

# EX-PROOF HD CAMERA IN A COMPACT DESIGN

EC-910-AFZ-Full HD IP – 10 x Zoom

STAHL

The compact Full HD explosion-protected EC-910-AFZ Series is designed for effective video surveillance and process control in harsh environments where flammable gas or dust is present. The small size allows the installation even in small niches.

A clear advantage is the "plug and play" installation. The camera can be powered by PoE+. Power over Ethernet (+), uses the network cable for data and power distribution, which further simplifies the installation.

The Full HD, 1080p, with 10 x motorized zoom lens, offers multiple video streams (H.264/AVC, MJPEG, JPEG, and MPEG4) and provides exceptional image

quality, picking out every detail in a scene, even in the harshest environmental conditions. The camera is supplied with supports for wall, ceiling and parapet installation and with a sunshield as standard.

The housing is entirely manufactured in stainless steel AISI316L.

The IP66/IP67/IP68/IP69 level guarantees complete protection against bad weather and water immersion. Another important feature of the camera is the extended temperature range of -40°C to +65°C.

The EC-910-AFZ range of cameras meets every installation need, providing maximum performance and excellent value for money.



EC-910 with Wall Mounting



EC-910 with Ceiling Mounting

## MAIN FEATURES

- ▶ Certifications for use in Zones 1 and 2, IIB T6 or T5 Group (Gas) and in Zones 21 and 22, IIIC T85°C or T100°C Group (Dust)
- ▶ Day/Night Full HD IP camera 1080p
- ▶ 10 x optical auto focus zoom. The camera is also available with 3 x Zoom
- ▶ Video compression H.264/AVC, MJPEG, JPEG and MPEG4
- ▶ Up to 3 simultaneous video streams
- ▶ Power supply: PoE+, 24VDC or 24VAC
- ▶ Without cable, with 4m (13ft) or 10m (33ft) preinstalled armoured multi cable with cable gland available
- ▶ AISI 316L stainless steel construction
- ▶ Wall-, ceiling mounting and sunshield are included as standard

## CERTIFICATES



## AMBIENT TEMPERATURE RANGE

from -40°C (-40°F) up to +65°C (149°F)

## IP PROTECTION

IP 66, 67, 68, 69

## TECHNICAL DATA

### GENERAL

Housing material: 316L  
Electro polished and shot peened outside surface  
Fluorocarbon O-ring seals

### MECHANICAL

Sunshield: included  
Support for wall, ceiling or parapet installation  
Unit weight: 6.5 kg (14.3lb) housing + bracket  
8.5 kg (18.7lb) housing with 4m multi cable

### CABEL GLAND

Cable entry: 1 x ½ "NPT  
Cable gland with gasket Ex d ½"NPT at version with preinstalled cable only

### HOUSING WINDOW

Material: Thermally tempered glass  
73.5 mm usable diameter

### ELECTRICAL

Power supply: 24V AC , 1.32A, 50/60Hz, 21W  
24V DC, 0.9A, 20W  
PoE+ (IEEE 802.3 at), 21W  
Armoured cable: outer diameter 18.6 +/- 0.2 mm  
Inner jacket diameter 13.8 mm  
Colour: RAL 9005 black  
Composition: 3x1 mm<sup>2</sup> (open wires)  
4x2x0.22 mm<sup>2</sup> (CAT5e F/STP) with RJ45 plug

### VIDEO

Compression: H.264/AVG, MJPEG, JPEG, MPEG4  
Number of streams: Up to 3 profiles in Full HD  
Image resolution: 320x180 to 1920x1080 in 6 steps  
Frame rate: 1 to 60 images per second (fps)  
Streaming: RTSP, RTCP, RTP/IPv4, HTTP

### CAMERA

Image device: 1/2.8" CMOS  
Resolution: Full HD 1080p (1920x1080)  
Effective pixels: approx. 2.38 Mega Pixel  
Minimum Illumination:  
Color (ICR-OFF): 1.4lx 1/30s 50% (Normal mode)  
0.35lx, 1/30s, 50% (High sensitivity mode)  
0.19lx 1/3s 50% (Normal mode)  
0.05lx, 1/3s, 50% (High sensitivity mode)  
Minimum Illumination,  
B/W (ICR-ON): 0.12lx 1/30s 50% (Normal mode)  
0.03lx, 1/30s, 50% (High sensitivity mode)  
0.002lx, 1/3s, 30% (High sensitivity mode)  
Lens: 3.8 mm (wide) ... 38 mm (tele)  
F1.8 to 3.4  
Zoom: 10 x optical zoom, 12 x digital zoom  
Viewing angle 1080p: H 67° (wide) to 7.6° (tele) V  
Minimum object distance: 10 mm (wide) to 800 mm (tele)  
Electronic shutter: 1/1 ~ 1/10,000sec, 22 steps  
White balance: Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium vapor lamp (Fix, Auto, Outdoor Auto), Manual  
Backlight compensation: Yes  
Wide dynamic range: On/Off/Visibility enhancer, Light level, Brightness compensation selection, Compensation level  
De-Fog: Yes (ON/OFF)  
Exposure control: Auto, EV Compensation, Manual, Priority (Shutter prio., Iris prio.)

