MAXIMUS MPXHD
EXPLOSION-PROOF FULL HD PTZ CAMERA

IP66 PROTECTION | TYPE 4X PROTECTION | IP | WIPER | INTEGRATED CAM | ONVIF | S

FEATURES

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

Electropolished AISI 316L stainless steel ex-proof PTZ unit

Camera Full HD 1080p, 30x, 60fps

Minimum Illumination:
- Colour: 1.4lx, F1.6 AGC on, 1/30s 50 IRE (Normal mode)
- Colour: 0.35lx, F1.6 AGC on, 1/30s, 50 IRE (High Sensitivity mode)
- B/W: 0.05lx, F1.6 AGC on, 1/30s, 50 IRE (Normal mode)
- B/W: 0.013lx, F1.6 AGC on, 1/30s, 50 IRE (High sensitivity mode)

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

Video compression H.264/AVC and MJPEG

Certified ONVIF, Profile S

Up to 4 simultaneous video streams

1 alarm input and 1 relay output

Variable speed: 0.1°-100°/s Pan and Tilt

Position accuracy: 0.02°

¾" NPT threaded hole for use of cable glands or conduit

Extremely easy electrical connections directly into the unit, thanks to the explosion-proof inspection box

Integrated wiper

Total control of the auxiliary functions through the Videotec PTZ ASSISTANT

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

OPTIONS:

Prewired versions with armoured cable and barrier cable gland (IEC/EN 60079-14) (except for UL versions). Option supplied as accessory

DESCRIPTION

MAXIMUS MPXHD is a Full HD ex-proof PTZ which produces high definition images and is ideal for effective video surveillance and process control in harsh settings where the presence of gases or flammable dust can create a potentially explosive environment (a reality often found in the oil and gas industries or marine and industrial sectors)

The Full HD, 1080p, 60fps camera incorporates an outstanding 30x optical zoom, able to accurately identify the smallest details in a scene, with the ability to transmit images via Ethernet, H.264/AVC and MJPEG compression and ONVIF Profile S compatibility to allow for use with third-party products. The response to the operator's commands is instantaneous, for a fast and accurate detection of a target in all conditions.

The care taken in the design, the choice of high quality components and the strong, the AISI 316L stainless steel construction with IP66 protection guarantees perfect operation and durability in temperatures ranging from -40°C to +60°C.

Thanks to the built-in wiper, images are always perfectly clear; also available is the WASEX washer kit with certified explosion-proof pump, which reduces the need for maintenance.

The ATEX/IECEx/EAC Ex/INMETRO 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.

FULL HD 1080P

WASEX - STAINLESS STEEL WASHER PUMP WITH EX-PROOF SOLENOID VALVE FOR MAXIMUS RANGE (REF. ACCESSORIES IN TECHNICAL DATA)

Ex ATEX | IECEx | EAC Ex | INMETRO | c UL us LISTED | KC S

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 glands

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°

12mm 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

Connector:
- RJ45, 10BASE-T/100BASE-T

VIDEO

Video encoder
- Communication protocol: ONVIF, Profile S
- Device configuration: TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, NTP, DHCP, WS-DISCOVERY, QoS, IGMP (Multicast)
- Streaming: RTSP, RTCP, RTP/IPv4
- Video compression: H.264/AVC, MJPEG
- 2 independent video streams Full HD or 4 independent video streams depending on the configuration
- Image resolution: from FullHD to 352x240 in 18 steps
- Selectable frame rate from 1 to 60 images per second (fps)
- Web Server

I/O INTERFACE

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

CAMERA

Day/Night Full HD 30x

Image Device: 1/2.8 type Exmor™ CMOS sensor

Effective Pixels: approx. 2.38 Megapixels

Minimum Illumination, color (ICR-OFF):
- 1.4lx, 1/30s, 50 IRE (Normal mode)
- 0.35lx, 1/30s, 50 IRE (High sensitivity mode)
- 0.19lx, 1/3s, 50 IRE (Normal mode)
- 0.05lx, 1/3s, 50 IRE (High sensitivity mode)

