

MAXIMUS MPX

EXPLOSION PROOF STAINLESS STEEL PTZ POSITIONING SYSTEM

REVISION 1209

MAIN FEATURES

Electropolished AISI 316L stainless steel explosion proof P&T head
 Variable speed: 0.1°-100°/s Pan and Tilt
 Continuous Pan rotation, Tilt rotation -90°/+90°
 Day/Night camera 36x or 28x
 Multiprotocol RS485/ RS422 serial interface
 Dynamic video masking of different areas
 Day/night (Auto ICR: automatic removal of IR filter)
 Remote firmware upgrade
 Video output available in analogue mode (via coaxial cable or optical fibre) or digital mode

DESCRIPTION

MAXIMUS MPX is a stainless steel, sturdy explosion-proof pan & tilt featuring a telemetry receiver and a Day/Night camera. MAXIMUS MPX performs continuous rotation and provides high speed, absolute positioning precision, superior image quality and simplified system configuration.

It is made of AISI 316L stainless steel passivated and electropolished.

The speed can reach up 100°/s by stepless horizontal rotation over a -90° to +90° vertical range. The P&T head can handle preset, autopan and patrol functions with 0.02° accuracy.

The integrated SONY camera is available with different optical zoom and allows high precision viewing of nearby or remote objects and dynamic masking of private areas. Moreover, the 1/4" Super HAD CCD II sensor (version with 28x zoom) guarantees high sensitivity in poorly lit environments.

All models feature a standard integrated wiper.

24, 230 or 120Vac versions in PAL or NTSC modes.

In addition to the OSD configuration, the system features a RS485/RS422 interface for complete control and remote updating to the latest firmware.

The Pan & Tilt is available both in analogue mode (via coaxial cable or optical fibre, single mode or multi mode) and in digital mode through the Ethernet cable, depending on the version.



MPX



MPX

ONVIF
 Driving network video through global standardization



INTEGRATED POSITIONING UNITS
STAINLESS STEEL SYSTEMS
CAMERA HOUSINGS
DOVE ENCLOSURES
VANDAL RESISTANT HOUSINGS
IR ILLUMINATORS
P&T MOTORS AND TELEMETRY
CAMERA BRACKETS
DIGITAL VIDEO SYSTEMS
CONTROL KEYBOARDS
VIDEO SWITCHING AND DISTRIBUTION
VIDEO TRANSMISSION

TECHNICAL DATA

GENERAL

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

MECHANICAL

1 3/4" NPT input for thread
 Zero backlash
 Horizontal rotation: continuous
 Vertical rotation: -90° to +90°
 Variable pan speed: from 0.1° to 100°/s
 Variable tilt speed: from 0.1° to 100°/s
 Preset accuracy: 0.02°
 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:
 • VIDEOTEC MACRO Protocol: 250
 • ERNITEC protocol: 250
 • PANASONIC protocol: 250
 • PELCO D Protocol: 99
 • AMERICAN DYNAMICS protocol: 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
 Nr.2 half-duplex serial RS485 interfaces, full-duplex RS422
 Firmware updating from console in remote mode (only VIDEOTEC MACRO and PELCO D protocols)
 Up to 999 units, addressable by means of dip-switches
 Integrated fiber optic video/data transceiver (optional):
 • 10bit PCM
 • Full duplex RS422/RS485
 • Multi Mode/Single Mode

IP Streaming Module (optional)
 • MPEG4 compression
 • Compatible with ONVIF 1.01
 • Compatible with VMS Milestone XProtect suite
 • LAN 10/100 Mbit/s RJ45 interface
 • Resolutions: Full D1 (720x576) @30fps, VGA (640x480), CIF (352x288), QCIF (176x144)

PROTOCOLS

AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO*
 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.
 *AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO are registered trademarks.

