# ExSite Enhanced 2 Series PTZ

2 MP

### Wide coverage for hazardous sites

The ExSite Enhanced 2 Series PTZ is an explosion-proof, Day/Night Pan-Tilt-Zoom (PTZ) camera. This video security camera offers up to 30x zoom and full 1080p resolution. Designed with AISI 316L stainless steel and micro-shot, electro-polished surfaces, it provides maximum resistance in corrosive environments, such as industrial and marine locations. In addition, this camera offers up to IP69, NEMA Type 4X and Type 6P ratings, ensuring protection against extreme conditions, including water and dust. With the Small Form-Factor Pluggable (SFP) slot built into the junction box, this PTZ camera provides easy installation through fiber optic connections.



### **Features**





Enhanced detection, tracking and classification of people and vehicles allowing operators to review situations needing immediate attention for faster response time.



## H.264 and H.265 Smart Compression Technology

Technology Retains image

Retains image quality and critical information while reducing and bandwidth requirements to lower cost of ownership.



#### **Hazardous Location Certifications**

Heavy-duty housing meets stringent explosion-proof and dust ignition-proof requirements while complying with international standards (UL, CSA, ATEX, IECEx, UKCA. INMETRO, KCs and TS mark).



#### **ONVIF®** Conformant

ONVIF Profile G, M, S and T compliance allows easy integration with existing ONVIF infrastructures.



### High-Temperature Range

Optimized to operate reliably even at increased temperature variances: from -40°C (-40°F) up to +60°C (+140°F).



### Wide Dynamic Range

Captures details in scenes with both very bright and very dark areas.



### Stainless Steel Construction

AISI 316L stainless steel construction for exceptional resistance to corrosion for both onshore and offshore marine environments



#### Low Light Technology

Offers excellent image detail in low-light settings.



For more information, contact your local Pelco sales representative today at pelco.com/about/contact-us/#form.





# **Specifications**

Image Performance	2.0 MP
Image Sensor	1/3" progressive scan CMOS
Active Pixels (H x V)	1944 (H) × 1212 (V)
Imaging Area (H x V)	5.568 mm (H) × 3.132 mm (V); 0.219 " (H) × 0.123 " (V)
Min. illumination	0.05 lux (1/30s, 60dB) in color mode; 0.005 lux (1/30s, 60dB) in monochrome
Dynamic Range	Up to 120 dB
Image Rate	Up to 60 fps
Aspect Ratio (Resolution Scaling)	Down to (16:9) 384×216 or (5:4) 320×256
3D Noise Reduction Filter	Yes
S/N Ratio	More than 50dB

Lens		2.0 MP	
Lens		F1.6, 4.3-129 mm (30x zoom) remote focus and zoom	
Horizontal		(16:9) 2.34° - 65.1°	
Angle of View Vertical		(16:9) 1.36° - 38.4°	
Zoom		Up to 30x	

Image Control					
Video Compression	H.264 and H.265 Pelco Smart Compression, Motion JPEG				
Streaming	Multi-stream H.264, Multi-stream H.265, Motion JPEG				
Frame Rate	60 fps				
Electronic Shutter Control	Automatic, Manual (1/1 to 1/30,000 sec)				
Iris Control	P-Iris, Automatic, Open, Closed				
Day/Night Control	Mechanical IR cut filter. Automatic, Manual				
Flicker Control	60 Hz, 50 Hz				
White Balance	Automatic, Manual				
Backlight Compensation	On/Off				
Smart Compression Technology	Yes, lowers bandwidth and storage requirements by up to 70%				
On Screen Displays	Yes				
Privacy Zones	3D, up to 64 zones				
Presets	500 named presets				
Digital Zoom	12X				
Tours	10 named tours				
Electronic Image Stabilization	Yes				
Digital Defog	Adjustable/Off				

