

ExSite Enhanced Thermal 2 Series Fixed

Uncover hidden threats in any conditions

Hazardous facilities need reliable video security solutions that meet their unique constraints, comply with strict requirements, and survive harsh environmental conditions.

The ExSite Enhanced Thermal 2 Series Fixed is encased in heavy-duty stainless steel, offering hazardous sites a durable security camera with global explosion-proof certifications. Ideal for monitoring targeted areas such as access points and fences, this camera offers precise thermal views to accurately detect a target in most environmental conditions, including fog, darkness and foliage.

VGA

QVGA



Features

THERMAL DETECTION

Detect and identify people from a long distance via their heat signature, even in low visibility, such as total darkness, fog, smoke or dense foliage.

EXPLOSION-PROOF

The heavy-duty housing meets stringent explosion-proof and dust-ignition-proof requirements while complying with international standards (UL, CSA, ATEX, IECEx, UKCA, INMETRO and KCs. Pending Ts Mark).

TRUSTED AND SECURE

Meet high data security standards with built-in cybersecurity features that safeguard your security system.

SMART ANALYTICS

Stay a step ahead of critical events with built-in analytics providing enhanced object detection and classification.

RADIOMETRICS

Receive real-time temperature data with radiometric capabilities* and reduce potential hazards by detecting overheating equipment early on.

READY FOR HARSH CONDITIONS

Safe within a wide temperature range, from -60°C to +65°C (-76°F to 149°F), plus Type 4X/6P and IP66/67/68/69 weather rating for maximum durability in tough environments.

EXPECT MORE FROM YOUR CAMERA

Unlock your camera's full potential by enabling Elevate, Pelco's built-in direct camera-to-cloud technology that enhances performance and detection accuracy.

ONVIF® CONFORMANT

ONVIF Profile S, G, T and M conformance for easy integration with leading video management software to maximize your existing investment.

*Select models only.

¹ONVIF is a trademark of Onvif, Inc.

PELCO®

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	

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
Electronic Image Stabilization	Yes

Network

Network	100BASE-TX
Cabling Type	CAT5
Connector	RJ-45
ONVIF	ONVIF® compliant with Profile S, Profile T, Profile G, and Profile M
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 Boot, Signed and encrypted firmware
Protocols	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMPv3, ICMP, DHCP, Zeroconf, 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

Mechanical

Dimensions (ØxL)	Ø155.5 mm x 269.0 mm; Ø6.12" x 10.4" (dimensions without sunshield)
Weight	6,6 Kg (14,5 lbs)
Construction	AISI 316L stainless steel
Finish	Electro-polished surface
Cable Entry	One 3/4" NPT
Sunshield	AISI 316L stainless steel

Electrical

Power Consumption	10W
Power Source	VDC: 12V +/- 10%, 9W min. VAC: 24V +/- 10%, 15VA min. PoE: IEEE802.3af Class 3 compliant
Audio	Input/Output Line level I/O
External I/O Terminals	Alarm In, Alarm Out
Local Storage	SD card support (Class V10 or better recommended)

Environmental

Operating Temperature	-50 °C to +65 °C (-58 °F to 149 °F)
Storage Temperature	-40°C to +70°C (-40°F to 158°F)
Humidity	10% - 95% non-condensing

Certifications

Certifications/Directives	cULus, CE, UKCA, ROHS, RCM, KC
Safety	UL/CSA 62368-1, EN/IEC 62368-1
Hazardous	ATEX (EN IEC 60079-0, EN 60079-1, EN 60079-31) IECEx (IEC 60079-0, IEC 60079-1, IEC 60079-31) UKEx (EN IEC 60079-0, EN60079-1, EN 60079-31), ETL listed for USA (UL60079-0, UL60079-1,UL60079-31) ETL listed for Canada (CAN/CSA-C22.2 NO. 60079-0, CAN/CSA-C22.2NO.60079-1, CAN/CSA-C22.2NO.60079-31) ABNT NBR IEC 60079-0:2020, ABNT NBR IEC 60079-1:2016 Versão Corrigida: 2020, ABNT NBR IEC 60079-31:2014 Versão Corrigida:2021 KCs (Employment and labor department 2021-22)
Environmental and Performance	EN/IEC 60529: IP66, IP67, IP68, IP69 IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-30, IEC 60068-2-52 UL50E: 4X, 6P MIL-STD-167-1A , MIL-STD 810H for N/A
Electromagnetic Emissions	FCC Part 15 Subpart B Class A, IC ICES-003 Class A, EN 55032 Class A, EN 61000-6-3
Electromagnetic Immunity	EN 50130-4
Vibration Test	EN 50130-5, EN 60068-2-6
Lloyd's Register Marine Type Approval certification	Test Specification Number 1 (ENV1, ENV2, ENV3, ENV5) Electromagnetic compatibility: EN60945 Environmental: IEC 60068-2-78
Warranty	3-year limited warranty. 5-year extended warranty is available.

