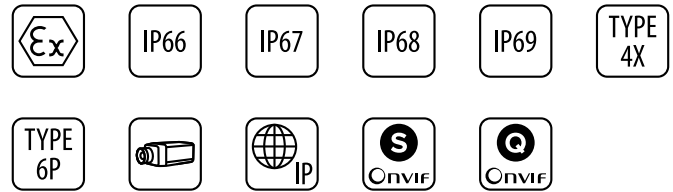


MAXIMUS MMX

EX-PROOF HD CAMERA IN A COMPACT DESIGN



MAXIMUS MMX+WALL MOUNTING



MAXIMUS MMX+FIXING TO PARAPET OR CEILING MOUNT

DESCRIPTION

The Full HD explosion-protected MAXIMUS MMX is perfect 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, with 3x or 10x motorised zoom lens, offers multiple video streams (H.264/AVC, MJPEG, JPEG, MPEG4) and provides exceptional image quality, picking out every detail in a scene, even in the harshest environmental conditions.

A clear advantage offered by this camera is its extremely easy and safe "plug and play" installation, since it can be supplied with multi-polar cabling to avoid complex electrical connections typical of this equipment. Furthermore, the camera can be powered in PoE+, using the power made available from the Ethernet cable as a single power supply source, thereby further simplifying installation. The camera is supplied with supports for wall, ceiling and parapet installation and with a sunshield.

The housing is entirely manufactured in stainless steel AISI316L. Resistance to corrosion is guaranteed and thanks to its compactness (only 116mm) and contained weight (only 6.5 kg), it can be installed in narrow environments typical of industrial surroundings.

The IP66/IP67/IP68/IP69 level guarantees complete protection against bad weather and water immersion.

Another important feature of the camera is the extended certification temperature range of -40°C to 70°C.

The MAXIMUS MMX range of cameras meets every installation need, providing maximum performance and excellent value for money.

CERTIFICATIONS



MAIN FEATURES

Certifications for use in Zones 1 and 2, IIB T6 or T5 Group (Gas) and in Zones 21 and 22, IIIC T85°C or T100°C Group (Dust)

AISI 316L stainless steel construction

Supports for ceiling, wall and parapet installation supplied

Camera Full HD 1080p, 3x or 10x Day/Night

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

Up to 3 simultaneous video streams

Optional 4m (13ft) or 10m (33ft) preinstalled armoured multipolar cable with cable gland

Power supply: 24Vdc/24Vac, PoE+

IP66/IP67/IP68/IP69

TECHNICAL DATA

GENERAL

AlSi 316L stainless steel construction

Shot peened and electro-polished outside surfaces

Fluorocarbon O-ring seals

MECHANICAL

Sunshield

Supports for wall, ceiling or parapet installation

Unit weight:

- 6.5kg (14.3lb) (housing only + mounting bracket)
- 8.5kg (18.7lb) (housing with 4m multi-polar cable shield)

CABLE GLANDS

Cable entry: 1 hole, 1/2" NPT

Cable gland with gasket Ex d 1/2"NPT (with pre-installed cable only)

HOUSING'S WINDOW

Material: Thermally tempered glass

Usable diameter: 73.5mm

ELECTRICAL

Supply voltage/Current consumption

- 24Vac/24Vdc, 1.32A, 50/60Hz
- PoE+ (IEEE 802-at)

Armoured cable

- External diameter: 18.6±0.2mm
- Diameter under armature: 13.8mm
- Colour: black RAL 9005

Armoured cable composition:

- 3x1mm²
- 4x2x0.22mm² (cat. 5E F/STP)

NETWORK

Ethernet connection: 100 Base-TX

Connector: RJ45

Communication protocol: ONVIF, Profile S and Profile Q

Device configuration: TCP/IPv4, UDP/IPv4, HTTP, NTP, DHCP, WS-DISCOVERY, IGMP (Multicast)

Web Server

Firmware and configuration upgrade via web pages and ONVIF protocol.

