EX-PROOF HD CAMERA IN A COMPACT DESIGN
EC-910-AFZ-Full HD IP – 10 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 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.

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

- IECEx
- ATEX
- UL Listed
- EAC Ex
- GOST R

AMBIENT TEMPERATURE RANGE

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

IP PROTECTION

IP 66, 67, 68, 69
**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 (14.3 lb) housing + bracket
8.5 kg (18.7 lb) housing with 4m multi cable

**CABLE GLAND**

Cable entry: 1 x ¼” NPT
Cable gland with gasket Ex d ¼” 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 mm² (open wires)
4x2x0.22 mm² (CAT5e F/STP) with RJ45 plug

**VIDEO**

Compression: H.264/AVC, 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 – 1/10,000 sec, 22 steps
White balance: Auto, ATW, Indoor, Outdoor, Outdoor Auto, Sodium vapor lamp (Fox, 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.)

**NETWORK**

Ethernet connection: IEEE 802.3 100Base-Tx
Connector at cable tale: RJ 45
Communication protocol: ONVIF Profile S and Q
Device configuration: TCP/IP4, UDP/IP4, 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 II 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 II 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)
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)
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 26 db IIB T6...T5 Gb
Ex II 2D Ex db IIB T6...T5 Gb

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**

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<tr>
<th>Type</th>
<th>Weight</th>
<th>Dimen. (wxhl)</th>
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<tbody>
<tr>
<td>EC910-AFZ-103-P00</td>
<td>8 kg</td>
<td>32.5x19.23 cm</td>
</tr>
<tr>
<td>EC-910-AFZ-103-P04</td>
<td>11 kg</td>
<td>64x20.85x9 cm</td>
</tr>
<tr>
<td>EC-910-AFZ-103-P10</td>
<td>11 kg</td>
<td>64x20.85x9 cm</td>
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<tr>
<td>MODELS</td>
<td>Description</td>
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<tr>
<td><strong>EC-910-AFZ-I10-P00</strong></td>
<td>10x Full HD IP Camera 24 VDC, 24 VAC or PoE+ Without cable, without cable gland</td>
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<tr>
<td><strong>EC-910-AFZ-I10-P04</strong></td>
<td>10x Full HD-IP Camera 24 VDC, 24 VAC or PoE+ 4 m (13ft) armoured cable with gasket Ex d ½&quot;NPT cable gland</td>
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<tr>
<td><strong>EC-910-AFZ-I10-P10</strong></td>
<td>10x Full HD-IP Camera 24 VDC, 24 VAC or PoE+ 10 m (33ft) armoured cable with gasket Ex d ½&quot;NPT cable gland</td>
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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:**

![Wall mounting diagram]

**Parapet ceiling mounting:**

![Parapet ceiling mounting diagram]