

SARIX THERMAL ENHANCED 4 CAMERA SERIES

VGA

QVGA

The Sarix Thermal Enhanced 4 Series enables sites to harness the power of intelligence-driven analytics and heat-sensing technology to identify threats beyond what is visible to the human eye. Protect your perimeter like never before, even in the most challenging conditions. Pelco Smart Analytics, powered by Motorola Solutions, automatically detects threats at distances over 300 m (980 ft) away. Using radiometric thermal imaging, the Sarix Thermal Enhanced measures temperature fluctuations to help identify and prevent hazardous situations, such as overheating equipment. The camera's superior long-range smart analytics detection and ability to concurrently trigger alerts based on radiometric events make the Sarix Thermal Enhanced an ideal solution for security and industrial applications.



FEATURES

SEE FARTHER, RESPOND FASTER



Identify critical events and classify objects during the day and night at distances over 300 m (980 ft) away.

Expedite real-time responses and forensic investigations with Pelco Smart Analytics.

REDUCE FALSE POSITIVES



Leverages Smart Analytics and self-calibration for improved object detection and minimize the chances of false alarms.

MULTIPLE LENS OPTIONS



Select between a wide combination of lens and sensor resolutions for optimal coverage.

OUTDOOR READY



IP66/67, IK10 and NEMA 4x rating provides a degree of protection against water and windblown dust. Continuously records between -40°C to 65°C (-40°F to 149°F).

RADIOMETRIC ANALYTICS



Prevent operational safety hazards by proactively detecting abnormal temperature fluctuations within a predefined time and when the temperature exceeds or falls below a set value.

ENHANCED CYBERSECURITY



Meet required security standards required with FIPS 140-2 compliant cryptography support, Secure Boot and integrated TPM.

COMPLY WITH REGULATIONS



With 9 Hz and 30 Hz versions, maintain analytic performance while complying with export restrictions.

OPEN SYSTEM



ONVIF Profile S, G, T and M compliance allows for easy integration between existing ONVIF structures, recording retrieval on the edge and cross-functionality with third-party solutions.

ONVIF is a trademark of Onvif, Inc.

SPECIFICATIONS

IMAGE PERFORMANCE	QVGA	VGA
Image Sensor	320 x 256 Uncooled VOx Microbolometer	640 x 512 Uncooled VOx Microbolometer
Pixel Pitch	12µm	
Spectral Range	8µm to 14µm	
Aspect Ratio	5:4	
Imaging Rate	Up to 30 fps (-1 models up to 8.6 fps)	
Dynamic Range	-40°C to 225°C (-40°F to 437°F) [may vary based on operating temperature]	
Resolution Scaling	320 x 256, can be scaled up to 640 x 512	640 x 512, can be scaled down to 320 x 256
3D Noise Reduction Filter	Yes	
Sensitivity	NETD ≤50 mK (NETD ≤40 mK on 30 fps models when Frame Averager feature is enabled)	
Thermal Palettes	White Hot, Black Hot, Rainbow, RainHC, IronBow, Lava, Artic, GlowBow, GradedFire, Hottest	
Image Uniformity Optimization	Automatic Flat Field Correction (FFC) - Thermal and Temporal	

LENS ¹	SXTE4-QF04-EBT	SXTE4-QF09-EBT	SXTE4-QF13-EBT	SXTE4-QF18-EBT	SXRE4-VF09-EBT	SXRE4-VF14-EBT	SXTE4-VF18-EBT	SXTE4-VF24-EBT	SXTE4-VF36-EBT
Lens	4.3 mm, F1.0	9.1 mm, F1.0	13.8 mm, F1.0	18.0 mm, F1.0	9.2 mm, F1.0	14.0 mm, F1.0	18.0 mm, F1.0	24.3 mm, F1.0	36.0 mm, F1.0
Angle of View (H x V)	50.0° x 40.0°	24.1° x 19.2°	16.0° x 12.8°	12.2° x 9.7°	49.9° x 39.3°	32.0° x 25.6°	24.3° x 19.5°	18.0° x 14.4°	12.2° x 9.8°

¹ Figures in this table also apply to -1 variants of each camera.