Network							
ONVIF	ONVIF compliance Profile G, Profile M, Profile S and Profile T (www.onvif.org)						
Security	Password protection, HTTPS encryption, digest authentication, WS authentication, user access log, 802.1x port based authentication, Signed and encrypted firmware.						
Protocols	IPv6, IPv4, HTTP, HTTPS, SOAP, DNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMPv3, ICMP, DHCP, Zeroconf, SNMP v2c, SNMP v3, NTCIP, SRTP						
Mechanical							
Dimensions (LxWxH)	313 mm x 232 mm x 398 mm; 12.3" x 9.13" x 15.7"						
Weight	26.5 kg; 58.4 lbs						
Construction	AISI 316L stainless steel						
Finish	Electro-polished surface						
Pan Movement	360° continuous, max 100°/s						
Vertical Tilt	-90° to 90°						
Maximum Pan/Tilt Speed	100°/s						
Wiper	Yes						
Cable Entry	2 x 3/4" NPT						
Pre-set Accuracy	0.2°						
Electrical							
Local Storage	Optional factory installed 128GB, Micro SDXC Card.						
Ports	10BASE-T/100BASE-TX, RJ45 connector (CAT5E cabling) and SFP slot						
Power Consumption	120 W						
Input Voltage (Power)	Ordering options: 230 VAC, 0.54 A, 50/60 Hz 24 VAC, 5A, 50/60 Hz 120 VAC, 1A, 50/60 Hz 220 VAC, 0.54A, 50/60 Hz						
Input for Remote Reset	1						
Alarm Inputs	1						
Relay Outputs	1+1 (one relay reserved for washer pump and one configurable, 1A, 30 VAC/60 VDC max)						
Environmental							
Operating Temperature	-40 °C to +55 °C (-40 °F to 131 °F) in enclosed space, - 40 °C to +60 °C (-40 °F to 140 °F) with ambient convection						
Storage Temperature	-40 °C to +55 °C (-40 °F to 131 °F)						
Humidity	5% - 95% non-condensing						
Housing Climate Control	Built-in heater and fan						
Cold Start	Up to 2 hour startup delay at temperature lower than -10 °C (14 °F)						

Pan and tilt operational at a maximum of 210 km/h wind (130.5 mph)

Wind Resistance

Certifications			
Certifications/Directives	cULus, CE, UKCA, ROHS, RCM, BIS (EXP2230-62, EXP2230-62-G, EXP2230-67, EXP2230-67-G) KC (EXP2230-62, EXP2230-62-G)		
Safety	UL/CSA 62368-1, EN/IEC 62368-1, IS 13252(PART 1):2010/ IEC 60950-1 : 2005		
Hazardous	ATEX (EN IEC 60079-0, EN 60079-1, EN 60079-31), IECEx (IEC 60079-0, IEC 60079-1, IEC 60079-31), EAC EX (TR CU 012/2011), INMETRO (ABNT NBR IEC 60079-0, ABNT NBR IEC 60079-1, ABNT NBR IEC 60079-31), UK Ex (EN IEC 60079-0, EN 60079-1, EN 60079-31), KCs (Employment and labor department 2021-22), UL listed for USA (UL 60079-0, UL 60079-1, UL 60079-31), UL listed for Canada (CAN/CSA-C22.2 NO. 60079-0, CAN/CSA-C22.2 NO. 60079-31)		
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 NEMA TS 2 para 2.2.7 - 2.2.9 UL50E: Type 4X and 6P		
Electromagnetic Emissions	FCC Part 15 Subpart B Class A, IC ICES-003 Class A, EN 55032 Class A, EN 61000-6-4, EN 61000-3-2, EN 61000-3-3		
Electromagnetic Immunity	EN 50130-4		
Vibration Test	EN 50130-5, EN 60068-2-6		
Marine Certification	Lloyd's Register Marine Type Approval certification: EN60945 (with MAXIMUS MBX communication box or with FM1010 filter). Test Specification Number 1 (ENV1, ENV2, ENV3, ENV5) Electromagnetic compatibility: EN60945 Salty fog resistance: EN60068-2-52.		
Warranty	3-year limited warranty. 5-year extended warranty is available.		

