

MAXIMUS MPX

EXPLOSION-PROOF POSITIONING UNIT WITH BUILT-IN DAY/NIGHT CAMERA



MAIN FEATURES

Electropolished AISI 316L stainless steel explosion proof P&T head
 ¾" NPT threaded hole for use of cable glands or conduit
 Variable speed: 0.1°-100°/s Pan and Tilt
 Extremely easy electrical connections directly into the unit, thanks to the explosion-proof inspection box
 Integrated wiper
 Day/Night camera 36x or 28x

- True Progressive Scan
- High resolution: up to 550 TVLines
- Advanced image stabilizer (Stable Zoom Mode)
- Day/Night (Auto ICR: automatic removal of IR filter)

Zero backlash
 Position accuracy: 0.02°

OPTIONS:

IP based control mode, MPEG4/MJPEG, 25fps, Full D1 (compatible with Milestone XProtect Suite and ONVIF protocol)
 Prewired ATEX / IECEx certified versions with unarmored cable/barrier cable gland

DESCRIPTION

These explosion-proof integrated positioning units have been certified and designed to meet the strictest standards regarding installation in potentially explosive environments, given the presence of gas and flammable dusts. The MAXIMUS range ensures excellent performance for monitoring critical processes in areas with risk of explosion, such as refineries, gas pipelines, oil tankers, offshore platforms, industrial processes, chemical industries, etc. The area is always monitored, thanks to the speed and detection accuracy of the target.

Made of AISI316L stainless steel, which is excellently resistant to UV rays, salt mist and air pollution.

The IP-based versions with integrated server for compressing analog data of videos and telemetry allow a network integration for a full control of all the PTZ functions via network. These models support the ONVIF protocol and are integrated by Milestone XProtect® Suite.

The versions certified ATEX / IECEx are available with optional prewired unarmored cable/barrier cable gland (IEC/EN 60079-14).

(Ref. ACCESSORIES: MPXCABL4, 4m, and MPXCABL10, 10m)



MPX



CABLE INPUT



TECHNICAL DATA**GENERAL**

AISI 316 stainless steel construction
 Passivated and electropolished external surfaces
 Quick configuration and setup
 Dynamic positioning control system

MECHANICAL

1 3/4" NPT hole for cable glands
 Zero backlash
 Horizontal rotation: 360° continuous
 Vertical rotation: -90° to +90°
 Horizontal speed (variable): from 0.1° to 100°/s
 Tilt speed (variable): from 0.1° to 100°/s
 Preset accuracy: 0.02°
 12mm thick tempered glass window
 Integrated wiper
 Unit weight: 27kg (60lb)

ELECTRICAL

Input voltage:

- 230Vac, 50/60Hz, 120W max
- 24Vac, 50/60Hz, 120W max
- 120Vac, 50/60Hz, 120W max

1 video output 75 Ohm 1Vpp (PAL/NTSC)
 Functions: Autopan, Preset, Patrol, Tour (maximum 3), Autoflip
 Maximum number of presets for protocol

- VIDEOTEC MACRO: 250
- ERNITEC: 250
- PANASONIC: 250
- PELCO D: 99
- AMERICAN DYNAMICS: 95

16-character string for zone and preset titling
 I/O alarm card:

- 5 alarm inputs
- 2 relay outputs (1A 30Vac/60Vdc max)

COMMUNICATIONS

Configuration through OSD
 2 half-duplex serial RS-485 interfaces or full-duplex RS-422
 Firmware updating from console in remote mode (only VIDEOTEC MACRO and PELCO D protocols)
 Up to 999 units, addressable by means of dip-switches
 MPX, IP based control mode:

- Connection Ethernet port LAN 10/100T

PROTOCOLS

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO*

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO are registered trademarks.

The product may be interfaced with devices not manufactured by VIDEOTEC. It is possible that the interface protocols have changed or are in a different configuration from earlier tested units by VIDEOTEC. VIDEOTEC recommends a test prior to installation. VIDEOTEC will not be liable for any installation costs or lost revenues in the event a compatibility problem will occur.

