

MAXIMUS MPX

EXPLOSION PROOF STAINLESS STEEL SYSTEM

REVISION 1137



MAIN FEATURES

Electropolished AISI 316L stainless steel explosion proof P&T head with integrated Day/Night camera and telemetry receiver

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

Pan rotation: continuous; Tilt rotation -90°/+90°

36x, 28x optical zoom capability

Dynamic video masking of different areas

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

RS485/ RS422 serial interface for control from PC

Remote firmware upgrade

Versions available with: built-in wiper, dual cameras -CCD and thermal-, video and data transmitter over optical fiber

IP66/IP67

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. MAXIMUS MPX can handle preset, autopan and patrol functions with 0.02° accuracy. The pan & tilt performs continuous control and correction of the position, which is useful in case of difficult operating conditions.

The integrated SONY camera is available with different optical zoom (36x, 28x) and allows high precision viewing of nearby or remote objects and dynamic masking of private areas.

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 system control and remote updating to the latest firmware. The user-friendly installation software interface provides typical default configurations or full system customization.



MPX



MPX DUAL VISION (CCD + THERMAL)

MAXIMUS MPX

TECHNICAL DATA

GENERAL

INOX AISI316L
 Passivated and electropolished external surfaces
 Easy installation
 Zero backlash
 Quick configuration and setup
 Dynamic positioning control system

MECHANICAL

1 input 3/4" NPT for cables
 Horizontal continuous rotation
 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°

ELECTRICAL

Input voltage:
 • 230Vac, 50/60Hz, 120W max
 • 24Vac, 50/60Hz, 120W max
 • 120Vac, 50/60Hz, 120W max

Functions: Autopan, Preset, Patrol, Tour (max 3), Autoflip

Maximum number of presets:
 • VIDEOTEC MACRO Protocol: 250
 • PELCO D Protocol: 99
 • AMERICAN DYNAMICS Protocol: 95

16-characters string for zone and preset titling

I/O alarm card:
 • 5 alarm inputs
 • 2 relais 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
 • Multimode/Singlemode

Streaming IP module (optional)
 • MPEG4 compression
 • LAN Interface 10/100 Mbit/s RJ45
 • Resolutions: Full D1 (720x576) @30fps, VGA (640x480), CIF (352x288), QCIF (176x144)

PROTOCOLS

AMERICAN DYNAMICS, 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, PELCO are registered trademarks.

ENVIRONMENT

Indoor / Outdoor
 Operating temperature: -40°C / +60°C (-40°F / +140°F)
 Surge immunity: up to 2KV line to line, up to 4KV line to earth (Class 4), to achieve a better protection from lightning

CERTIFICATIONS

ATEX (EN 60079-0: 2010, EN 60079-1: 2008, EN 60079-31: 2010)
 •  II 2 G Ex d IIC T6 T_A -40°C to +60°C Gb
 •  II 2 D Ex tb IIIC T85°C T_A -40°C to +60°C Db
 • IP66/67

IECEx (IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-31: 2008)
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 • Ex tb IIIC T85°C T_A -40°C to +60°C Db
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UL pending

AVAILABLE BUILT-IN THERMAL CAMERAS						
	Thermal camera 35mm		Thermal camera 25mm		Thermal camera 9mm	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Detector	Uncooled Vanadium Oxide microbolometer (VOx)					
Resolution	320x256	320x240	320x256	320x240	320x256	320x240
Pixel dimensions	25µm					
Spectral response - Infrared long wave (LWIR)	From 7.5µm to 13.5µm					
Internal shutter (only for sensor compensation)	Video stop < 1sec.					
Digital Detail Enhancement (DDE)	Yes		Yes		Yes	
Digital zoom	2x, 4x					
Image frequency	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps	8.3fps, 25fps	7.5fps, 30fps
Image temperature range	-40°C ÷ +160°C (-40°F ÷ +320°F)					
Horizontal field of view	13°		18°		48°	
Vertical field of view	10°		14°		37°	
Focal length	F/1.2		F/1.1		F/1.25	
Man (detection / recognition / identification)	780m / 190m / 97m		560m / 140m / 70m		205m / 56m / 26m	
Car (detection / recognition / identification)	2150m / 560m / 280m		1550m / 400m / 200m		590m / 150m / 74m	

AVAILABLE CAMERAS				
	SONY Day/Night 36x		SONY Day/Night 28x High sensitivity	
	PAL	NTSC	PAL	NTSC
Optical zoom	36x		28x	
Wide Dynamic Range (Fix/Auto)	•		-	
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. 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	More than 50dB			
AE control	Auto, 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		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)	
Min. Object Distance	320mm (wide) to 1500mm (tele)		10mm (wide) to 1500mm (tele)	
Electronic Shutter Speed	1/1 ÷ 1/10000s			

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