EX-PROOF HD PTZ CAMERAS
EC-940-PTZ-HDI - Series

STAHL

The EC-940-PTZ-HDI Series are Full HD ex-proof PTZ cameras which produces high definition images and is ideal for effective video surveillance and process control in harsh settings where the presence of gases or flammable dust can create a potentially explosive environment, a reality often found in the oil and gas industries or marine and industrial sectors.
The Full HD, 1080p, 60fps cameras incorporate an outstanding 30x optical zoom, able to accurately identify the smallest details in a scene, with the ability to transmit images via Ethernet, H.264/AVC and MJPEG compression and ONVIF Profile S compatibility to allow for use with third-party products. The response to the operator's commands is instantaneous, for a fast and accurate detection of a target in all conditions.

The care taken in the design, the choice of high quality components and the strong AISI 316L stainless steel construction with IP66 protection guarantees perfect operation and durability in temperatures ranging from -40°C to +60°C.

Thanks to the built-in wiper images are always perfectly clear; also available is the washer kit with a certified explosion-proof pump, which reduces the need of maintenance.
The ATEX/IECEx certified versions are available as pre- wired options with armoured cable and barrier cable gland, simplifying installation and making these PTZ cameras the perfect solution for use in the most demanding video surveillance installations, and in the most extreme conditions.

FULL HD 1080P

ONVIF | S

MAIN FEATURES

► Electropolished AISI 316L stainless steel explosion proof PTZ camera unit

► Certifications for use in Zone 1 and 2, Group IIC T6 (Gas), and in Zone 21 and 22, Group IIIC T85° (Dust)

► Camera Full HD 1080p, 30x Zoom, 60 frames per second (fps)

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

► Video compression H.264/AVC and MJPEG

► Up to 4 simultaneous video streams

► 1 alarm input and 1 relay output

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

► Position accuracy: 0.02°

► Integrated wiper

CERTIFICATES

IECEx   **Ex ATEX**   **NEC**   **CEC**

AMBIENT TEMPERATURE RANGE

-40°C up to +60°C

IP SAFETY

IP 66

TECHNICAL DATA

GENERAL

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

MECHANICAL

1 ¾" NPT hole for cable glands
12mm thick tempered glass window
Integrated wiper

Unit weight:	27kg (60lb)

MOVEMENT

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
Accuracy of preset positions:	0.02°

ELECTRICAL

Power supply / Current Consumption:	230V AC, 0.5A, 50/60Hz (W1) 24V AC, 5A, 50/60Hz (W2)
I/O Alarm card:	Alarm inputs: 1 Relay outputs: 1 (1A, 30V AC/60V DC max)
Power consumption:	120W max

VIDEO

Compression:	H.264/AVC, MJPEG
Number of streams:	2 independent video streams Full HD or 4 independent video streams depending on the configuration
Image resolution:	from Full HD to 352x240 in 18 steps
Frame rate:	selectable from 1 to 60 images per second (fps)

CAMERA

Image Device:	1/2.8" type Exmor™ CMOS sensor
Effective Pixels:	approx. 2.38 Megapixels
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)
Electronic Shutter:	1/1 to 1/10,000s, 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, Black & White, Mirror image, Color enhancement, Negative art
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):	130dB
De-fog:	On/Off
Minimum Illumination, color (ICR-OFF):	• 1.4lx, F1.6 AGC on, 1/30s 50 IRE (Normal mode) • 0.35lx, F1.6 AGC on, 1/30s, 50 IRE (High sens. mode) • 0.19lx, F1.6 AGC on, 1/3s, 50 IRE (Normal mode) • 0.05lx, F1.6 AGC on,1/3s, 50 IRE (High sens. mode)
Minimum Illumination, B/W (ICR-ON):	• 0.05lx, F1.6 AGC on, 1/30s, 50 IRE (Normal mode) • 0.013lx, F1.6 AGC on, 1/30s, 50 IRE (High sens. mode) • 0.002lx, F1.6 AGC on, 1/3s, 30 IRE (High sens. mode)

NETWORK

Connection:	Ethernet port LAN 10/100T

NETWORK PROTOCOLS

Protocol:	ONVIF, Profile S
Device configuration:	TCP/IPv4-IPv6, UDP/IPv4-IPv6, HTTP, NTP, DHCP, WS-DISCOVERY, QoS, IGMP (Multicast)
Streaming:	RTSP, RTCP, RTP

ENVIRONMENT

Operating Temperature:	from −40°C (-40°F) up to +60°C (149°F)

CERTIFICATIONS

ATEX (EN 60079-0: 2012, A11: 2013, EN60079-1: 2007, EN60079-31: 2009):	⟨Ex⟩II 2 G Ex d IIC T6 Gb Ta -40°C to +60°C ⟨Ex⟩II 2 D Ex tb IIIC T85°C Db Ta -40°C to +60°C
IECEx (IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-31: 2008):	Ex d IIC T6 Gb Ta -40°C to +60°C Ex tb IIIC T85°C Gb Ta -40°C to +60°C Db IP66
NEC (only 24V AC)	Class I, Zone 1, AEx d IIC T6 Class I, Div 2, Groups A, B,C and D Zone 21, AEx tb IIIC T85°C Class II, Div 2, Group F and G
CEC (only 24V AC)	Class I, Zone 1, Ex d IIC T6 Gb Class I, Div 2, Groups A, B,C and D Class II, Group E, F and G Class II, Div 2, Group F and G

ACCESSORIES (optional, all in stainless steel)

Pole adapter module EC-940-PTZ	Order No. 251362
Corner adapter module EC-940-PTZ	Order No. 251363
Mounting bracket EC-940-PTZ	Order No. 251365
Wall bracket EC-940-PTZ	Order No. 251364
Watertank 10L (ATEX)	Order No. 251366
Watertank 10L (EAC)	Order No. 251367

PACKAGE

Weight:	30.4 kg (67 lb)
Dimensions:	54x31x49 cm (21x12x19 in)

MODELS

EC-940-PTZ-HDI-W	1	230V AC
	2	24V AC

TECHNICAL DRAWINGS

Sizes in millimeters