MPX, IP based control mode:

- Compression MPEG-4/MJPEG
- Picture resolution:
- Full D1 (720x576)
- VGA (640x480)
- CIF (352x288)
- Image frame rate max 25fps at Full D1
- Web Server

ENVIRONMENT

Indoor/Outdoor
 Operating temperature: -40°C (-40°F)/+60°C (140°F)
 Surge immunity: up to 2kV line to line, up to 4kV line to earth (Class 4)

CERTIFICATIONS

ATEX (EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009)

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

IECEX (IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008)

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

GOST-R

- 1 Ex d IIC T₆ Gb X
- Ex tb IIIC T₈₅°C Db X
- IP66

CNEx

- Ex d IIC T₆ Gb Tamb-40~60°C
- DIP A21 TA T₆ Tamb-40~60°C

INMETRO

- Ex d IIC T₆ Gb Ta -40°C a/to +60°C
- Ex tb IIIC T₈₅°C Db Ta -40°C a/to +60°C
- IP66

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

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

- Class I, Zone 1, AEx d IIC T₆
- Zone 21, AEx tb IIIC T₈₅°C

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

- Class I, Zone 1, Ex d IIC T₆ Gb
- Class II, Groups E, F and G

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 GOST-R 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-GOST
OCTEXA3/4C	Cable gland with gasket EX 3/4" NPT, armoured cable IECEX-ATEX-GOST
OCTEXB3/4C	Barrier cable gland 3/4" NPT, unarmoured cable IECEX-ATEX-GOST
OCTEXBA3/4C	Barrier cable gland 3/4" NPT, armoured cable IECEX-ATEX-GOST
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
MPXCABL4	Cabling for MPX/MPXT, 4m (157.5in) (unarmoured cable and barrier cable gland): 2 ethernet cables, 3 power supply wires, 2 coaxial video cables, 15 wires for relays alarms and telemetry
MPXCABL10	Cabling for MPX/MPXT, 10m (394in) (unarmoured cable and barrier cable gland): 2 ethernet cables, 3 power supply wires, 2 coaxial video cables, 15 wires for relays alarms and telemetry

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
MPX1QVW000A	30.4kg	54x31x49cm	-

MAXIMUS MPX - CONFIGURATION OPTIONS

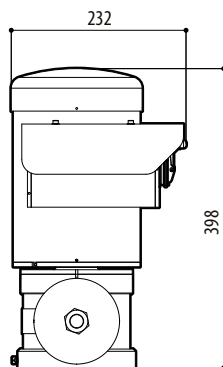
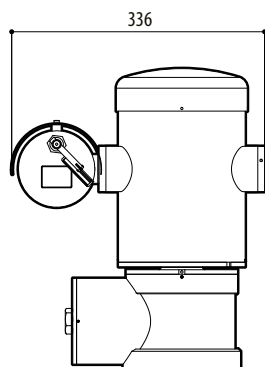
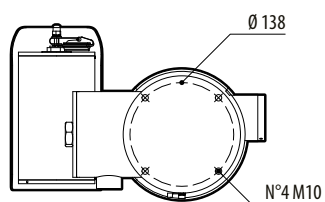
	Voltage	Day/Night camera				Video output	
MPX	1 230Vac	P Day/Night camera 36x optical zoom lens, PAL	V With alarm board	W With wiper	0	0 Analog control mode	00A
	2 24Vac	Q Day/Night camera 28x optical zoom lens, PAL				X IP MPEG4 control mode	
	3 120Vac	N Day/Night camera 36x optical zoom lens, NTSC					
		M Day/Night camera 28x optical zoom lens, NTSC					