VIDEO

Video encoder

- Streaming: RTSP, RTCP, RTP/IPv4, HTTP
- Video compression: H.264/AVC, MJPEG, JPEG, MPEG4
- 3 independent video streams Full HD
- Image resolution: from 320x180 a 1920x1080 in 6 steps
- Selectable frame rate from 1 to 60 images per second (fps) (camera 10x)
- Selectable frame rate from 1 to 30 images per second (fps) (camera 3x)

CAMERAS

Day/Night Full HD 3x

Resolution: Full HD 1080p (1920x1080)

Image Device: 1/2.8 type Exmor™ CMOS sensor

Effective Pixels: approx. 3.27 Megapixels

Signal system: max 1080p/30fps

Minimum Illumination (ICR-OFF):

- 1lx, 1/30s, F1.2, 50% (Normal mode)
- 0.25lx, 1/30s, F1.2, 50% (High sensitivity mode)

Minimum Illumination (ICR-ON):

- 0.1lx, 1/30s, F1.2, 50% (Normal mode)
- 0.03lx, 1/30s, F1.2, 50% (High sensitivity mode)

Lens: f=3.0 mm (wide) ~ 9.0 mm (tele), from F1.2 up to F2.1

Zoom: 3x (36x with digital zoom)

Horizontal Viewing Angle: from 90° (wide) up to 32° (tele)

Minimum object distance: 300mm (11.8in) (wide to tele)

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

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

Wide Dynamic Range: On/Off

Exposure Control: Auto, Manual, Priority (Shutter priority, Iris priority), Brightness

Gain limit: up to 28dB

Backlight Compensation

Day/Night Full HD 10x

Resolution: Full HD 1080p (1920x1080)

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% (Normal mode)
- 0.35lx, 1/30s, 50% (High sensitivity mode)
- 0.19lx 1/3s 50% (Normal mode)
- 0.05lx, 1/3s, 50% (High sensitivity mode)

Minimum Illumination, B/W (ICR-ON):

- 0.12lx 1/30s 50% (Normal mode)
- 0.03lx, 1/30s, 50% (High sensitivity mode)
- 0.002lx, 1/3s, 30% (High sensitivity mode)

Lens: f=3.8 mm (wide) ~ 38 mm (tele), from F1.8 to F3.4

Zoom: 10x (120x with digital zoom)

Horizontal Viewing Angle: 67° (wide end), 7.6° (tele end)

Minimum object distance: 10mm (wide) ~ 800mm (tele)

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

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

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

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

S/N Ratio: 50dB

Gain limit: up to 43.5dB

De-fog: Yes (On/Off)

Backlight Compensation

ENVIRONMENT

For installation indoors and outdoors

Operating temperature: from -40°C (-40°F) up to +65°C (149°F)

Certification temperature: from -40°C (-40°F) up to +65°C (149°F) (T6/T85°C) or +70°C (158°F) (T5/T100°C)

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)

IECEX (IEC 60079-0: 2011 Ed.6, IEC 60079-1: 2014-06 Ed.7, IEC 60079-31: 2013 Ed.2)

EAC EX (TR CU 012/2011)

UL listed for USA (UL 60079-0 Ed.6, UL 60079-1 Ed.7, UL 60079-31 Ed.2)

UL listed for Canada (C22.2 NO. 60079-0:15, C22.2 NO. 60079-1:16, C22.2 NO. 60079-31:15)

Lloyd's Register Marine Type Approval

TYPE 6P, TYPE 4X (UL50E)

IP protection degree: EN/IEC60529

- IP66
- IP67
- IP68 (2h, 5m (16ft))
- IP69

ACCESSORIES

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)
OCTEXA1/2C	Cable gland in nickel-plated brass EX 1/2" NPT armoured cable IECEx-ATEX-EAC Ex, with gasket
OCTEXB1/2C	Barrier cable gland EX 1/2" NPT unarmoured cable ATEX-IECEx-EAC Ex
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)

