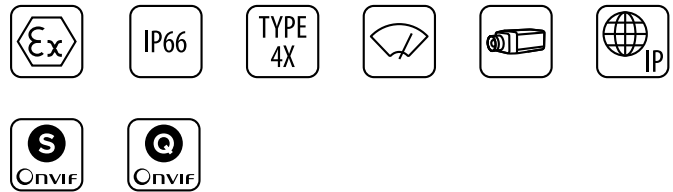


MAXIMUS MPX **delux** technology



EXPLOSION-PROOF FULL HD PTZ CAMERA WITH NEW DELUX TECHNOLOGY, FOR DAY/NIGHT VIEWING WITH EXCEPTIONAL NIGHT BRIGHTNESS



MPX DELUX

DESCRIPTION

MAXIMUS MPX DELUX is an explosion-proof FULL HD PTZ camera which integrates new imaging and encoding technology for outdoor video surveillance, allowing recordings to be produced with incredibly bright and vivid colours both by day and by night. This camera is 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 Oil&Gas, marine or industrial sectors.

Thanks to the superior light sensitivity of the sensor, the DELUX technology means that it is possible to make bright recordings with sharp, clearly defined colours in the very low light conditions typically found at night, working at as low as 0.006 lux (0.0006 lux in black and white).

MAXIMUS MPX DELUX is a Day/Night Full HD 1080p camera with 30x optical zoom and a frame rate of 60fps. It is capable of precisely identifying the details in a scene, even in dynamic, rapidly changing situations. DELUX technology for MAXIMUS MPX DELUX has introduced new, advanced performance in proportional zoom control and management of privacy masking for sensitive areas.

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 ATEX/IECEx certified versions are available as pre-wired options, with armoured cable and barrier cable gland, simplifying installation and making these PTZ cameras the perfect solution for use in the most demanding video surveillance installations, and in the most extreme conditions.

The MAXIMUS MPX series products are Lloyd's Register Type Approval System Test Specification Number 1 certified and therefore can be used in Marine and Offshore applications for environmental categories ENV1, ENV2, ENV3 and ENV5 (eg. passenger ships, open-air decks, closed spaces and technical areas that may be subject to heat generated by other equipment, potentially explosive areas, docking procedures).

CERTIFICATIONS



Other certifications pending.

All updates on Certifications and Markings at www.videotec.com

FEATURES

Certifications for use in Zone 1 and 2, Group IIC T6 (Gas), and in Zone 21 and 22, Group IIIC T85° (Dust)

Marine Certification: Lloyd's Register Marine Type Approval

Electropolished AISI 316L stainless steel ex-proof PTZ unit

Camera Full HD 1080p, 30x, 60fps

Minimum Illumination:

- Colour: 0.006lx

- B/W: 0.0006lx

Video compression H.264/AVC, MJPEG, JPEG and MPEG4

Certified ONVIF, Profile S, Profile Q

Day/Night (Auto ICR: automatic removal of IR filter)

De-fog function

Up to 3 simultaneous video streams in FULL HD

1 alarm input and 1 relay output

Variable speed: from 0.1°/s up to 100°/s Pan and Tilt

Position accuracy: 0.02°

Speed proportional to Zoom

3/4" NPT threaded hole for use of cable glands or conduit

Integrated wiper

Operating temperature: from -40°C (-40°F) up to +60°C (140°F)

Options:

- Prewired versions with armoured cable and barrier cable gland (IEC/EN60079-14) (except for UL versions). Option supplied as accessory

TECHNICAL DATA

GENERAL

AISI 316L stainless steel construction
Passivated and electropolished external surfaces
Dynamic positioning control system

MECHANICAL

1 3/4" NPT hole for cable gland
Zero backlash
Horizontal rotation: 360°, continuous rotation
Vertical rotation: from -90° up to +90°
Horizontal speed (variable): from 0.1°/s up to 100°/s
Tilt speed (variable): from 0.1°/s up to 100°/s
Accuracy of preset positions: 0.02°
12mm (0.47in) thick tempered glass window
Integrated wiper
Unit weight: 27kg (60lb)

ELECTRICAL

Supply voltage/Current consumption

- 230Vac, 0.5A, 50/60Hz
- 24Vac, 5A, 50/60Hz
- 120Vac, 1A, 50/60Hz

Power consumption:

- 120W max

NETWORK

Ethernet connection: 100 Base-TX
Connector: RJ45

VIDEO

Video encoder

- Communication protocol: ONVIF, Profile S and Profile Q
- Device configuration: TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, HTTPS, NTP, DHCP, WS-DISCOVERY, DSCP, IGMP (Multicast), SOAP, DNS
- Streaming: RTSP, RTCP, RTP/IPv4, HTTP, Multicast
- Video compression: H.264/AVC, MJPEG, JPEG, MPEG4
- 3 independent video streams Full HD
- Image resolution: from 320x180pixel up to 1920x1080pixel in 6 steps
- Selectable frame rate from 1 to 60 images per second (fps)
- Web Server
- Directional OSD
- Motion Detection