Minimum Illumination, B/W (ICR-ON):
- 0.05lx, 1/30s, 50 IRE (Normal mode)
- 0.013lx, 1/30s, 50 IRE (High sensitivity mode)
- 0.002lx, 1/3s, 30 IRE (High sensitivity mode)

Lens: f=4.3 mm (wide) ~ 129.0 mm (tele), from F1.6 to F4.7

Zoom: 30x (360x with digital zoom)

Horizontal Viewing Angle: from 63.7° (wide end) up to 2.3° (tele end)

Minimum object distance: from 10mm (wide) up to 1200mm (tele)

Electronic Shutter: 1/1 to 1/10000 s, 22 steps

White balance: Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium vapor lamp (Fix, Auto, Outdoor Auto), One-push, Manual

Gain: Auto, Manual, Gain Limit (from 3dB up to 43dB, steps: 3dB)

Wide Dynamic Range: On/Off/Visibility enhancer, Light level, Brightness compensation selection, Compensation level

Focus System: Auto (Sensitivity: Normal, Low), One-push AF, Manual, Focus compensation with ICR On, Interval AF, Zoom trigger AF

Picture Effects: E-flip, Mirror image, Color enhancement

Exposure Control: Auto, EV Compensation, Manual, Priority (Shutter priority, Iris priority), Brightness, Slow AE

S/N Ratio: more than 50dB

Wide-D (wide dynamic range): 130dB

De-fog: On/Off

ENVIRONMENT

Indoor/Outdoor

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: 2007, EN 60079-31: 2009):

   ⟨Ex⟩ II 2 G Ex d IIC T6 Gb T_a -40℃ to +60℃

   ⟨Ex⟩ II 2 D Ex tb IIIC T85℃ Db T_a -40℃ to +60℃

   IP66

IECEx (IEC 60079-0: 2011, IEC 60079-1: 2007-04, IEC 60079-31: 2008):

   Ex d IIC T6 Gb T_a -40℃ to +60℃

   Ex tb IIIC T85℃ Db T_a -40℃ to +60℃

   IP66

EAC EX:

   Ex d IIC T6 Gb X

   Ex tb IIIC T85 Db X

INMETRO:

   Ex d IIC T6 Gb -40 ℃ ≤ T_a ≤ +60 ℃

   Ex tb IIIC T85℃ Db -40 ℃ ≤ T_a ≤ +60 ℃

   IP66

cULus Listed, TYPE 4X

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

   Class I, Zone 1, AEx d IIC T6

   Zone 21, AEx tb IIIC T85℃

   Class I, Division 2, Groups A, B, C, and D

   Class II, Division 2, Groups F and G

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

   Class I, Zone 1, Ex d IIC T6 Gb

   Class II, Groups E, F and G

   Class I, Division 2, Groups A, B, C, and D

   Class II, Division 2, Groups F and G

KCs 16- KA4B0-0313X - 16- KA4B0-0314X

   Ex d IIC T6

   Ex tb IIIC T85℃

   -40 ℃ ≤ T_a ≤ +60 ℃

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 with integrated manual pump controlled by ATEX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4GOR	Tank 10l with integrated manual pump controlled by EAC EX certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
WASEX2T4IN	Tank 10l with integrated manual pump controlled by INMETRO certified solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac/Vdc
OCTEX3/4C	Cable gland with gasket EX 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXA3/4C	Cable gland with gasket EX 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEXB3/4C	Barrier cable gland 3/4" NPT, unarmoured cable IECEX-ATEX-EAC Ex
OCTEXBA3/4C	Barrier cable gland 3/4" NPT, armoured cable IECEX-ATEX-EAC Ex
OCTEX3/4	Cable gland with gasket EX 3/4" NPT, unarmoured cable ATEX
OCTEXA3/4	Cable gland with gasket EX 3/4" NPT, armoured cable ATEX
OCTEXB1/2C	Barrier cable gland EX 1/2" NPT unarmoured cable ATEX-IECEx-EAC Ex
OCTEX1/2C	Cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC Ex, with gasket from 3 to 8mm (0.12 to 0.31in)
OCTEXS1/2C	Cable gland in nickel-plated brass EX 1/2" NPT, unarmoured cable IECEX-ATEX-EAC Ex, with gasket from 7.5 to 11.9mm (3 to 4.7in)
OCTEX1/2-3/4C	Cable glands reduction in nickel-plated brass 3/4" - 1/2" NPT IECEX-ATEX-EAC Ex
OEXPLUG3/4	Plug EX 3/4" NPT IECEX-ATEX-EAC Ex
MPXCABLARM4	Cabling for MPX/MPXHD, 4m (157.5in) (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	Cabling 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

