

2310131030

## MPXHD21A000C Series2 EX PTZ Camera

MPX Series 2 Delux IP PTZ Ex camera, super low-light, full HD



- ✓ Certifications for use in Zones 1 and 2 IIC Group (Gas) and in Zones 21 and 22 IIIC Group (Dust)
- ✓ Certification temperature from -40°C (-40°F) to +80°C (+176°F)
- ✓ In stainless steel AISI 316L, micro-shot peened and electro-polished
- ✓ Two cable inputs for use of cable glands or conduits
- ✓ One SFP port, Fast Ethernet (100BASE-FX), for connection through fibre optics
- ✓ Camera Full HD 1080p, 30x, 60fps
- ✓ Minimum Illumination: 0.006lx (Colour); 0.0006lx (B/W)
- ✓ Privacy zone masking: 8 settable zones
- ✓ Video compression H.264/AVC, MJPEG, JPEG and MPEG4
- ✓ Complies with ONVIF, Profile Q, Profile S and Profile T
- ✓ Digitally signed firmware
- ✓ Complies with ONVIF Security Service specifications

ONVIF ONVIF Conformant



Onboard communication



Atex



H.264

## Description

MPX SERIES2 is an explosion-proof PTZ Full HD camera ideal for efficient video surveillance and control of processes in critical environments where the atmosphere is potentially explosive due to the presence of inflammable gases or dust, typical of the offshore energy and maritime environments.

The Super low-light, Full HD, 1080p, 60 fps IP camera with 30x optical zoom and integrated Delux technology offers unbeatable clear and detailed images with vivid colours, day or night. The integrated motion detection function readily detects unwanted intrusions. With the masking of privacy zones, you can hide areas that should not be seen. The video images are sent via the network with compression H.264/AVC, MPEG4, MJPEG or JPEG and up to a maximum of 3 simultaneous and independent Full HD video streams. The integrated SFP port allows connection using fibre optics and the dual cable input offers better installation flexibility with multi-pole cables or conduits.

## Corrosive environments camera

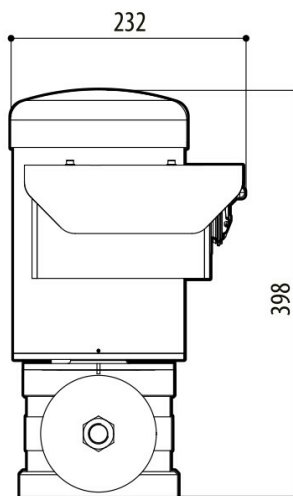
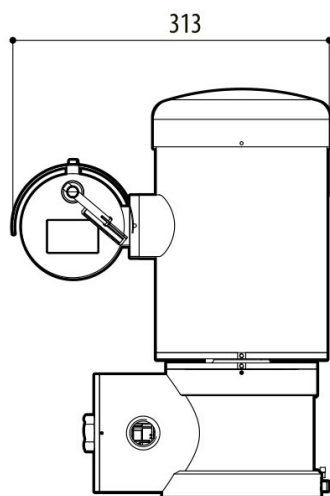
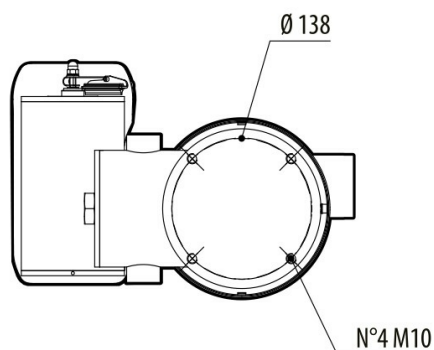
MPX SERIES2 offers maximum resistance in corrosive environments thanks to construction in AISI 316L stainless steel and micro-shot peened and electro-polished surfaces. Furthermore, the IP66/IP67/IP68/IP69, NEMA Type 4X and Type 6P certification guarantees complete protection against water and dust entry, even in difficult conditions.

## Maritime Approval

MPX SERIES2 products are certified Lloyd's Register Marine Type Approval System Test Specification Number 1 and can be used in Marine and Offshore applications for type ENV1, ENV2, ENV3 and ENV5 environmental categories (for example: passenger ships, open decks, enclosed spaces, technical premises subject to heat generated by other equipment, areas at risk of explosion and as visual support for mooring manoeuvres).

## Technical Dimensions

*The indicated measurements are expressed in millimetres.*



MAXIMUS MPX SERIES2

# Specifications

## GENERAL

AISI 316L stainless steel construction

External surfaces micro-shot peened and electro-polished

Dynamic positioning control system

## MECHANICAL

Cable inputs: 2 x 3/4" NPT (on request, 2 x M25)

Zero backlash

Horizontal rotation: 360°, continuous rotation

Vertical rotation: from -90° up to +90°

Horizontal speed (variable): from 0.1° to 100°/s

Tilt speed (variable): from 0.1° to 100°/s

Accuracy of preset positions: 0.02°

Integrated wiper

Window with extra clear tempered glass: thick 12mm (0.47in)

Unit weight: 24.5kg (54lb)