I/O INTERFACE

I/O alarm board

- Alarm inputs: 1
- Relay outputs: 1 (1A, 30Vac/60Vdc max)

CAMERAS

Day/Night Full HD 30x

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, 10 steps (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, 3D
Exposure Control: Auto, Manual, Priority (Iris Priority, Shutter Priority), Brightness, Custom
De-fog: Yes (On/Off)

ENVIRONMENT

For installation indoors and outdoors
Operating temperature: from -40°C (-40°F) up to +60°C (140°F)
Relative humidity: from 10% up to 95% (no condensation)

CERTIFICATIONS

ATEX (EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-31: 2014):

- Ex II 2 G Ex db IICT6 Gb T_a -40°C to +60°C
- Ex II 2 D Ex tb IIIC T85°C Db T_a -40°C to +60°C
- IP66

IECEX (IEC 60079-0: 2011, IEC 60079-1: 2014, IEC 60079-31: 2013):

- Ex db IIC T6 Gb T_a -40°C to +60°C
- Ex tb IIIC T85°C Db T_a -40°C to +60°C
- IP66

EAC EX (pending):

- Ex II 2G Ex db IIC T6 Gb T_a -40°C to +60°C, IP66
- Ex II 2D Ex tb IIIC T85°C Db T_a -40°C to +60°C, IP66

UL listed for USA (only for 24Vac version):

- Class I, Zone 1, AEx d IIC T6
- Zone 21, AEx tb IIIC T85°C
- Class I, Division 2, Groups A, B, C, and D, T6
- Class II, Division 2, Groups F and G, T6

UL listed for Canada (only for 24Vac version):

- Ex db IIC T6 Gb
- Ex tb IIIC T85°C Db
- Class I, Division 2, Groups A, B, C, and D, T6
- Class II, Division 2, Groups F and G, T6

KCs 16- KA4B0-0313X - 16- KA4B0-0314X (pending)

- Ex d IIC T6
- Ex tb IIIC T85°C
- 40 °C ≤ T_a ≤ +60 °C

Lloyd's Register Marine Type Approval (the 24Vac versions require a filter accessory FM1010)

- Test Specification Number 1:2015 (ENV1, ENV2, ENV3, ENV5)

cULus Listed, TYPE 4X (only for 24Vac version)

IP protection degree (EN/IEC60529):

- IP66

BRACKETS AND ADAPTORS

MPXWBA	AISI 316L stainless steel wall bracket
MPXCW	AISI 316L stainless steel corner adapter module
MPXCOL	AISI 316L stainless steel pole adapter module
MPXWBTA	AISI 316L stainless steel parapet or ceiling mounting bracket

ACCESSORIES

WASEX2T4AT	Tank 10l (2.6gal) with integrated manual pump controlled by ATEX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4GOR	Tank 10l (2.6gal) with integrated manual pump controlled by EAC EX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4IN	Tank 10l (2.6gal) with integrated manual pump controlled by INMETRO certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc

MBA155A	Explosion-proof communication box in aluminium, 230Vac
MBA255A	Explosion-proof communication box in aluminium, 24Vac
MBA355A	Explosion-proof communication box in aluminium, 120Vac
OCTEX3/4C	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXA3/4C	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEXB3/4C	Barrier cable gland in nickel-plated brass 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXB3/4P	Barrier cable gland in nickel-plated brass EX 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXBA3/4C	Barrier cable gland in nickel-plated brass 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEXBA3/4P	Barrier cable gland in nickel-plated brass EX 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEX3/4	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, unarmoured cable ATEX
OCTEXA3/4	Cable gland in nickel-plated brass with gasket EX 3/4" NPT, armoured cable ATEX
OCTEXB1/2C	Barrier cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXB1/2P	Barrier cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXBA1/2P	Barrier cable gland in nickel-plated brass EX 1/2" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEX1/2C	Cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXS1/2C	Cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXA1/2C	Cable gland in nickel-plated brass EX 1/2" NPT armoured cable IECEX-ATEX-EAC Ex
OCTEX1/2-3/4C	Cable glands reduction in nickel-plated brass 3/4" - 1/2" NPT IECEX-ATEX-EAC Ex
OCTEX1/2-3/4P	Cable glands reduction in nickel-plated brass Ex 3/4" - 1/2" NPT IECEX-ATEX-EAC Ex
OCTEXP3/4C	Conduit cable gland nickel-plated brass 3/4" NPT IECEX-ATEX- c CSA us - EAC Ex (operating temperature: from -60°C (-76°F) up to +80°C (+176°F))
MPXCABLARM4	Cablings for MPX/MPXHD, 4m (13ft) (armoured cable and barrier cable gland): 1 Ethernet cable, 3 power supply wires, 1 coaxial video cable, 7 wires for alarms, relay and telemetry
MPXCABLARM10	Cablings for MPX/MPXHD, 10m (394in) (armoured cable and barrier cable gland): 1 Ethernet cable, 3 power supply wires, 1 coaxial video cable, 7 wires for alarms, relay and telemetry
FM1010	EMC filter for Marine certification

For further details about cable glands part numbers, please refer to the relevant table.