IMAGE CONTROL	
Image Compression Method	H.264, H.265, Motion JPEG, Pelco Smart Compression
Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG
Bandwidth Management	Pelco Smart Compression technology; Idle scene mode
Motion Detection	Pixel and Classified Objects
Tamper Detection	Yes
Privacy Zones	Up to 64 Zones
Audio Compression Method	Opus, G.711 PCM 8 kHz

NETWORK	
Network	100BASE-TX
Cabling Type	CAT5
Connector	RJ-45
ONVIF	ONVIF® compliant with Profile S, Profile T, and Profile M
Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication
Protocols	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
Device Management Protocols	SNMP v2c, SNMP v3

PERIPHERALS	
USB Port	USB 2.0
Onboard Storage	microSD/microSDHC/microSDXC slot – video speed class card required. Class V10 or better recommended
External I/O Terminals	Alarm In, Alarm Out
Audio Input/Output	Line level input and output

MECHANICAL ¹		SXTE4-QF04-EBT	SXTE4-QF09-EBT	SXTE4-QF13-EBT	SXTE4-QF18-EBT	SXRE4-VF09-EBT	SXRE4-VF14-EBT	SXTE4-VF18-EBT	SXTE4-VF24-EBT	SXTE4-VF36-EBT
Dimensions (LxWxH)		312 mm x 126 mm x 104 mm; 12.3" x 5.0" x 4.1" (including junction box)								
Weight	Camera	1.45 kg (3.20 lbs)	1.44 kg (3.17 lbs)	1.47 kg (3.24 lbs)	1.45 kg (3.20 lbs)	1.48 kg (3.26 lbs)	1.47 kg (3.24 lbs)	1.47 kg (3.24 lbs)	1.47 kg (3.24 lbs)	1.55 kg (3.42 lbs)
	Junction Box	0.47 kg (1.04 lbs)								
Body		Aluminum								
Sunshield		Polycarbonate								
Finish		Powder coat, close to Pantone 427C								
Adjustment Range		±175° pan, ±90° tilt, ±175° azimuth								

¹ Figures in this table also apply to -1 variants of each camera.

ELECTRICAL	
Power Consumption	10W
Power Source	VDC: 12V +/- 10%, 9W min. VAC: 24V +/- 10%, 15VA min. PoE: IEEE802.3af Class 3 compliant
RTC Backup Battery	3V manganese lithium

ENVIRONMENTAL	
Operating Temperature	-40 °C to +65 °C (-40 °F to 149 °F)
Storage Temperature	-10 °C to +70 °C (14 °F to 158 °F)
Humidity	0 - 93% non-condensing

CERTIFICATIONS	QVGA	VGA
Certifications/Directives	UL, cUL, CE, UKCA, ROHS, RCM, BIS, NOM	
Safety	UL/CSA/IEC/EN 62368-1	
Environmental	- IEC/EN 60529 (IP66, IP67 rating) - IEC/EN 62262 Impact (IK10 rating) includes window impact on all models - Type 4X	- IEC/EN 60529 (IP66, IP67 rating) - IEC/EN 62262 Impact (IK10 rating) includes window impact only on models SXRE4-VF14-EBT, SXRE4-VF14-EBT-1, SXTE4-VF18-EBT, SXTE4-VF18-EBT-1, SXTE4-VF24-EBT, SXTE4-VF24-EBT-1 - Type 4X
Electromagnetic Emissions	FCC Part 15 Subpart B (Class B), 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	

ANALYTICS SPECIFICATIONS

SUPPORTED VIDEO ANALYTIC 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.

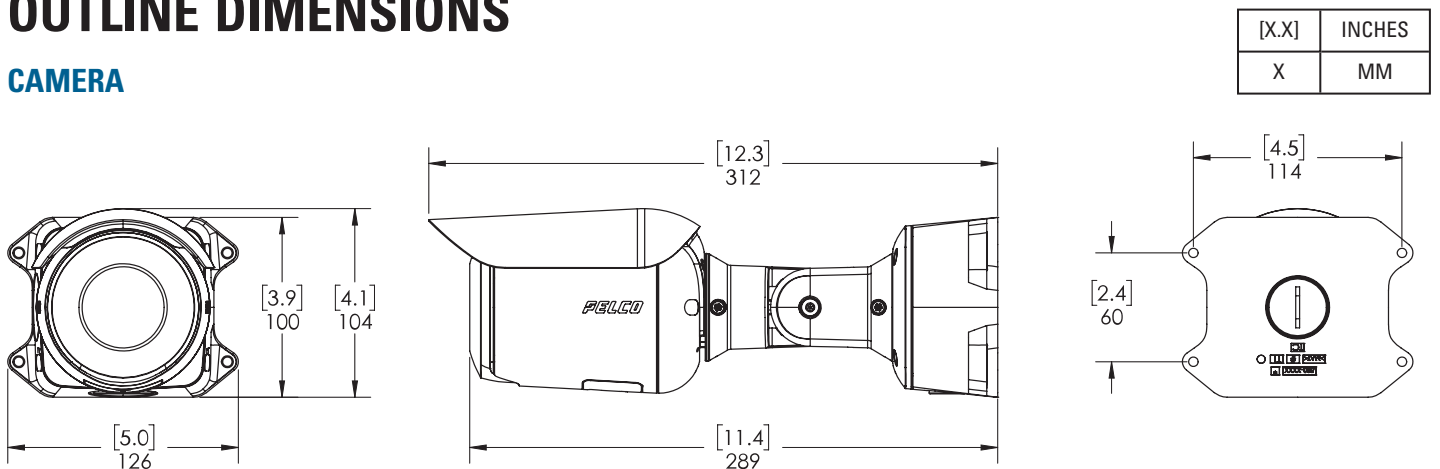
RADIOMETRIC EVENTS	
Temperature Below, Above, Match Pre-Defined Value	The event is triggered when the temperature in the region of interest is below, above or match a pre-defined temperature value.
Temperature Changed	The event is triggered when the temperature changed a predefined value during a designated period of time.