BRACKETS AND ADAPTORS

MMXCWCOL	Pole and corner adaptor module in stainless steel AISI 316L
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PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
MMX2COZA	8kg (18lb)	32.5x19x23cm (12.8x7.5x9in)	2
MMX2CAZA	11kg (24.2lb)	64x20.8x59cm (25.2x8.2x23.2in)	-
MMX2CBZA	14kg (31lb)	64x20.8x59cm (25.2x8.2x23.2in)	-

1/2" NPT CABLE GLAND SELECTION GUIDE

Cable gland type	Certification	Operating temperature	Cable	Cable glands product code	Diameter of the external cable (mm)	Under armor cable diameter (mm)
Barrier	IECEX/ATEX/EAC Ex	-60°C / +80°C (-76°F / +176°F)	Not armoured	OCTEXB1/2C	3 - 8	–
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	–
			Armoured	OCTEXA1/2C	12.5 - 20.5	8.4 - 14.3

MMX FAMILY - WITH CABLE

Certification	Marking	Ambient temperature
ATEX	Ⓜ II 2 G Ex db IIB T6...T5 Gb Ⓜ II 2 D Ex tb IIIC T85°C...T100°C Db	-40°C ≤ Ta ≤ +65°C or +70°C
IECEX	Ex db IIB T6...T5 Gb Ex tb IIIC T85°C...T100°C Db	-40°C ≤ Ta ≤ +65°C or +70°C
EAC Ex	Ex II 2 G Ex db IIB T6...T5 Gb Ex tb IIIC T85°C...T100°C Db	-40°C ≤ Ta ≤ +65°C or +70°C

MMX FAMILY - WITHOUT CABLE

Certification	Marking	Ambient temperature
ATEX	Ⓜ II 2 G Ex db IIB T6...T5 Gb Ⓜ II 2 D Ex tb IIIC T85°C...T100°C Db	-40°C ≤ Ta ≤ +65°C or +70°C
IECEX	Ex db IIB T6...T5 Gb Ex tb IIIC T85°C...T100°C Db	-40°C ≤ Ta ≤ +65°C or +70°C
EAC Ex	Ex II 2 G Ex db IIB T6...T5 Gb Ex tb IIIC T85°C...T100°C Db	-40°C ≤ Ta ≤ +65°C or +70°C
Hazardous Location America	Class I, Zone 1, AEx db IIB T6...T5 Zone 21, AEx tb IIIC T85°C...T100°C Class I, Div 2 Groups C, D T6...T5 Class II, Div 2 Groups E, F and G T85°C...T100°C	-40°C ≤ Ta ≤ +65°C or +70°C
Hazardous Location Canada	Ex db IIB T6...T5 Gb Ex tb IIIC T85°C...T100°C Db Class I, Div 2 Groups C, D T6...T5 Class II, Div 2 Groups E, F and G T85°C...T100°C	-40°C ≤ Ta ≤ +65°C or +70°C