### CAMERA

S/N Ratio: 50 dB  
Gain limit: up to 43.5 dB



### NETWORK

Ethernet connection: IEEE 802.3 100Base-Tx  
Connector at cable tale: RJ 45  
Communication protocol: ONVIF Profile S and Q  
Device configuration: TCP/IPv4, UDP/IPv4, HTTP, NTP, DHCP, WS-DISCOVERY, IGMP (Multicast)  
Webserver  
Firmware: Configuration upgrade via web page and ONVIF protocol

### ENVIRONMENT

Operating temperature: -40°C (-40°F) up to +65 °C (149°F)  
Relative humidity: From 10% to 95% no condensation

### CERTIFICATIONS

ATEX:  II 2 G Ex db IIB T6...T5 Gb  
 II 2 D Ex tb IIIC T85°C...T100°C Db  
EN 60079-0:2012 +A11:2013  
EN 60079-1:2014  
EN 60079-31:2014  
IECEX: Ex db IIB T6...T5 Gb  
Ex tb IIIC T85°C...T100°C Db  
IEC 60079-0: 2011 (Ed.: 6)  
IEC 60079-1: 2014-06 (Ed.: 7)  
IEC 60079-31: 2013 (Ed.: 2)  
NEC (type without cabel only) Pending  
Class 1, Zone 1, AEx db IIB T6...T5 Gb  
Zone 21, AEx tb IIIC T85°C...T100°C Db  
Class I, Div 2 Group C,D  
Class II, Div 2 Group E,F,G  
CEC (type without cabel only) Pending  
Ex db IIB T6...T5 Gb  
Ex tb IIIC T85°C...T100°C Db  
Class I, Div 2 Group C,D  
Class II, Div 2 Group E,F,G  
TR-EAC EX II 2G db IIB T6...T5 Gb  
Ex II 2D Ex tb IIIC T85°C...T100°C Db  
IP Protection (EN/IEC 60529) IP66, 67, 68 (2h, 2m, 16 ft), 69

### ACCESSORIES (optional)

Pole and Corner bracket  
in 316L stainless steel  
Order-No. 264965



Max load: 30kg  
Pole diameters: from 60 mm (2.36 in) up to 200 mm (7.9 in)  
Size: 120x86 mm (4.7 x3.4 in)

### PACKAGE

Type	Weight	Dimen. (wxh)
EC910-AFZ-I03-P00	8 kg	32.5x19x23 cm
EC-910-AFZ-I03-P04	11 kg	64x20.8x59 cm
EC-910-AFZ-I03-P10	11 kg	64x20.8x59cm

## MODELS

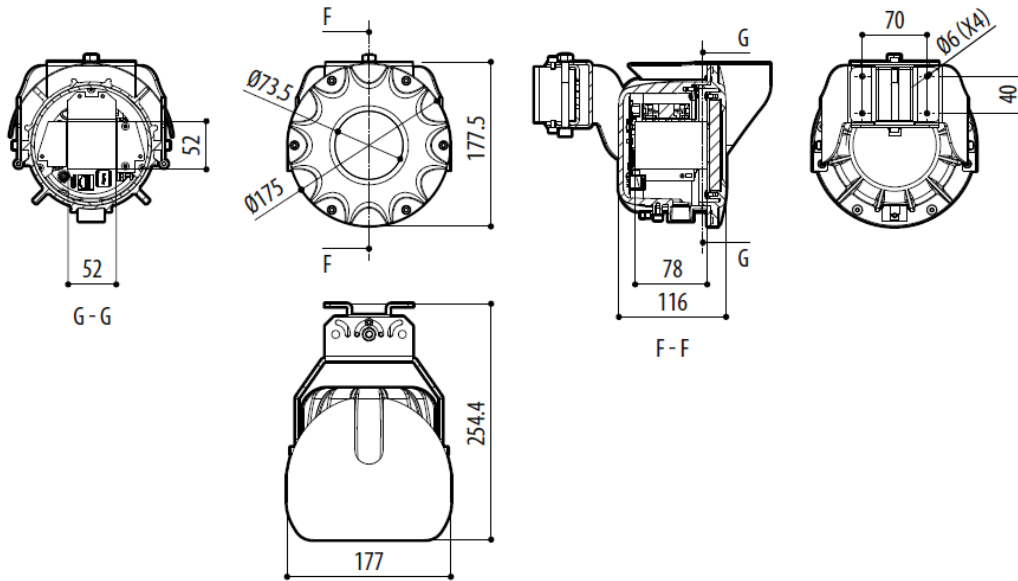
<b>EC-910-AFZ-I10-P00</b>	10x Full HD IP Camera	24 VDC, 24VAC or PoE+	Without cable, without cable gland
<b>EC-910-AFZ-I10-P04</b>	10x Full HD-IP Camera	24 VDC, 24 VAC or PoE+	4 m (13ft) armoured cable with gasket Ex d ½"NPT cable gland
<b>EC-910-AFZ-I10-P10</b>	10x Full HD-IP Camera	24 VDC, 24 VAC or PoE+	10 m (33ft) armoured cable with gasket Ex d ½"NPT cable gland

The EC-910-AFZ is available with 3 x optical zoom as well: **EC-910-AFZ-I03-PXX**

## TECHNICAL DRAWINGS

Sizes in millimeters

### Wall mounting:



### Parapet ceiling mounting:

