

NXPTZT

PTZ CAMERA DUAL VISION, DAY/NIGHT AND THERMAL, FOR ONSHORE/OFFSHORE, MARINE AND INDUSTRIAL AREAS



MAIN FEATURES

Electropolished AISI 316L stainless steel

Dual independent video output

Thermal camera:

- Sensor: Uncooled microbolometer (VOx)
- Lenses: 50mm, 35mm or 25mm
- Resolution 336x256 or 640x512

Day/Night camera:

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

Up to 2 simultaneous video streams for each camera (IP based version)

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

Position accuracy: 0.02°

Pre-wired multipolar cable (3m (118in))

Integrated wiper

Total control of the auxiliary functions through the Videotec PTZ ASSISTANT (IP based version)

Operating temperature: -40°C / +60°C (-40°F / +140°F)

OPTIONS

IP based control, H.264/AVC and JPEG, 25fps, Full D1 (compatible with ONVIF protocol, Profile S)

DESCRIPTION

This model features real-time dual vision, integrating a Day/Night colour module and a thermal imaging camera, for security applications in most corrosive industrial and offshore/onshore marine environments and even in total darkness, through fog, rain, heavy smoke or for long-distance surveillance.

These positioning units guarantee long-term performance and low maintenance thanks to the maximum care in the construction processes and the best quality AISI316L, passivated and electropolished.

All models are available in analog or IP version.

The flexible operator control of pan/tilt/zoom functions allows the video transmission over the local area network (LAN) or over the Internet with H.264/AVC compression, compatible with ONVIF Profile S.

The Videotec's PTZ ASSISTANT plug-in software supports any VMS with the control of all special functions such as wiper and washer pump.

The PTZ unit is always supplied with integrated wiper; wide choice of tanks with washer pump available with different capacities and delivery heights.



NXPTZT

TECHNICAL DATA

GENERAL

Dynamic positioning control system
 16-character string for zone and preset titling
 Maximum number of presets: 250
 Functions: Autopan, Preset, Patrol, Tour (maximum 3), Autoflip
 I/O alarm card:
 • 5 alarm inputs
 • 2 relay outputs (1A 30Vac/60Vdc max)

MECHANICAL

AISI 316L stainless steel construction
 Passivated and electropolished external surfaces
 Pre-wired multipolar cable (3m (118in))
 Horizontal rotation: 360° continuous
 Vertical rotation: from -90° up to +90°
 Horizontal speed (variable): from 0.1°/s up to 100°/s
 Tilt speed (variable): from 0.1°/s up to 100°/s
 Accuracy of preset positions: 0.02°
 Integrated wiper
 Unit weight: 24kg (53lb)

HOUSING WINDOWS

Glass window: thick 6mm (0.2in)
 Germanium window: thick 1.5mm (0,06in)

ELECTRICAL

Power supply/Current consumption:
 • 230Vac, 0.5A max, 50/60Hz
 • 24Vac, 5A max, 50/60Hz
 • 120Vac, 1A max, 50/60Hz
 Power consumption:
 • 120W
 • 30W, P&T static, heating switched off

VIDEO

Analog version
 • 2 video outputs, 75 Ohm, 1Vpp (PAL/NTSC)
 IP version
 • Video compression: H.264/AVC, JPEG
 • Up to 2 simultaneous video streams for each camera
 • Image resolution: from Full D1 (720x576 for PAL, 720x480 for NTSC) to 352x240 in 18 steps
 • Web Server
 • Certified ONVIF, Profile S

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

PROTOCOLS

Serial communication protocol: AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D, VIDEOTEC MACRO

NETWORK

Connection Ethernet port LAN 10/100T

NETWORK PROTOCOLS

Protocol: ONVIF, Profile S
 Device configuration: TCP/IPv4, UDP/IPv4, HTTP, NTP, DHCP, WS-DISCOVERY, QoS
 Streaming: RTSP, RTCP, RTP

ENVIRONMENT

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

CERTIFICATIONS

Electrical safety (CE): EN60950-1
 Electromagnetic compatibility (CE): EN50130-4, EN55022 (Class A), EN61000-6-3, FCC Part 15 (Class A)
 Outdoor installation (CE): EN60950-22, IEC 60950-22
 IP protection degree: EN60529 (IP66)
 UL certification: cULus Listed (TYPE 4X, only for 24Vac versions)
 EAC certification