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
MPXHD11VW0Z00B	30.4kg (67lb)	54x31x49cm (21x12x19in)	-

SELECTION DIAGRAM FOR CABLE GLANDS AND ACCESSORIES 1/2" NPT

Type	Certification	Operating temperature	Cable	Model Number	Diameter of the external cable	Under armor cable diameter
Barrier cable gland	IECEX/ATEX/EAC Ex	-60°C / +80°C (-76°F / +176°F)	Unarmoured cable	OCTEXB1/2C	3.0 - 8.0mm (0.12-0.31in)	–
			Unarmoured cable	OCTEXB1/2P	12.5 - 14.0mm (0.5-0.55in)	–
			Armoured cable	OCTEXBA1/2P	15.5 - 21.1mm (0.61-0.83in)	–
Cable gland with gasket	IECEX/ATEX/EAC Ex	-60°C / +100°C (-76°F / +212°F)	Unarmoured cable	OCTEX1/2C	3.2 - 8.0mm (0.12-0.31in)	–
			Unarmoured cable	OCTEXS1/2C	6.5 - 11.9mm (0.26 - 0.47in)	–
			Armoured cable	OCTEXA1/2C	12.5 - 20.5mm (0.49 - 0.8in)	10 - 14.3mm (0.4 - 0.56in)
Plug EX 1/2"NPT	IECEX/ATEX/EAC Ex	-100°C (-148°F) / +400°C (752°F)	–	OEXPLUG1/2P	–	–

SELECTION DIAGRAM FOR CABLE GLANDS AND ACCESSORIES 3/4" NPT

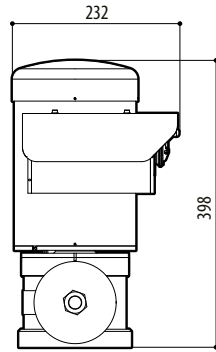
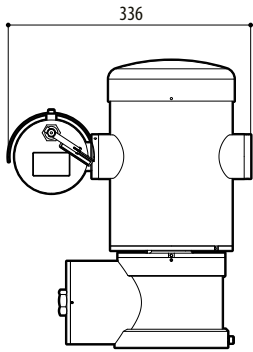
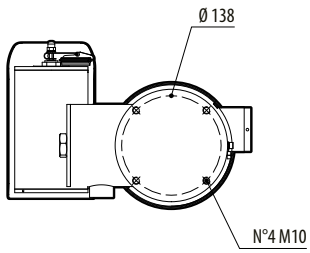
Type	Certification	Operating temperature	Cable	Model Number	Diameter of the external cable	Under armor cable diameter
Barrier cable gland	IECEX/ATEX/EAC Ex	-60°C / +80°C (-76°F / +176°F)	Unarmoured cable	OCTEXB3/4C	13.0 - 20.2mm (0.51-0.79in)	–
			Armoured cable	OCTEXBA3/4C	16.9 - 26.0mm (0.66-1.02in)	–
			Unarmoured cable	OCTEXB3/4P	17.8 - 20.0mm (0.70-0.79in)	–
			Armoured cable	OCTEXBA3/4P	16.8 - 23.9mm (0.66-0.94in)	–
Cable gland with gasket	IECEX/ATEX/EAC Ex	-60°C / +100°C (-76°F / +212°F)	Unarmoured cable	OCTEX3/4C	13.0 - 20.2mm (0.51-0.79in)	–
			Armoured cable	OCTEXA3/4C	16.9 - 26.0mm (0.66-1.02in)	11.1 - 19.7mm (0.44 - 0.78in)
	ATEX	-40°C / +100°C (-40°F / +212°F)	Unarmoured cable	OCTEX3/4	14.0 - 17.0mm (0.55-0.67in)	–
			Armoured cable	OCTEXA3/4	18.0 - 23.0mm (0.71-0.91in)	14 - 17mm (0.55 - 0.67in)
Plug EX 3/4"NPT	IECEX/ATEX/EAC Ex	-20°C / +80°C (-4°F / + 176°F)	–	OEXPLUG3/4	–	–
		-100°C (-148°F) / +400°C (752°F)	–	OEXPLUG3/4P	–	–
Conduit sealing fitting	IECEX-ATEX- c CSA us - EAC Ex	-60°C / +80°C (-76°F / +176°F)	–	OCTEXP3/4C	–	–
Reduction 3/4" NPT x 1/2" NPT	IECEX/ATEX/EAC Ex	-50°C (-58°F) / +180°C (+356°F)	–	OCTEX1/2-3/4C	–	–
		-100°C (-148°F) / +400°C (752°F)	–	OCTEX1/2-3/4P	–	–

MAXIMUS MPX DELUX - CONFIGURATION OPTIONS

	Voltage	Camera				Video Output	
MPXHD	1 230Vac	1 Videotec super low-light Day/Night 30X zoom, Full HD camera	V With alarm board	W With wiper	0	Z IP H.264/AVC, ONVIF protocol Profile S and Profile Q	00B
	2 24Vac						
	3 120Vac						

TECHNICAL DRAWINGS

The measurements indicated are expressed in millimetres.



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