EC-940-AFZ
OUR NEW CAMERA DESIGN
For hazardous areas
Our newly designed EC-940-AFZ camera is suitable for universal use in all types of industries and applications. The latest zoom camera technology has been integrated into the Ex d camera enclosure, while the options for connecting the camera are suitably protected in the Ex e type chamber.

The advantage is that you can now connect a modern Full HD IP camera with ONVIF Profile S, 32x optical zoom and WDR function through the Ex e connection chamber directly in the hazardous area – it’s as simple as that!
Easy to install, adjustable pan/tilt bracket

Avoids complex Ex d cable glands; installation of additional junction boxes is no longer required. The Ex e connection chamber provides short installation times with clearly defined connection points.

EX E CONNECTION CHAMBER

NEW

Ex e cover fully secured against falls, including captive screws

EX E COVER

FALL ARRESTER

Camera enclosure with integrated fall arrester

FALL ARRESTER
The new camera family includes three models, all of them designed for worldwide use and for reliable operation in ambient temperatures ranging between -55 °C and +65 °C / -67 °F and +149 °F. The camera enclosure is entirely made out of electropolished stainless steel, and therefore ideally suited for a multitude of surveillance applications in different industries – on drilling rigs, for pipeline surveillance, in refineries, tank farms, or in the chemical and pharmaceutical industries.
NEW CAMERA DESIGN COMES IN 3 VERSIONS

All of the cameras combine cost-effectiveness and ease of installation; any additional Ex e junction boxes are no longer required.

STANDARD IP VERSION
- Integrated Ex e connection chamber offers ease of installation directly in the hazardous area
- Full HD IP, WDR, defog, 32x optical zoom
- Easily maintained modular design
- 230 VAC and 24 VDC versions available

FIBRE OPTIC VERSION (additional features)
- Designed for long-distance transmission (up to 5 km / 3.1 mi) with maximum EMC protection
- Ex op is protection type enables fibre optic cable connection in the hazardous area

PoE++ Version (additional features)
- Reliable camera operation in extreme ambient temperatures (-55 °C up to +65 °C / -67 °F up to +149 °F)
- Data transmission distance of up to 150 m / 492 ft using R. STAHL’s PoE++ extender
- Power over Ethernet (PoE) through just one Ethernet cable
EC-940-AFZ
THE NEW CAMERA TECHNOLOGY

High definition (HD) cameras produce approximately five times sharper images than analogue cameras, thus revealing minute image details. The modern sensor technology combined with WDR (Wide Dynamic Range) imaging provides clear video images even in poor lighting conditions, with great variation in light levels.

The IP technology enables video retrieval over a network by using terminal devices such as PCs or smartphones and simplifies video analytics or video archiving.

Modern compression standards such as H.264 deliver a lower compressed bit rate for the same excellent video image quality.
**GLOBAL IP INTERFACE STANDARD**

ONVIF (Open Network Video Interface Forum) is an open industry forum for the development of a global standard for the interface of IP-based physical security products; the ONVIF Profile S has been specially developed for IP-based video systems. The ONVIF specification ensures interoperability between network video products regardless of manufacturer. It defines a common protocol for the exchange of information between network video devices including automatic device discovery and video streaming. ONVIF allows us the seamless integration of our IP cameras into video surveillance networks worldwide.

**WDR – PROVIDES THE FULL SCENE CONTENT**

Wide Dynamic Range technology assimilates information from extreme light levels and combines them into a single scene. The principle: each image is captured with multiple exposure times, so that bright or dark parts of the image are captured with optimal short or long exposures. For example, a dark background requires a longer exposure time, while a bright foreground requires a shorter exposure time. The digital camera produces clear images, combining them into one frame and thus showing the full content of the scene.

**DEFOG – HAZE AND FOG REDUCTION**

Outdoor cameras often have to withstand adverse weather conditions or unfavorable atmospheric conditions. Fog, mist, smog or smoke may considerably affect image quality, often beyond recognition. The defog feature analyzes the uncompressed video signal pixel by pixel. Color, contrast and sharpness of the optical signal are then retouched, and the camera provides clear images of objects or people even in difficult weather conditions such as fog.