ACCESSORIES

WASPT0V5L5M00	Water tank 5l (1 gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac
WASPT0V23L5M00	Water tank 23l (6 gal), pump with delivery up to 5m (16ft), IN 230Vac-24Vac-120Vac
WASPT0V23L11M00	Water tank 23l (6 gal), pump with delivery up to 11m (36ft) with water floating, IN 230Vac-24Vac-120Vac
WASPT1V23L30M00	Water tank 23l (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 230Vac
WASPT3V23L30M00	Water tank 23l (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 120Vac

BRACKETS AND ADAPTORS

NXPTZWB	AISI 316L stainless steel wall bracket
NXPTZTW	AISI 316L stainless steel parapet or ceiling mounting bracket
NXPTZCOL	AISI 316L stainless steel pole adapter module
NXPTZCW	AISI 316L stainless steel corner adapter module

PACKAGE

Model Number	Weight	Dimensions (WxHxL)	Master carton
NXPTZT1PVW0X00A	28.5kg (63lb)	54x31x49cm (21x12x19in)	-

NXPTZT - CONFIGURATION OPTIONS									
	Voltage	Day/Night camera	Thermal camera		Video Output		Frequency		
NXPTZT	1 230Vac	P Day/Night camera 36x optical zoom lens, PAL	A Thermal camera 35mm - 336x256	W With wiper	0 0 Analog	00A	- 7.5-8.3Hz		
	2 24Vac	N Day/Night camera 36x optical zoom lens, NTSC	B Thermal camera 25mm - 336x256		Z IP H.264/AVC, Protocol ONVIF Profile S		H 25-30Hz		
	3 120Vac	Q Day/Night camera 28x optical zoom lens, PAL	D Thermal camera 35mm - 640x512						
		M Day/Night camera 28x optical zoom lens, NTSC	E Thermal camera 25mm - 640x512						
			Y Thermal camera 50mm - 336x256						
			W Thermal camera 50mm - 640x512						

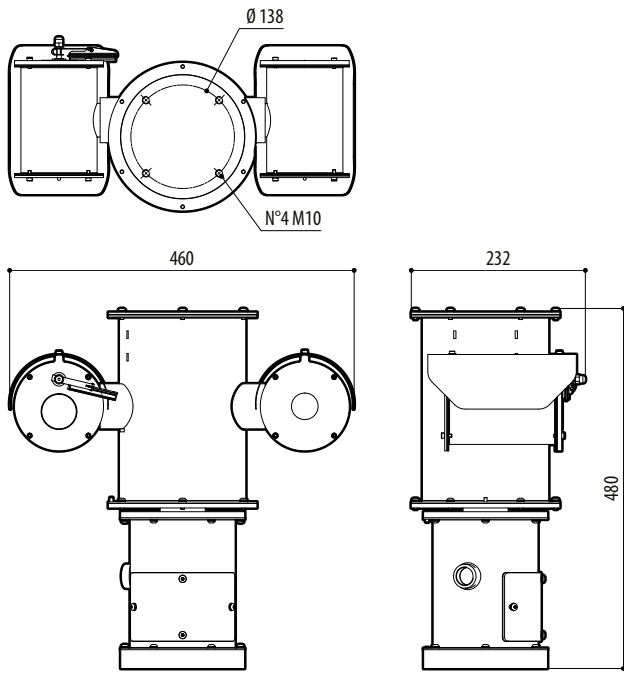
ANALOG CAMERAS (DAY/NIGHT)				
	Day/Night 36x		Day/Night 28x High sensitivity	
	PAL	NTSC	PAL	NTSC
Optical zoom	36x		28x	
Wide Dynamic Range (Fix/Auto)	✓		-	
True progressive SCAN	✓		-	
Digital image stabilisation	✓		✓	
White balance	Auto, ATW, Indoor, Outdoor (Fix/Auto), Sodium Vapor Lamp (Fix/Auto)		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	More than 50dB		More 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	Automatic Lens Reset		Automatic Lens Reset	
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	