CLASSIFIED OBJECT DETECTION RANGE ¹	SXTE4-QF04-EBT	SXTE4-QF09-EBT	SXTE4-QF13-EBT	SXTE4-QF18-EBT	SXRE4-VF09-EBT	SXRE4-VF14-EBT	SXTE4-VF18-EBT	SXTE4-VF24-EBT	SXTE4-VF36-EBT
Focal Length	4.3 mm	9.1 mm	13.8 mm	18.0 mm	9.2 mm	14.0 mm	18.0 mm	24.3 mm	36.0 mm
Angle of View (H x V)	50.0° x 40.0°	24.1° x 19.2°	16.0° x 12.8°	12.2° x 9.7°	49.9° x 39.3°	32.0° x 25.6°	24.3° x 19.5°	18.0° x 14.4°	12.2° x 9.8°
Human	68 m (224')	120 m (393')	180 m (590')	220 m (722')	120 m (394')	165 m (541')	210 m (689')	260 m (853')	310 m (1017')
Vehicle	80 m (263')	130 m (426')	190 m (623')	225 m (739')	142 m (466')	185 m (607')	229 m (751')	275 m (902')	319 m (1047')

¹ Figures in this table also apply to -1 variants of each camera. The detection ranges may vary in different weather conditions.

OUTLINE DIMENSIONS

CAMERA



ORDERING INFORMATION

SYSTEM MODELS

	RESOLUTION	NETD	LENS	PELCO SMART COMPRESSION	RADIOMETRIC
SXTE4-QF04-EBT	320 x 256	< 50 mK	4.3 mm	✓	
SXTE4-QF09-EBT	320 x 256	< 50 mK	9.1 mm	✓	
SXTE4-QF13-EBT	320 x 256	< 50 mK	13.8 mm	✓	
SXTE4-QF18-EBT	320 x 256	< 50 mK	18.0 mm	✓	
SXRE4-VF09-EBT	640 x 512	< 50 mK	9.2 mm	✓	✓
SXRE4-VF14-EBT	640 x 512	< 50 mK	14.0 mm	✓	✓
SXTE4-VF18-EBT	640 x 512	< 50 mK	18.0 mm	✓	
SXTE4-VF24-EBT	640 x 512	< 50 mK	24.3 mm	✓	
SXTE4-VF36-EBT	640 x 512	< 50 mK	36.0 mm	✓	
SXTE4-QF04-EBT-1	320 x 256	< 50 mK	4.3 mm	✓	
SXTE4-QF09-EBT-1	320 x 256	< 50 mK	9.1 mm	✓	
SXTE4-QF13-EBT-1	320 x 256	< 50 mK	13.8 mm	✓	
SXTE4-QF18-EBT-1	320 x 256	< 50 mK	18.0 mm	✓	
SXRE4-VF09-EBT-1	640 x 512	< 50 mK	9.2 mm	✓	✓
SXRE4-VF14-EBT-1	640 x 512	< 50 mK	14.0 mm	✓	✓
SXTE4-VF18-EBT-1	640 x 512	< 50 mK	18.0 mm	✓	
SXTE4-VF24-EBT-1	640 x 512	< 50 mK	24.3 mm	✓	
SXTE4-VF36-EBT-1	640 x 512	< 50 mK	36.0 mm	✓	

ACCESSORIES

PLMT-1001	Pole Mount for Sarix Thermal Enhanced 4 Camera
CRNMT-1001	Corner Mount for Sarix Thermal Enhanced 4 Camera
USB-AC56-NA-MSI	USB WiFi Adapter (North America)
USB-AC56-EU-MSI	USB WiFi Adapter (Europe)

SUPPORT

Learn more and find additional documentation at pelco.com or email support@pelco.com for specific product support.



Jul 2023 | C5065-S | Rev 3

© 2023, Motorola Solutions, Inc. All rights reserved. MOTOROLA, MOTO, MOTOROLA SOLUTIONS, and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. Pelco, the Pelco logo, and other trademarks associated with Pelco products referred to in this publication are trademarks of Pelco, Inc. or its affiliates. All other product names and services are the property of their respective companies. Product specifications and availability are subject to change without notice.