**32X OPTICAL ZOOM**

32x optical zoom with no change in camera resolution. With optical zoom the pixel count remains the same, unlike with digital zoom.
# CAMERA VERSIONS

## TECHNICAL DATA

<table>
<thead>
<tr>
<th></th>
<th>STANDARD VERSIONS</th>
<th>FIBRE OPTIC VERSIONS</th>
<th>PoE++ VERSION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Code</strong></td>
<td>EC-940-AFZ-HDI-04H</td>
<td>EC-940-AFZ-HDI-05H</td>
<td>EC-940-AFZ-HDF-O4I</td>
</tr>
<tr>
<td><strong>Highlight</strong></td>
<td>Full HD IP</td>
<td>Full HD IP</td>
<td>Fibre optic port, Ex op is certified</td>
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<tr>
<td><strong>Certifications</strong></td>
<td>ATEX, IECEx, Zone 1, 2, 22</td>
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<tr>
<td><strong>Product Type</strong></td>
<td>1/2.8” MP Zoom Camera</td>
<td></td>
<td></td>
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<tr>
<td><strong>Resolution</strong></td>
<td>1920 x 1080 (FULL HD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Temperature Range</strong></td>
<td>-40 °C … +65 °C</td>
<td>-55 °C … +65 °C</td>
<td>-25 °C … +55 °C</td>
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<tr>
<td></td>
<td>-40 °F … +149 °F</td>
<td>-67 °F … +149 °F</td>
<td>-13 °F … +131 °F</td>
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<tr>
<td><strong>IP Class</strong></td>
<td>IP66</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Enclosure</strong></td>
<td>Electropolished Stainless Steel 316L (1.4404)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Connection</strong></td>
<td>Ex e Connection Chamber</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td>230 VAC nominal</td>
<td>24 VDC nominal</td>
<td>230 VAC nominal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Zoom Lens</strong></td>
<td>32x optical, 4.44 ~ 142.6 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Min. Illumination</strong></td>
<td>B/W: 0.03 Lux (1/30 sec, F 1.6, 50 IRE); Color: 0.3 Lux (1/30 sec, F1.6, 50 IRE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Viewing Angle</strong></td>
<td>62.8° (Wide) ~ 2.23° (Tele)</td>
<td></td>
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</tr>
</tbody>
</table>

## ACCESSORIES

- **Parapet Mounting Bracket EC-94x-AFZ**
- **Wall Bracket EC-94x-AFZ**
- **PoE++ Extender EC-940-HDI-06H**
- **Pole Adapter Module EC-94x-AFZ**
- **Corner Adapter Module EC-94x-AFZ**
EC-940-AFZ Camera with Wall Bracket, Combined with Pole Adapter Module

Pan/Tilt Bracket Included

EC-94x-AFZ Pole Adapter Module
CCTV SYSTEMS – tailored to your individual hazardous area requirements

We develop CCTV system solutions tailored to the specific requirements of your plant to provide you with maximal overview of all areas and processes in hazardous areas. We provide not only hardware and software, but all relevant services such as project design, project engineering, system configuration, documentation, FAT, commissioning, SAT, service and maintenance – except for installation. Our CCTV systems also adapt to existing CCTV systems.

An experienced project manager will be your primary contact and responsible throughout the entire project.

PERSONAL PROJECT MANAGEMENT

CCTV DESIGN

PROJECT ENGINEERING

SYSTEM CONFIGURATION

DOCUMENTATION

COMMISSIONING / TRAINING

FACTORY ACCEPTANCE TEST (FAT)

SITE ACCEPTANCE TEST (SAT)

SERVICE / MAINTENANCE

WEB SERVICE

CCTV SYSTEM FINDER

Our CCTV SYSTEM FINDER serves as the basis for developing system solutions tailored to your specific requirements. Please answer these questions and describe your requirements – our CCTV experts will then develop a non-binding system solution or quote for you.
OUR CCTV EXPERTS

We cannot be everywhere, but we provide expert advice, whenever and wherever you need us. Using modern communication, video and chat functions allow us to present and discuss with you CCTV solutions tailored to your individual requirements.

Your personal CCTV expert provides you with extensive support, including training, commissioning, FAT, SAT, and system configuration – all from one single expert source.

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