Explosion-Proof Certifications

Part Number	Certification	Marking	Ambient Temperature	Cable Entry Temperature
EXRE2-VF09-E0A00-1 EXTE2-VF36-E0A00-1 EXTE2-QF06-E0A00-1 EXTE2-QF18-E0A00-1 EXRE2-VF09-E0A00 EXTE2-VF36-E0A00 EXTE2-QF06-E0A00 EXTE2-QF18-E0A00	ATEX ITS 15ATEX18330X	Ex II 2 G Ex db IIC T6...T5 Gb Ex II 2D Ex tb IIIC T85°C...T100°C Db	-60°C ≤ Ta ≤ +55°C or +65°C	+80°C
	IECEX ITS15.0030X	Ex db IIC T6...T5 Gb Ex tb IIIC T85°C...T100°C Db		
	UKEx ITS21UKEX0379X	Ex II 2 G Ex db IIC T6...T5 Gb Ex II 2D Ex tb IIIC T85°C...T100°C Db		
	cETLus 5002689 Hazardous Location America	Class I Zone 1 AEx db IIC T6...T5 Gb Zone 21 AEx tb IIIC T85°C...T100°C Db Class I Div 2 Group A,B,C,D T6...T5 Class II Div 2, Group F,G T6...T5		
	cETLus 5002689 Hazardous Location Canada	Ex db IIC T6...T5 Gb Ex tb IIIC T85°C...T100°C Db Class I Div 2 Group A,B,C,D T6...T5 Class II Div 2, Group F,G T6...T5		
	INMETRO UL-BR 16.0004X	Ex db IIC T6...T5 Gb Ex tb IIIC T85°C...T100°C Db		
	KCs 25-KA4BO- 0211X, 25-KA4BO- 0212X	Ex db IIC T6...T5 Gb Ex tb IIIC T85°C...T100°C Db		
	Ts mark	Ex db IIC T6...T5 Gb Ex tb IIIC T85°C...T100°C Db		

Analytics Specifications

Supported Video Analytic Events

Objects in Area	The event is triggered when the selected object type moves into the region of interest. This event can be used to count objects.
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.
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.

Supported Video Analytic Events

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 Events¹

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.

¹ User selectable burnt-in video radiometry overlays.

Pelco Elevate Supported Features

Image Health	Detects incremental changes in the cameras view, such as position shifts or obstructions. Notifies users through ONVIF conformant events and summarized email reports.
Firmware Management	Schedule and deploy automatic firmware updates to multiple cameras, or update individual cameras on-demand.

Classified Object Detection Range²

	EXRE2-VF09-E0A00 EXRE2-VF09-E0A00-1	EXTE2-VF36-E0A00 EXTE2-VF36-E0A00-1	EXTE2-QF06-E0A00 EXTE2-QF06-E0A00-1	EXTE2-QF18-E0A00 EXTE2-QF18-E0A00-1
Focal Length	9.2 mm	36.0 mm	6.3 mm	18.0 mm
Angle of View (H x V)	50.0° x 40.0°	12.0° x 9.6°	34.0° x 27.2°	12.0° x 9.6°
Detection Range	120 m (394')	310 m (1017')	78 m (256')	220 m (722')

²Figures in this table also apply to -1 variants of each camera.

The detection ranges may vary in different weather conditions.

Mounting Accessories

Part #	Description
NXWBS1	Wall bracket for use with EXF2230 cameras. AISI 316L stainless steel.
MHXWFWCA	Parapet mounting bracket for use with EXF2230 cameras. AISI 316L stainless steel.
NXFWBT	Vertical riser, 124 mm (4.9"), for use with EXF2230 cameras. AISI 316L stainless steel.
NXWTU	Wall adapter module, for use with NXWBS1. AISI 316L stainless steel.
NXCOL	Pole mount adapter for use with EXF2230 cameras or explosion proof washers. For pole diameters from 110 mm (4.3") to 150 mm (5.9"). Max load 50 kg (110 lb.). AISI 316L stainless steel.
NXCW	Corner mount adapter for use with EXF2230 cameras or explosion proof washers. Max load 50 kg (110 lb.). AISI 316L stainless steel.