THERMAL CAMERAS (RESOLUTION 336X256)						
	Lens 25mm		Lens 35mm		Lens 50mm	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Image sensor	Uncooled VOx microbolometer		Uncooled VOx microbolometer		Uncooled VOx microbolometer	
Resolution	320x256	320x240	320x256	320x240	320x256	320x240
Pixel dimensions	17µm		17µm		17µm	
Spectral response - long wave infrared (LWIR)	from 7.5µm to 13.5µm		from 7.5µm to 13.5µm		from 7.5µm to 13.5µm	
Internal shutter (only for sensor compensation)	Video stop < 1sec.		Video stop < 1sec.		Video stop < 1sec.	
Digital Detail Enhancement (DDE)	✓		✓		✓	
Digital Zoom	2x, 4x		2x, 4x		2x, 4x	
Image updating frequency	8.3fps	7.5fps	8.3fps	7.5fps	8.3fps	7.5fps
Image updating high frequency	25fps	30fps	25fps	30fps	25fps	30fps
Scene range (High Gain)	-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)	
Scene range (Low Gain)	-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)	
Horizontal field of view	13°		9,3°		6,5°	
Vertical field of view	10°		7,1°		5°	
F-number	F/1.1		F/1.2		F/1.2	
Thermal sensitivity (NEΔT)	< 50mK to f/1.0		< 50mK to f/1.0		< 50mK to f/1.0	
Person (detection / recognition / identification)	930m / 230m / 116m (3051ft / 754ft / 380ft)		1280m / 320m / 160m (4199ft / 1049ft / 525ft)		1700m / 430m / 215m (5577ft / 1410ft / 715ft)	
Auto (detection / recognition / identification)	2800m / 710m / 360m (9186ft / 2329ft / 1181ft)		3850m / 950m / 295m (12631ft / 3116ft / 967ft)		5100m / 1320m / 660m (16732ft / 4330ft / 2165ft)	

THERMAL CAMERAS (RESOLUTION 640X512)						
	Lens 25mm		Lens 35mm		Lens 50mm	
	PAL	NTSC	PAL	NTSC	PAL	NTSC
Image sensor	Uncooled VOx microbolometer		Uncooled VOx microbolometer		Uncooled VOx microbolometer	
Resolution	640x512	640x480	640x512	640x480	640x512	640x480
Pixel dimensions	17µm		17µm		17µm	
Spectral response - long wave infrared (LWIR)	from 7.5µm to 13.5µm		from 7.5µm to 13.5µm		from 7.5µm to 13.5µm	
Internal shutter (only for sensor compensation)	Video stop < 1sec.		Video stop < 1sec.		Video stop < 1sec.	
Digital Detail Enhancement (DDE)	✓		✓		✓	
Digital Zoom	2x, 4x, 8x		2x, 4x, 8x		2x, 4x, 8x	
Image updating frequency	8.3fps	7.5fps	8.3fps	7.5fps	8.3fps	7.5fps
Image updating high frequency	25fps	30fps	25fps	30fps	25fps	30fps
Scene range (High Gain)	-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)		-40°C ÷ +160°C (-40°F ÷ +320°F)	
Scene range (Low Gain)	-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)		-40°C ÷ +550°C (-40°F ÷ +1022°F)	
Horizontal field of view	25°		18°		12.4°	
Vertical field of view	20°		14°		9.9°	
F-number	F/1.1		F/1.2		F/1.2	
Thermal sensitivity (NEΔT)	< 50mK to f/1.0		< 50mK to f/1.0		< 50mK to f/1.0	
Person (detection / recognition / identification)	820m / 210m / 104m (2690 / 689 / 341ft)		1140m / 280m / 142m (3740ft / 919ft / 466ft)		1500m / 380m / 190m (4921ft / 1247ft / 623ft)	
Auto (detection / recognition / identification)	2200m / 580m / 290m (7218ft / 1903ft / 951ft)		3000m / 800m / 200m (9843ft / 2625ft / 656ft)		3900m / 1060m / 540m (12795ft / 3478ft / 1772)	

TECHNICAL DRAWINGS

Sizes in millimeters.



NXPTZT