### **Explosion-Proof Certifications**

Part Number	Certification	Marking	Ambient Temperature	Cable Entry Temperature	
EXP2230-62 EXP2230-65 EXP2230-66	DEMKO 12 ATEX 1031198X	<ul><li>II 2G Ex db IIC T6T5 Gb</li><li>II 2D Ex tb IIIC T85°CT100°C Db</li></ul>	-40°C ≤ Ta ≤ +55°C or +70°C (T6/T85°C with Ta	+80°C	
EXP2230-67 EXP2230-62-G EXP2230-65-G	IECEx ULD 11.0005X	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db	≤ +55°C) (T5/T100°C with		
EXP2230-66-G EXP2230-67-G	EAC Ex RU C-IT.H A91.B.00274/22	1Ex db IIC T6T5 Gb X Ex tb IIIC T85°CT100°C Db X	<sup>+</sup> Ta ≤ +70°C)		
	INMETRO UL-BR 13.0063X	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db			
	KCs 16-KA4BO-0313X, 21-KA4BO- 0314X	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db			
	UKEx UL21UKEX2216X				
	cULus File E319666 Hazardous Location America	Class I, Zone 1, AEx db IIC T6T5 Gb Zone 21, AEx tb IIIC T85°CT100°C Db Class I, Div 2, Group A, B, C, D T6T5 Class II, Div 2, Group F, G T6T5	-40°C ≤ Ta ≤ +55°C or +70°C (T6/T85°C with Ta ≤+55°C) (T5/T100°C with	+81°C Ta ≤ +70°C +80°C Ta ≤ +69°C	
	cULus File E319666 Hazardous Location Canada	Ex db IIC T6T5 Gb X Ex tb IIIC T85°CT100°C Db X Class I, Div 2, Group A, B, C, D T6T5 Class II, Div 2, Group F, G T6T5	† Ta≤+70°C)		
EXP2230M1E EXP2230M1EG EXP2230M2E EXP2230M2EG EXP2230ACE EXP2230ACEG	DEMKO 12 ATEX 1031198X	<ul><li>II 2G Ex db IIC T6T5 Gb</li><li>II 2D Ex tb IIIC T85°CT100°C Db</li></ul>	-40°C ≤ Ta ≤ +55°C or +70°C (T6/T85°C with Ta	+80°C	
	IECEx ULD 11.0005X	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db	`≤ +55°C) (T5/T100°C with		
	TS mark	Ex db IIC T6T5 Gb Ex tb IIIC T85°CT100°C Db	Ta ≤ +70°C)		

# **Analytics Specifications**

Supported Analytics Eve	ents*
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, 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.
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.
Sabotage Detection	The event is triggered when the scene unexpectedly changes.

<sup>\*</sup>Pelco Smart Analytics powered by Motorola Solutions.

## **System Model Numbers**

System Resolution	Model #	Description
2 MP 30X	EXP2230-62	ExSite Enhanced 2PTZ, 2MP x 30, 24 VAC
2 MP 30X	EXP2230-65	ExSite Enhanced 2PTZ, 2MP x 30, 120 VAC
2 MP 30X	EXP2230-66	ExSite Enhanced 2PTZ, 2MP x 30, 220 VAC
2 MP 30X	EXP2230-67	ExSite Enhanced 2PTZ, 2MP x 30, 230 VAC
2 MP 30X	EXP2230-62-G	ExSite Enhanced 2PTZ, 2MP x 30, 24 VAC, with ONVIF G remote storage
2 MP 30X	EXP2230-65-G	ExSite Enhanced 2PTZ, 2MP x 30, 120 VAC, with ONVIF G remote storage
2 MP 30X	EXP2230-66-G	ExSite Enhanced 2PTZ, 2MP x 30, 220 VAC, with ONVIF G remote storage
2 MP 30X	EXP2230-67-G	ExSite Enhanced 2PTZ, 2MP x 30, 230 VAC, with ONVIF G remote storage
2 MP 30X	EXP2230ACE	ExSite Enhanced 2PTZ, 2MP x 30, 24 VAC with TS mark
2 MP 30X	EXP2230M1E	ExSite Enhanced 2PTZ, 2MP x 30, 120 VAC with TS mark
2 MP 30X	EXP2230M2E	ExSite Enhanced 2PTZ, 2MP x 30, 230 VAC with TS mark
2 MP 30X	EXP2230ACEG	ExSite Enhanced 2PTZ, 2MP x 30, 24 VAC, with ONVIF G remote storage with TS mark
2 MP 30X	EXP2230M1EG	ExSite Enhanced 2PTZ, 2MP x 30, 120 VAC, with ONVIF G remote storage with TS mark
2 MP 30X	EXP2230M2EG	ExSite Enhanced 2PTZ, 2MP x 30, 230 VAC, with ONVIF G remote storage with TS mark