## ELECTRICAL

Supply voltage/Current consumption • 230Vac ±10%, 0.5A, 50/60Hz

• 24Vac ±10%, 5A, 50/60Hz

• 120Vac ±10%, 1A, 50/60Hz

Power consumption: • 120W max

## NETWORK

One RJ45 port • Ethernet connection: 10BASE-T/100BASE-T

One SFP port (SMALL FORM FACTOR PLUGGABLE) • Ethernet connection: 100BASE-FX

• Supply voltage: 3.3V

• Standard: compliant MSA

The SFP module (not supplied by Zenitel) must meet the following requirements: • Laser: Class 1, complies with EN60825-1

• UL/IEC 60950-1 or UL/IEC 62368-1 Certification

## CYBERSECURITY

Digitally signed firmware

Password restricted access (HTTP digest)

Support of various user access levels

Control of accesses IEEE 802.1X

HTTPS cryptography using TLS1.0, TLS1.1, TLS1.2 and TLS1.3

Centralised certificate management

Complies with ONVIF Security Service specifications

## VIDEO ENCODER

Communication protocol	ONVIF, Profile Q, Profile S and Profile T
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Device configuration	TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, HTTPS, NTP, DHCP, WSDISCOVERY, DSCP, IGMP (Multicast), SOAP, DNS
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Streaming	RTSP, RTCP, RTP/IPv4-IPv6, HTTP, Multicast
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Video compression	H.264/AVC, MJPEG, JPEG, MPEG4
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3 independent video streams Full HD

Image resolution	from 320x180pixel up to 1920x1080pixel in 6 steps
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Frame rate	Selectable frame rate from 1 to 60 images per second (fps)
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Other	• Web Server
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	• Directional OSD (maximum 4 settable areas)
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	• Motion Detection
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	• SNMP and NTCIP protocols
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## CAMERA

Day/Night Full HD 30x DeLux	
Resolution	Full HD 1080p (1920x1080pixel)
Image Device	1/2.8" Exmor™ R CMOS sensor
Effective Pixels	approx. 2.38 Megapixels
Minimum Illumination	• Colour: 0.006lx (F1.6, 30 IRE)
	• B/W: 0.0006lx (F1.6, 30 IRE)
Focal length	from 4.5mm (wide) up to 135mm (tele)
Zoom	30x (480x with digital zoom)
Iris	from F1.6 up to F9.6 (Auto, Manual)
Horizontal Viewing Angle	from 61.6° (wide end) up to 2.50° (tele end)
Vertical Viewing Angle	from 37.07° (wide end) up to 1.44° (tele end)
Shutter speed	from 1/1s up to 1/10000s (Auto, Manual)
White balance	Auto, Manual
Gain	from 0dB up to 36dB (Auto, Manual)
Wide Dynamic Range	120dB
Focus System	Auto, Manual, Trigger
Picture Effects	E-flip, Color enhancement
Noise removal	2D (3 levels), 3D (3 levels)
Exposure Control	Auto, Manual, Priority (Iris Priority, Shutter Priority), Brightness, Custom
De-fog	On/Off
Privacy zones masking (maximum 8 settable masks)	

## CERTIFICATIONS

Electrical safety (CE): EN60950-1,  
IEC60950-1, EN62368-1,  
IEC62368-1

Electromagnetic compatibility (CE):  
EN50130-4, EN55032 (Class A),  
EN61000-6-3, EN61000-3-2,  
EN61000-3-3

RoHS (CE): EN50581

Outdoor installation (CE):  
EN60950-22, IEC60950-22

Vibration test: EN50130-5,  
EN60068-2-6

UL certification (UL60950-1,  
CAN/CSA C22.2 No. 60950-1-07,  
UL62368-1, CAN/CSA C22.2 No.  
62368-1-14): cULus Listed

Electromagnetic compatibility  
(North America): FCC part 15  
(Class A), ICES-003 (Class A)

IP protection degree  
(EN/IEC60529): IP66, IP67, IP68,  
IP69

Level of protection Type (UL50E):  
4X, 6P

## CERTIFICATIONS - EXPLOSION-PROOF APPLICATIONS

ATEX (EN IEC 60079-0, EN  
60079-1, EN 60079-31)

IECEX (IEC 60079-0, IEC 60079-1,  
IEC 60079-31)

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. 60079-1, CAN/ CSA-  
C22.2 NO. 60079-31)

Other certifications pending: • EAC Ex (TR CU 012/2011)

Certifications on request: • INMETRO (ABNT NBR IEC  
60079-0 + Errata 1, ABNT NBR  
IEC 60079-1 + Errata 1, ABNT  
NBR IEC 60079-31)

• KCs (Employment and labor  
department 2016-54)

## CERTIFICATIONS - MARINE APPLICATIONS

Lloyd's Register Marine Type  
Approval certification, Test  
Specification Number 1 (ENV1,  
ENV2, ENV3, ENV5)

Electromagnetic compatibility:  
EN60945

Salty fog resistance: EN60068-2-  
52

## Accessories



### OCABLMPXARM4

Armoured multicable with barrier gland  
4m for MVX-MPX



### OCABLMPXARM10

Armoured multicable with barrier gland  
10m for MVX-MPX



### WASEX2T4AT EX

WASEX WASHER PUMP WITH EX-  
PROOF SOLENOID VALVE



### MBX2MAA Communication box

EXPLOSION-PROOF  
COMMUNICATION BOX IN STAINLESS  
STEEL



### MPXWBA Wall bracket AISI 316L

Wall Bracket



### FM1010 EMC Filter

EMC filter for Marine certification