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Dutch, Portuguese, Turkish, Polish, Czech, Hungarian, Greek	
Web Viewer	Supported OS: Windows XP / VISTA / 7 / 8 / 8.1 / 10 Supported Browser: Microsoft Internet Explorer (Ver. 9~11)	

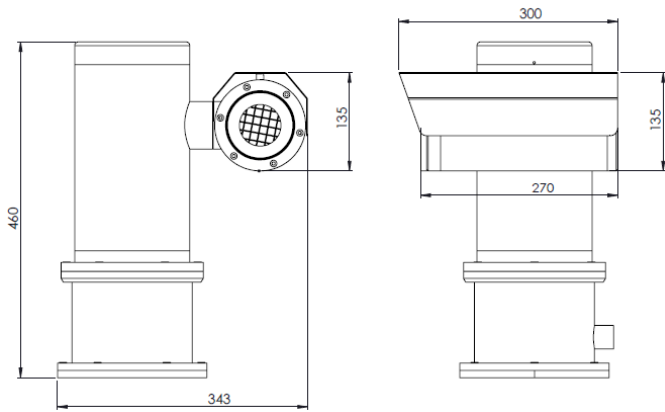
Lens FOV and DORI Comparison

Resolution	Lens (mm)	FOV	Detection (m)	Recognition (m)	Identification (m)
640x480	4.8	97.15° x 80.73°	178.58	44.64	22.32
	8	68.43° x 54.04°	297.63	74.41	37.20
	12	48.77° x 37.56°	446.44	111.61	55.80
	20	30.43° x 23.06°	744.07	186.02	93.01
	35	17.67° x 13.30°	1302.11	325.53	162.76
	50	12.42° x 9.33°	1860.16	465.04	232.52
384x288	4.8	68.43° x 54.04°	178.58	44.64	22.32
	8	44.39° x 34.03°	297.63	74.41	37.20
	12	30.43° x 23.06°	446.44	111.61	55.80
	20	18.54° x 13.96°	744.07	186.02	93.01
	35	10.66° x 8.00°	1302.11	325.53	162.76
	50	7.47° x 5.61°	1860.16	465.04	232.52

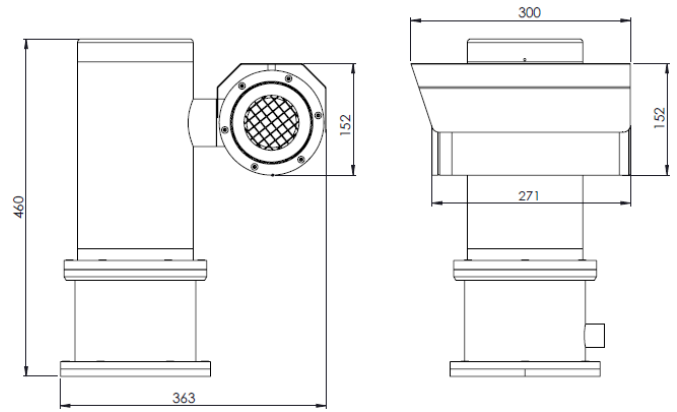
*Lens 35mm and 50mm will need to use GL Housing Series only.

Lens Comparison Table

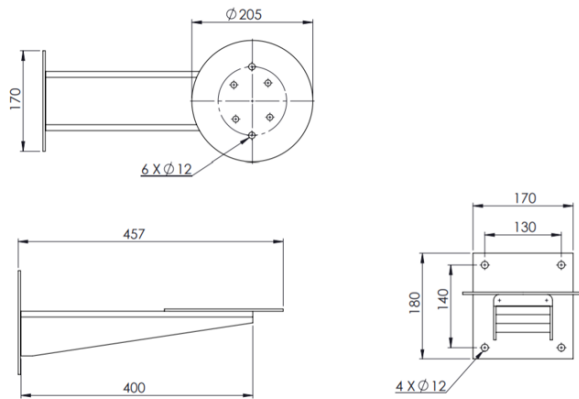
Outline Dimensions (mm)



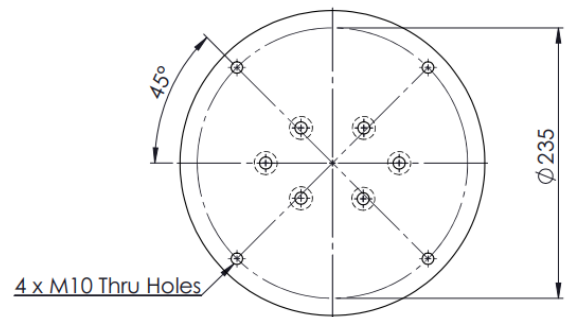
SX1PTZ-G Outline Dimensions



SX1PTZ-GL Outline Dimensions



WB-SX1PTZ - Wall Bracket Outline Dimensions



PTA-SX1PTZ - Pole Top Mounting Adapter Outline Dimensions

Model & Ordering Code

SX1PTZ - X - X - X - 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

Detection Mode Options

- Blank : Normal Temperature
- H : High Temperature

Thermal Camera Focal Length Options

- M4.8 : 4.8 mm motorized lens
- M8 : 8 mm motorized lens
- M12 : 12 mm motorized lens
- M20 : 20 mm motorized lens
- M35 : 35 mm motorized lens
- M50 : 50 mm motorized 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-SX1PTZ : Sunshield for Camera Housing

Optional Accessories

- WB-SX1PTZ : Wall Bracket
- SPT-SX1PTZ : Sunshield for Pan & Tilt Body
- PTA-SX1PTZ : Pole Top Mounting Adapter