## **Mounting Accessories**

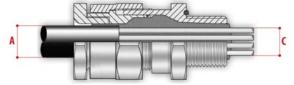
Part #	Description
MPXCW	Corner mount adapter for use with ExSite cameras. Max load 50 kg (110 lb.). AISI 316L stainless steel.
MPXWBA	AISI 316L stainless steel wall bracket.
MPXCOL	Pole mount adapter for use with ExSite cameras. For pole diameters from 110 mm (4.3") to 150 mm (5.9"). Max load 50 kg (110 lb.). AISI 316L stainless steel.
MPXWBTA	AISI 316L stainless steel parapet or ceiling mounting bracket.

# Cabling

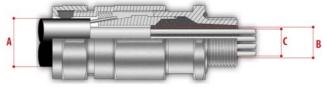
Item	Description
MPX2CABL41	Cabling, 4m (13.1 ft), unarmored cable, barrier cable gland
MPX2CABL101	Cabling, 10m (32.8 ft), unarmored cable, barrier cable gland
MPX2CABLARM41	Cabling, 4m (13.1 ft), armored cable, barrier cable gland
MPX2CABLARM101	Cabling, 10m (32.8 ft), armored cable, barrier cable gland

## Cable Glands and Accessories 3/4" NPT

Туре	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	Unarmored	OCTEXB3/4P	20.0 mm (0.78 in)	-	17.8 mm (0.7in)
		(+275°F)	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	-	-	-



Barrier cable gland with unarmored cable



Barrier cable gland with armored cable

Туре	Certification	Operating Temp.	Cable	Part Number	Maximum diameter of the external sheath (A)	Maximum diameter of the internal sheath (B)	-
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Cable gland with gasket with unarmored cable



Cable gland with gasket with armored cable



Conduit sealing fitting

## **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

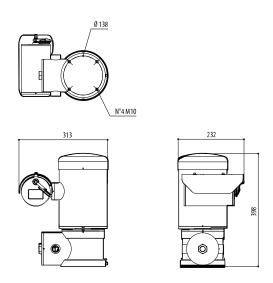
Part #	Description
MBX1MAA MBX2MAA MBX3MAA	AISI 316L stainless steel housing, 230 VAC input. AISI 316L stainless steel housing, 24 VAC input. AISI 316L stainless steel housing, 120 VAC input.
MBXMP	Adapter plate for communication box to MPXCOL or MPXCW mounts. AISI 316L stainless steel housing.
MBXWRE	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.

## **Explosion-Proof Washer**

A 10L (2.6 gal) tank with integrated manual pump and delivery up to 20m (66 ft), 24 VAC/VDC input.

Part #	Description
WASEX2T4AT WASEX2T4IC WASEX2T4IN WASEX2T4KC WASEX2T4GOR WASEX2T4UL	ATEX certified solenoid valve. IECEX certified solenoid valve. INMETRO certified solenoid valve. KCS certified solenoid valve (only 24 VDC). EAC Ex certified solenoid valve. cULus certified solenoid valve.
NXCOL	Pole mount adapter for use with EXF2230 cameras or explosion protected 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 protected washers. Max load 50 kg (110 lb.). AISI 316L stainless steel.

### **Dimensions**



Values in parentheses are inches; all others are millimeters.

### Support

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





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