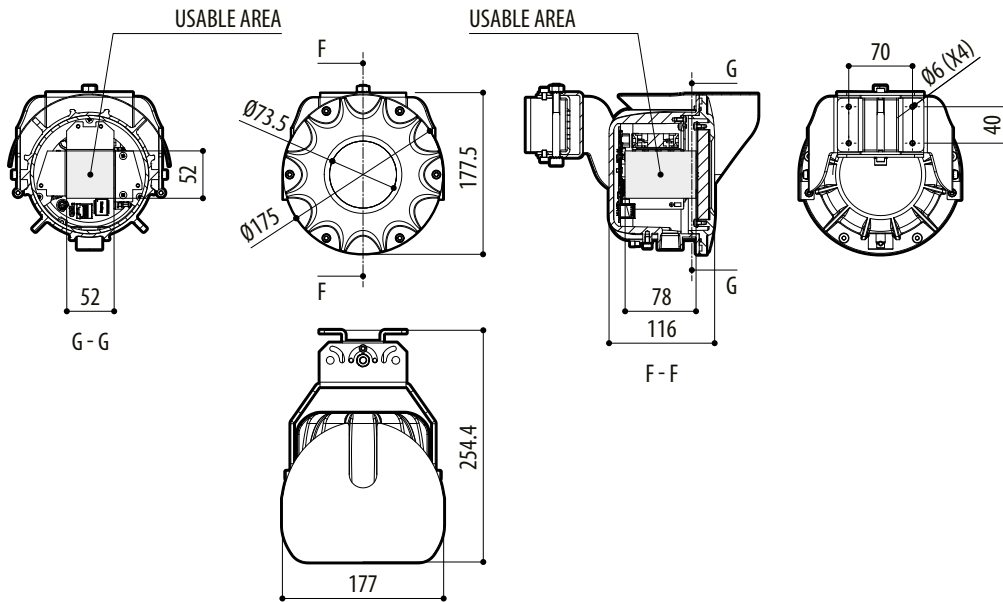
MAXIMUS MMX - CONFIGURATION OPTIONS

	Voltage	Camera	Connections	Video Output	
MMX	2 24Vdc/ 24Vac, PoE+	C Day/Night camera 3X zoom, FullHD	0 Without cable, without cable gland	Z IP H.264/AVC control, Protocol ONVIF, Profile S and Profile Q	A
		G Day/Night camera 10X zoom, FullHD	A Cable gland with gasket Ex d 1/2" NPT and 4m (13ft) armoured cable		
			B Cable gland with gasket Ex d 1/2" NPT and 10m (33ft) armoured cable		

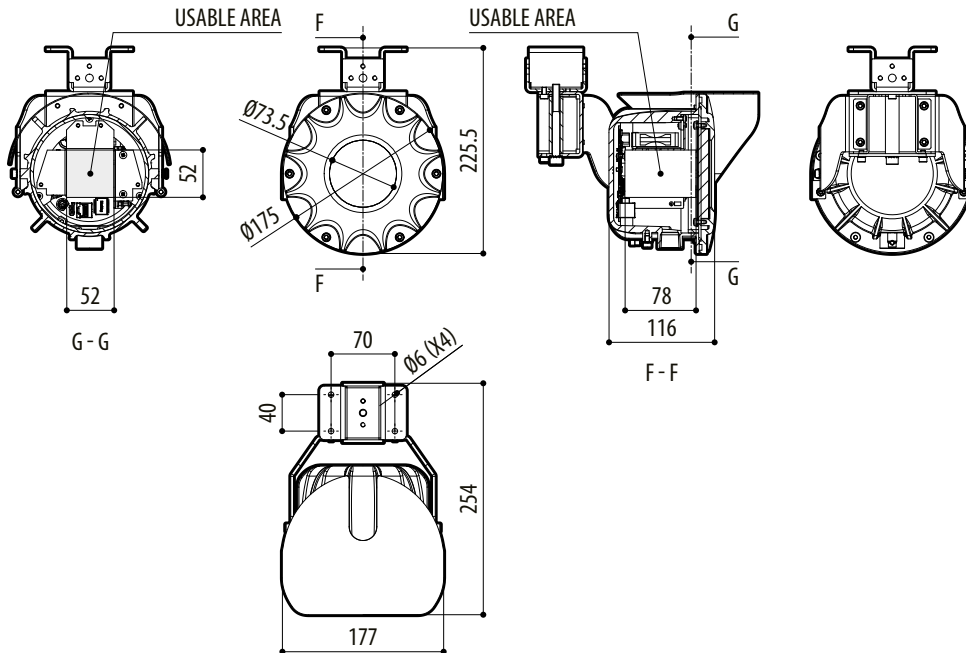
TECHNICAL DRAWINGS

The dimensions of the drawings are in millimetres.

WALL MOUNTING



PARAPET OR CEILING MOUNTING



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