## EX-PROOF HD CAMERA IN A COMPACT DESIGN

EC-910-AFZ-Full HD IP - 3 x Zoom



#### 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 3 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 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
- 3 x optical auto focus zoom. The camera is also available with 10 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 included

Unit weight: 6.5 kg (14.3lb) housing + bracket

8.5 kg (18.7lb) housing with 4m multi cable

**CABLE GLAND** 

1 x ½ "NPT Cable entry:

Cable gland with gasket Ex d 1/2"NPT at version with preinstalled cable only

**HOUSING WINDOW** 

Material: Thermally tempered glass

73.5 mm usable diameter

**ELECTRICAL** 

24V AC, 1.32A, 50/60Hz, 21W Power supply:

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 mm2 (CAT5e F/STP) with RJ45 plug

**VIDEO** 

H.264/AVG, MJPEG, JPEG, MPEG4 Compression:

Number of streams: Up to 3 profiles in Full HD Image resolution: 320x180 to 1920x1080 in 6 steps Frame rate: 1 to 30 images per second (fps) Streaming: RTSP, RTCP, RTP/IPv4, HTTP

**CAMERA** 

1/2.8" CMOS Image device:

Resolution: Full HD 1080p (1920x1080) Effective pixels: approx. 3.27 Mega Pixel

Minimum Illumination:

Color (ICR-OFF): 1lx 1/30s 50% (Normal mode)

0.25lx, 1/30s, 50% (High sensitivity mode)

Minimum Illumination.

B/W (ICR-ON): 0.1lx 1/30s 50% (Normal mode)

0.03lx, 1/30s, 50% (High sensitivity mode

Lens: 3.0 mm (wide) ... 9 mm (tele)

F1.2 to 2.1

Zoom: 3 x optical zoom, 12 x digital zoom Viewing angle, 1080p: H 90° (wide) to 32° (tele) V

Minimum object distance: 300 mm (wide to 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** Wide dynamic range: On/Off

Exposure control: Auto, Manual, Priority (Shutter prio.,

Iris prio.) Brightness

Gain limit: up to 28 dB **NETWORK** 

Ethernet connection: IEEE 802.3 100Base-Tx

Connector at cable tale: R.I 45

ONVIF Profile S and Q Communication protocol:

TCP/IPv4, UDP/IPv4, HTTP, NTP, DHCP, WS-Device configuration:

DISCOVERY, IGMP (Multicast)

Webserver

Configuration upgrade via web page and ONVIF Firmware

protocol

**ENVIRONMENT** 

-40°C (-40°F) up to +65 °C (149°F) Operating temperature: Relative humidity:

From 10% to 95% no condensation

**CERTIFICATIONS** 

ATEX: € II 2 G Ex db IIB T6...T5 Gb

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...T135°C Db IEC 60079-0: 2011 (Ed.: 6) IEC 60079-1: 2014-06 (Ed.: 7) IEC 60079-31: 2013 (Ed.: 2)

Pending NEC (type without cabel

CEC (type without cabel

only)

Class 1, Zone 1, AEx db IIB T6...T5 Gb

Zone 21, AEx th IIIC T85°C...T100°C Db Class I, Div 2 Group C,D

Class II, Div 2 Group E,F,G

Pendina

only)

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:

Pole diameters: from 60 mm (2.36 in) up to 200 mm

(7.9 in)

Size: 120x86 mm (4.7 x3.4 in)

**PACKAGE** 

Туре	Weight	Dimen. (wxhl)
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

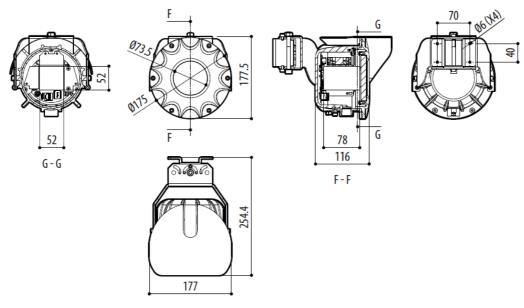
EC-910-AFZ-I03-P00	3 x Full HD IP Camera	24 VDC, 24VAC or PoE+	Without cable, without cable gland
EC-910-AFZ-I03-P04	3 x Full HD-IP Camera	24 VDC, 24 VAC or PoE+	4 m (13ft) armoured cable with gasket Ex d ½"NPT cable gland
EC-910-AFZ-I03-P10	3 x Full HD-IP Camera	24 VDC, 24 VAC or PoE+	10 m (33ft) armoured cable with gasket Ex d $\frac{1}{2}$ NPT cable gland

The EC-910-AFZ is available with 10 x optical zoom as well: EC-910-AFZ-I10-PXX

## TECHNICAL DRAWINGS

#### Sizes in millimeters

## Wall mounting:



# Parapet ceiling mounting:

