# **NXPTZHD**

### HD PTZ CAMERA FOR ONSHORE/OFFSHORE, MARINE AND INDUSTRIAL AREAS













NXPTZHD













#### DESCRIPTION

The NXPTZHD is an exceptional PTZ camera perfect for heavy-duty tasks and ideal to operate in the harshest and most corrosive environments, such as industrial and offshore/onshore marine applications.

This PTZ camera ensures long-term performance, with low maintenance and is made entirely out of AISI316L stainless steel. Its resistance to corrosion is not only quaranteed, but is also enhanced by way of polishing processes.

The Full HD Day/Night camera, available in 30x zoom, 1080p, accurately identifies the details of a scene delivering from 2 to 4 H.264/AVC or MJPEG video streams simultaneously, up to a total of 20Mbits, depending on system configuration.

The flexible operator control of Pan/Tilt/Zoom functions allows the images transmission over Ethernet with H.264/AVC and MJPEG compression, certified 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.

An equally noteworthy point is that the IP66/IP67/IP68 ratings guarantee the complete protection against harsh weather and immersion in up to 1 metre of water for 2 hours. Moreover the IP69 rating allows the device to be cleaned with high pressure and high temperature water jets.

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

The NXPTZ series products are Lloyd's Register Type Approval System Test Specification Number 1 certified and therefore can be used in Marine and Offshore applications for environmental categories ENV1, ENV2, ENV3 and ENV5 (eg. passenger ships, open-air decks, closed spaces and technical areas that may be subject to heat generated by other equipment, docking procedures).

CERTIFICATIONS

MAIN FEATURES



NXPTZHD

#### TYPE APPROVAL SCHEME

In stainless steel AISI 316L, micro-shot peened in silicon and electro-polished Camera Full HD 1080p, 30x, 60fps

Minimum Illumination:

- Colour: 1.4lx, F1.6 AGC on, 1/30s 50 IRE (Normal mode)
- Colour: 0.35lx, F1.6 AGC on, 1/30s, 50 IRE (High Sensitivity mode)
- B/W: 0.05lx, F1.6 AGC on, 1/30s, 50 IRE (Normal mode)
- B/W: 0.013lx, F1.6 AGC on, 1/30s, 50 IRE (High sensitivity mode)

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

De-fog function

Video compression H.264/AVC and MJPEG

Certified ONVIF, Profile S

Up to 4 simultaneous video streams

Variable speed: from 0.1°/s up to 100°/s Pan and Tilt

Position accuracy: 0.02°

Pre-wired multipolar cable (3m (9.8ft))

Integrated wiper

 ${\it Total control of the auxiliary functions through the Videotec PTZ\ ASSISTANT}$ 

Operating temperature: from  $-40^{\circ}$ C ( $-40^{\circ}$ F) up to  $+60^{\circ}$ C ( $140^{\circ}$ F)

Protection degree: IP66, IP67, IP68, IP69

Marine Certification: Lloyd's Register Marine Type Approval

#### TECHNICAL DATA

#### **MECHANICAL**

AISI 316L stainless steel construction

External surfaces micro-shot peened in silicon and electro-polished

Pre-wired multipolar cable (3m (9.8ft))

Horizontal rotation: 360°, continuous rotation

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: 22kg (44lb)

#### **ELECTRICAL**

Supply voltage/Current consumption:

- 230Vac, 0.5A max, 50/60Hz
- 24Vac, 5A max, 50/60Hz
- 120Vac, 1A max, 50/60Hz

Power consumption:

• 120W max

#### **NETWORK**

Ethernet connection: 10BASE-T/100BASE-T

Connector: RJ45
Cable length: 100m max

#### I/O INTERFACE

I/O alarm board:

• Alarm inputs: 1

• Relay outputs: 1 (1A, 30Vac/60Vdc max)

# VIDEO

Video encoder

- · Communication protocol: ONVIF, Profile S
- Device configuration: TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, HTTPS, NTP, DHCP, WSDISCOVERY, QoS, DSCP, IGMP (Multicast), SOAP, DNS, SNMP
- Streaming: RTSP, RTCP, RTP/IPv4, Multicast
- Video compression: H.264/AVC, MJPEG
- 2 independent video streams Full HD or 4 independent video streams depending on the configuration
- Image resolution: from FullHD to 352x240 in 18 steps
- Selectable frame rate from 1 to 60 images per second (fps)
- Web Server
- Directional OSD
- Motion detection

#### CAMERAS

#### Day/Night Full HD 30x

Resolution: Full HD 1080p (1920x1080pixel)
Image Device: 1/2.8 type Exmor™ CMOS sensor

Effective Pixels: approx. 2.38 Megapixels

Minimum Illumination, colour (ICR-OFF):

- 1.4lx, 1/30s, 50 IRE (Normal mode)
- 0.35lx, 1/30s, 50 IRE (High sensitivity mode)
- 0.19lx, 1/3s, 50 IRE (Normal mode)
- 0.05lx, 1/3s, 50 IRE (High sensitivity mode)

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

- 0.05lx, 1/30s, 50 IRE (Normal mode)
- 0.013lx, 1/30s, 50 IRE (High sensitivity mode)
- 0.002lx, 1/3s, 30 IRE (High sensitivity mode)

Lens: f=4.3 mm (wide) ~ 129.0 mm (tele), from F1.6 to F4.7

Zoom: 30x (360x with digital zoom)

Horizontal Viewing Angle: from 63.7° (wide end) up to 2.3° (tele end)

Minimum object distance: from 10mm (wide) up to 1200mm (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), One-push, Manual

Gain: Auto, Manual, Gain Limit (from 3dB up to 43dB, steps: 3dB)

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

Focus System: Auto (Sensitivity: Normal, Low), One-push AF, Manual, Focus compensation with ICR On, Interval AF, Zoom trigger AF

Picture Effects: E-flip, Mirror image, Color enhancement

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

S/N Ratio: more than 50dB

Wide-D (wide dynamic range): Yes (130dB)

De-fog: Yes (On/Off)

**Backlight Compensation: Yes** 

#### **ENVIRONMENT**

For installation indoors and outdoors

Operating temperature: from -40°C (-40°F) up to +60°C (140°F)

#### CERTIFICATIONS

Electrical safety (CE): EN60950-1, IEC60950-1

Electromagnetic compatibility (CE): EN601000-6-4, EN61000-3-2, EN61000-3-3, EN50130-4, EN55032 (Class A)

Outdoor installation (CE): EN60950-22, ICE60950-22

IP protection degree (EN60529): IP66, IP67, IP68, IP69

**EAC** certification

UL certification (UL60950-1, CAN/CSA C22.2 No. 60950-1-07): cULus Listed (only for 24Vac version)

Electromagnetic compatibility (North America): FCC part 15 (Class A), ICES-003 (Class A) Level of protection Type (UL50E): 4X (only for 24Vac version)

## **CERTIFICATIONS - MARINE APPLICATIONS**

Lloyd's Register Marine Type Approval certification (the 24Vac versions require a filter accessory FM1010):

• Test Specification Number 1 (ENV1, ENV2, ENV3, ENV5)

Electromagnetic compatibility: EN60945

Salty fog resistance: EN60068-2-52

Tested at 70°C (158°F) for 16 hours in compliance with EN60068-2-2

ACCESSORIES	
WASPT0V5L5M00	Water tank 5I (1.3gal), 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 23I (6 gal), pump with delivery up to 11m (36ft) with water floating, IN 230Vac-24Vac-120Vac
WASPT1V23L30M00	Water tank 23I (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 230Vac $$
WASPT3V23L30M00	Water tank 23I (6 gal), pump with delivery up to 30m (98ft) with water floating, IN 120Vac $$
WASNX1V10L20M00	Tank 10l (2.6gal) with integrated manual pump controlled by solenoid valve, delivery head up to 20m (66ft) max, IN 230Vac
WASNX2V10L20M00	Tank 10I (2.6gal) with integrated manual pump controlled by solenoid valve, delivery head up to 20m (66ft) max, IN 24Vac
WASNX3V10L20M00	Tank 10l (2.6gal) with integrated manual pump controlled by solenoid valve, delivery head up to 20m (66ft) max, IN 120Vac
FM1010	EMC filter for Marine certification

BRACKETS AI	ND 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	
DACKAGE		

PACKAGE			
<b>Model Number</b>	Weight	Dimensions (WxHxL)	Master carton
NXPTZHD1FVW0Z00	A 26.5kg (58lb)	54x31x49cm (21x12x19in)	-

NXPTZHD - CONFIGURATION OPTIONS												
	Voltage									Video Output		
NXPTZHD	1	230Vac	F	Day/Night camera 30X zoom, FullHD	V	With alarm board	W	With wiper	0	Z	IP H.264/AVC, Protocol ONVIF Profile S	00A
	2	24Vac										
	3	120Vac										

# **TECHNICAL DRAWINGS**

The indicated measurements are expressed in millimetres.