3/4" NPT CABLE GLAND SELECTION LAYOUT

Zone, Gas	Cable gland type	Certification	Operating temperature	Cable	Cable glands part code	Diameter of the external cable	Under armor cable diameter
IIC, Zone 1 or Zone 2 IIB or IIA, Zone 1	Barrier	IECEX/ATEX/GOST	From -60°C (140°F) to +80°C (+176°F)	Not armored	OCTEXB3/4C	From 13mm (0.5in) to 20.2mm (0.8in)	—
				Armored	OCTEXBA3/4C	From 16.9mm (0.7in) to 26mm (1in)	—
IIB or IIA, Zone 2	With gasket	IECEX/ATEX/GOST	From -60°C (140°F) to +100°C (212°F)	Not armored	OCTEX3/4C	From 13mm (0.5in) to 20.2mm (0.8in)	—
				Armored	OCTEXA3/4C	From 16.9mm (0.7in) to 26mm (1in)	From 11.1mm (0.4in) to 19.7mm (0.8in)
		ATEX	From -20°C (-4°F) to +80°C (+176°F)	Not armored	OCTEX3/4	From 14mm (0.6in) to 17mm (0.7in)	—
				Armored	OCTEXA3/4	From 18mm (0.7in) thick glass to 23mm (0.9in)	From 14mm (0.6in) to 17mm (0.7in)

CAMERA FEATURES				
	SONY Day/Night 36x		SONY Day/Night 28x High sensitivity	
	PAL	NTSC	PAL	NTSC
Optical zoom	36x		28x	
Wide Dynamic Range (Fix/Auto)	✓		–	
True progressive SCAN	✓		–	
Digital image stabilisation	✓		✓	
White balance	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)		Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)	
High horizontal resolution	Up to 550 TV Lines		Up to 550 TV Lines	
Day/Night (Auto ICR)	✓		✓	
Image Sensor	1/4" EXView HAD CCD		1/4" Super HAD CCD II	
Number of effective Pixels	~ 440000 pixel	~ 380000 pixel	~ 440000 pixel	~ 380000 pixel
Min. Color illumination (IR-Cut Filter = OFF)	1.4Lux / 1/50s 0.1 Lux / 1/3s	1.4Lux / 1/60s 0.1 Lux / 1/4s	0.25Lux / 1/50s 0.16 Lux / 1/3s	0.25Lux / 1/60s 0.16 Lux / 1/4s
Min. B/W illumination	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance	✓		✓	
S/N ratio	Greater than 50dB		Greater than 50dB	
AE control	Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual		Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual	
Back light compensation	On/Off		On/Off	
Spherical masking (3D) of Privacy zones with automatic upgrade	✓		✓	
Privacy Zone Masking	On/Off (24 positions)		On/Off (24 positions)	
Maximum number of masking blocks to be displayed	8		8	
Resolution of masking blocks	160x120 HxV		160x120 HxV	
Masking	Up to 15 different masking types: 14 colour types or mosaic		Up to 15 different masking types: 14 colour types or mosaic	
Focusing system	Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual		Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual	
"Smart" lens control	SONY Modular Automatic Lens Reset Technology		SONY Modular Automatic Lens Reset Technology	
High Zoom and Wide Horizontal Field of View Capability	✓		✓	
Optical zoom	36x, f=3.4 (wide) to 122.4mm (tele) / F1.6 to F4.5		28x, f=3.5 (wide) to 98mm (tele) / F1.35 to F3.7	
Digital Zoom	12x (432x with optical zoom)		12x (336x with optical zoom)	
Angle of view (A)	57.8 degrees (wide) to 1.7 degrees (tele)		55.8 degrees (wide) to 2.1 degrees (tele)	
Minimum object distance	320mm (12.6in) (wide) to 1500mm (59.1in) (tele)		10mm (0.4in) (wide) to 1500mm (59.1in) (tele)	
Electronic Iris Speed	1/1 ÷ 1/10000s		1/1 ÷ 1/10000s	

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TECHNICAL DRAWINGS*Sizes in millimeters.*

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