

EX-PROOF PTZ DAY/NIGHT CAMERA

EC-940-PTZ Analogue Series

STAHL

The **EC-940-PTZ ex-proof PTZ camera series** offers a superior image quality and an exceptional precision even in poorly lighted environments. This ex camera 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 area is always monitored, thanks to the speed and detection accuracy of the target.

The optional watertank washer kit, with tank and pump controlled by an ex-proof solenoid valve, allows flawless and maintenance-free cleaning of the front glass.



MAIN FEATURES

- ▶ Electropolished AISI 316L stainless steel ex-proof PTZ unit
- ▶ Day/Night camera
- ▶ True Progressive Scan
- ▶ High resolution: up to 550 TV Lines
- ▶ Advanced image stabilizer (Stable Zoom Mode)
- ▶ Day/Night (Auto ICR: automatic removal of IR filter)
- ▶ Variable speed: 0.1°-100°/s Pan and Tilt
- ▶ Position accuracy: 0.02°
- ▶ 3/4" NPT threaded hole for use of cable glands or conduit
- ▶ Extremely easy electrical connections directly into the unit, thanks to the explosion-proof inspection box
- ▶ Integrated wiper

CERTIFICATES



NEC



ATEX

CEC

AMBIENT TEMPERATURE RANGE

-40°C (-40°F) up to +60°C (+140°F)

IP SAFETY

IP 66



TECHNICAL DATA

GENERAL

Housing material:	AISI 316L stainless steel construction
External surfaces :	Passivated and electropolished
Positioning control system :	Dynamic
Functions:	Autopan, Preset, Patrol, Tour (maximum 3), Autoflip

Up to 999 units, addressable by means of dip-switches

MECHANICAL

3/4" NPT hole for cable glands	
Zero backlash	
Horizontal rotation:	360°, continuous rotation
Vertical rotation:	from -90° up 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°
12mm thick tempered glass window	
Integrated wiper	
Unit weight:	27kg (60lb)

CAMERA

Optical zoom:	36x
Wide Dynamic Range (Fix/Auto):	yes
True progressive SCAN:	yes
Digital image stabilisation:	yes
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):	yes
Image Sensor:	1/4" EXView HAD CCD
	PAL: NTSC:
Number of effective Pixels:	~ 440,000 ~ 380,000
Min. Color illumination	1.4Lux / 1/50s 1.4Lux / 1/60s
(IR-Cut Filter = OFF):	0.1 Lux / 1/3s 0.1 Lux / 1/4s
Min. B/W illumination:	0.01 Lux / 1/3s 0.01 Lux / 1/4s
"Shutter Time" automatic increase to improve the night surveillance:	yes
S/N ratio:	More 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:	yes
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:	Automatic Lens Reset
High Zoom and Wide Horizontal Field of View Capability:	yes
Optical zoom:	36x
Lens:	f=3.4 (wide) to 122.4mm (tele) / F1.6 to F4.5 2
Digital Zoom:	12x (432x with optical zoom)
Angle of view (A):	57.8 degrees (wide) to 1.7 degrees (tele)
Minimum object distance:	320mm (12.6in) (wide) to 1500mm (59.1in) (tele)
Electronic Iris Speed:	1/1 ÷ 1/10 000s

ELECTRICAL

Supply voltage/	230VAC, 0.5A, 50/60Hz
Current consumption:	24VAC, 5A, 50/60Hz
Power consumption:	120W

SERIAL COMMUNICATIONS

Serial communication protocol:	AMERICAN DYNAMICS, ERNITEC, PANASONIC, PELCO D
Maximum number of presets for serial communication protocol:	ERNITEC: 250 PANASONIC: 250 PELCO D: 99 AMERICAN DYNAMICS: 95
Serial interface:	1 serial interface RS-485 half-duplex

VIDEO

Analogue version:	1 video output 75 Ohm 1Vpp (PAL/NTSC) 16-character string for zone and preset titling
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I/O INTERFACES

I/O alarm card	• 2 alarm inputs • 1 relay output (1A 30V AC/60V DC max)
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ENVIRONMENT

Indoor/Outdoor	
Operating temperature:	from -40°C (-40°F) up to +60°C (140°F)
Relative humidity:	from 10% up to 95% (no condensation)

CERTIFICATIONS

ATEX: (EN 60079-0: 2012 +A11: 2013, EN 60079-1: 2007, EN 60079-31: 2009):	II 2 G Ex d IIC T6 Gb Ta -40°C to +60°C II 2 D Ex tb IIIC T85°C Db Ta -40°C to +60°C IP66
IECEX: (IEC 60079-0: 2011, IEC 60079-1: 2007-04, IEC 60079-31: 2008):	Ex d IIC T6 Gb Ta -40°C to +60°C Ex tb IIIC T85°C Db Ta -40°C to +60°C IP66 ATEX, IECEX: T4, -55°C to +80°C
Only 24 V AC - NEC:	Class I, Zone 1, AEx d IIC T6 Zone 21, AEx tb IIIC T85°C Class I, Division 2, Groups A, B, C, and D Class II, Division 2, Groups F and G
Only 24 V AC -CEC:	Class I, Zone 1, Ex d IIC T6 Gb Class II, Groups E, F and G Class I, Division 2, Groups A, B, C, and D Class II, Division 2, Groups 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

PACKAGE

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

MODELS

Series		Type	Transmission	Accessories	Voltage
EC-940-	PTZ	- A	3N - 36x NTSC 3P - 36x PAL	- W	10 - 230V AC 20 - 24V AC*

For example: EC-940S-PTZ-A3P-W20

*NEC/CEC only with 24V AC

TECHNICAL DRAWINGS

Sizes in millimeters