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
MPXHD1FVW0Z00A	30.4kg (67lb)	54x31x49cm (21x12x19in)	-

MAXIMUS MPX HD - CONFIGURATION OPTIONS

MPXHD	Voltage		Camera						Video Output		
MPXHD	1	230Vac	F	Day/Night camera 30X zoom, FullHD	V	With alarm board	W	With wiper, 1 input, 1 output	0	Z	IP H.264/AVC, Protocol ONVIF Profile S	00A
	2	24Vac									
	3	120Vac									

1/2" NPT CABLE GLAND SELECTION GUIDE

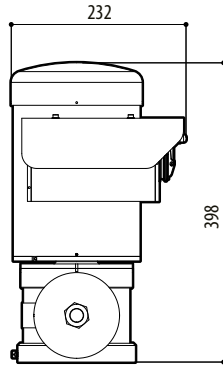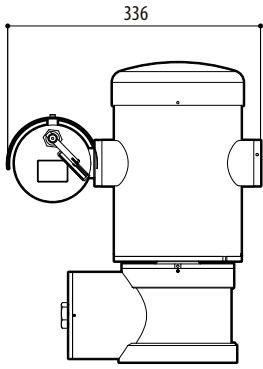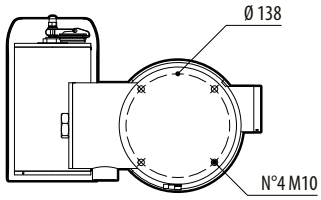| Zone, Gas	Cable gland type	Certification	Operating temperature	Cable	Cable glands part code	Diameter of the external cable (mm)
IIC, Zone 1 or Zone 2 IIB or IIA, Zone 1	Barrier	IECEX/ATEX/EAC Ex	-60°C / +80°C (-76°F / +176°F)	Not armoured	OCTEXB1/2C	3 - 8
IIB or IIA, Zone 2	With gasket	IECEX/ATEX/EAC Ex	-60°C / +100°C (-76°F / +212°F)	Not armoured	OCTEX1/2C	3 - 8
				Not armoured	OCTEXS1/2C	7.5 - 11.9

3/4" NPT CABLE GLAND SELECTION GUIDE

Zone, Gas	Cable gland type	Certification	Operating temperature	Cable	Cable glands part code	Diameter of the external cable (mm)	Under armor cable diameter (mm)
IIC, Zone 1 or Zone 2 IIB or IIA, Zone 1	Barrier	IECEX/ATEX/EAC Ex	-60°C / +80°C (-76°F / +176°F)	Not armoured	OCTEXB3/4C	13 - 20.2	–
				Armoured	OCTEXBA3/4C	16.9 - 26	–
IIB or IIA, Zone 2	With gasket	IECEX/ATEX/EAC Ex	-60°C / +100°C (-76°F / +212°F)	Not armoured	OCTEX3/4C	13 - 20.2	–
				Armoured	OCTEXA3/4C	16.9 - 26	11.1 - 19.7
		ATEX	-20°C / +80°C (-4°F / + 176°F)	Not armoured	OCTEX3/4	14 - 17	–
				Armoured	OCTEXA3/4	18 - 23	14 - 17

VIDEOTEC **VIDEO SECURITY PRODUCTS**

TECHNICAL DRAWINGS

Sizes in millimeters.

Ø 138

N°4 M10

336

232

398

MAXIMUS MPXHD