Cabling

Item	Description
EXTE2-CABLARM101	Cabling, 10m (32.8 ft), armored cable, barrier cable gland
EXTE2-CABLARM41	Cabling, 4m (13.1 ft), armored cable, barrier cable gland

Cable Glands and Accessories 3/4" NPT

Type	Certification	Operating Temp.	Cable	Part Number	Maximum diameter of the external sheath (A)	Maximum diameter of the internal sheath (B)	Maximum diameter of the conductors bundle (C)
Barrier Cable Gland	IECEX / ATEX / EAC Ex	-60°C (-76°F) / +135°C (+275°F)	Unarmored	OCTEXB3/4P	20.0 mm (0.78 in)	-	17.8 mm (0.7in)
			Armored	OCTEXBA3/4P	16.8 - 23.9 mm (0.66-0.94 in)	20 mm (0.79 in) max	17.8 mm (0.7 in)
Cable Gland with Gasket	IECEX / ATEX / EAC Ex	-60°C (-76°F) / +100°C (+212°F)	Unarmoured	OCTEX3/4C	13.0 - 20.2 mm (0.51-0.79 in)	-	-
		-60°C (-76°F) / +80°C (+176°F)	Armored	OCTEXA3/4C	16.9 - 26.0 mm (0.66-1.02 in)	11.1 - 19.7 mm (0.44 - 0.78 in)	-
Plug EX 3/4"NPT	IECEX / ATEX / EAC Ex	-100°C (-148°F) / +400°C (+752°F)	-	OEXPLUG3/4P	-	-	-
Conduit Sealing Fitting	IECEX / ATEX / cCSAus / EAC Ex	-60°C (-76°F) / +80°C (+176°F)	-	OCTEXP3/4C	-	-	11.0 mm (0.43 in)
Reduction 3/4" NPT x 1/2" NPT	IECEX / ATEX / EAC Ex	-100°C (-148°F) / +400°C (+752°F)	-	OCTEX1/2-3/4P	-	-	-

Explosion-Proof Communication Box

A communication box includes a 3-port RJ45 and 1 SFP port Ethernet switch and 24 VAC output for powering up to one of the following:

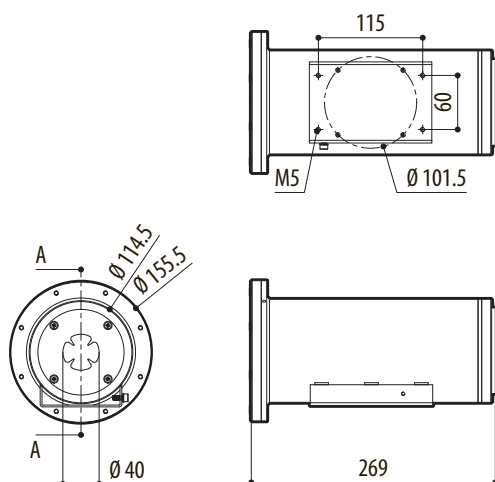
- 2x EXC2602 fixed compact cameras
- 2x EXF2230 fixed cameras with 2x washer pump
- 1x EXP2230 PTZ camera with 1x washer pump

Part #	Description
MBX1MAA	AISI 316L stainless steel housing, 230 VAC input.
MBX2MAA	AISI 316L stainless steel housing, 24 VAC input.
MBX3MAA	AISI 316L stainless steel housing, 120 VAC input.
MBXMP	Adapter plate for communication box to MPXCOL or MPXCW mounts. AISI 316L stainless steel housing.
MBXWRE	Wrench for opening communication boxes, MBX.
MPXCOL	Pole mount adapter for use with ExSite cameras. For pole diameters from 110 mm (4.3") to 150 mm (5.9"). Max load 50 kg (110 lb.). AISI 316L stainless steel.
MPXCW	Corner mount adapter for use with ExSite cameras. Max load 50 kg (110 lb.). AISI 316L stainless steel.

Outline Dimensions

Camera

[X.X]	INCHES
X	MM



Ordering Information

	Resolution	NETD	Lens	HFOV	FPS	Pelco Smart Compression	Radiometric
EXRE2-VF09-E0A00-1	640 x 512	< 50 mK	9.2 mm	50°	8.6	✓	✓
EXTE2-VF36-E0A00-1	640 x 512	< 50 mK	36.0 mm	12°	8.6	✓	
EXTE2-QF06-E0A00-1	320 x 256	< 50 mK	6.3 mm	34°	8.6	✓	
EXTE2-QF18-E0A00-1	320 x 256	< 50 mK	18.0 mm	12°	8.6	✓	
EXRE2-VF09-E0A00	640 x 512	< 50 mK	9.2 mm	50°	30	✓	✓
EXTE2-VF36-E0A00	640 x 512	< 50 mK	36.0 mm	12°	30	✓	
EXTE2-QF06-E0A00	320 x 256	< 50 mK	6.3 mm	34°	30	✓	
EXTE2-QF18-E0A00	320 x 256	< 50 mK	18.0 mm	12°	30	✓	

Support

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