ENVIRONMENT

Indoor / Outdoor
 Operating temperature: see certifications
 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 T_A -40°C to +60°C Gb
 • Ex II 2 D Ex tb IIIC T85°C T_A -40°C to +60°C Db
 • IP66

IECEx (IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008)
 • Ex d IIC T6 T_A -40°C to +60°C Gb
 • Ex tb IIIC T85°C T_A -40°C to +60°C Db
 • IP66

UL pending

BRACKETS AND ADAPTORS

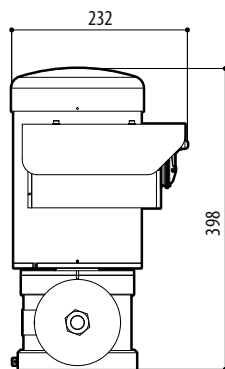
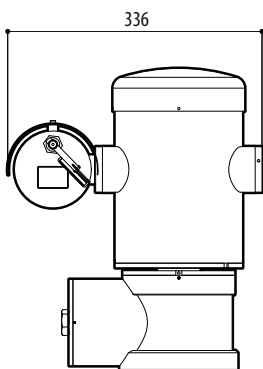
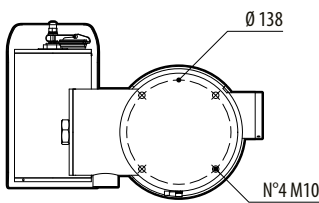
MPXWBA	AISI 316L stainless steel wall bracket
MPXCW	AISI 316L stainless steel corner adapter module
MPXCOL	AISI 316L stainless steel pole adapter module
MPXWBTA	AISI 316L stainless steel parapet or ceiling mounting bracket

ACCESSORIES

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

SELECTION TABLE FOR CABLE GLANDS							
Zone, Gas	Cable gland type	Certification	Operating temperature	Cable	Cable glands part code	External diameter (mm)	Diameter under armour (mm)
IIC, Zona 1 or Zona 2 IIB or IIA, Zona 1	Barrier	IECEX/ATEX/GOST	-60 / +80°C	Not armored	OCTEXB3/4C	13 - 20.2	
				Armored	OCTEXBA3/4C	16.9 - 26	
IIB o IIA, Zone 2	With gasket	IECEX/ATEX/GOST	-60 / +100°C	Not armored	OCTEX3/4C	13 - 20.2	
				Armored	OCTEXA3/4C	16.9 - 26	11.1 - 19.7
		ATEX	-20 / +80°C	Not armored	OCTEX3/4	14 - 17	
				Armored	OCTEXA3/4	18 - 23	14 - 17

MAXIMUS MPX - CONFIGURATION OPTIONS (NOT ALL COMBINATIONS ARE POSSIBLE)							
	Voltage	Day/night camera	Options	Options		Video output	
MPX	1 230Vac	P Day/Night camera 36x optical zoom lens, PAL	V With alarm board	W With wiper	0	O Analog mode	00A
	2 24Vac	Q Day/Night camera 28x optical zoom lens, PAL				X Integrated MPEG4 video server to control all functions via IP	
	3 120Vac	N Day/Night camera 36x optical zoom lens, NTSC				F Single Mode video and data transmitter on optical fibre	
		M Day/Night camera 28x optical zoom lens, NTSC				G Multi Mode video and data transmitter on optical fibre	



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Sizes in millimeters.

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ANALOGUE CAMERAS AVAILABLE				
	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)			
High horizontal resolution	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. night Illumination (ICR ON) (typical)	0.01 Lux / 1/3s	0.01 Lux / 1/4s	0.0015 Lux / 1/3s	0.0015 Lux / 1/4s
Min. day Illumination (ICR OFF) (typical)	0.1 Lux / 1/3s	0.1 Lux / 1/4s	0.16 Lux / 1/3s	0.16 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance	•			
S/N ratio	Greater than 50dB			
AE control	Automatic, Shutter priority, Diaphragm priority, Brightness priority and Manual			
Back light compensation	On/Off			
Spherical masking (3D) of Privacy zones with automatic upgrade	•			
Privacy Zone Masking	On/Off (24 positions)			
Maximum number of masking blocks to be displayed	8			
Resolution of masking blocks	160x120 HxV			
Masking	Up to 15 different masking types: 14 colour types or mosaic			
Focusing system	Auto (Sensitivity: Normal, Low), Trigger PTZ, Manual			
"Smart" lens control	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			