



# INSIGHT INFORMATION

IP CCTV Solutions





## INDEX

<b>IP CCTV Solutions</b>	<b>3</b>
<hr/>	
<b>CCTV camera systems in action</b>	<b>4</b>
<hr/>	
<b>Advanced video management</b>	<b>6</b>
Manage your recordings	6
Analytics beat humans	7
<hr/>	
<b>A camera for any solution</b>	<b>8</b>
Pan Tilt Zoom Cameras	8
Fixed Cameras	8
Dome Cameras	8
Thermal Cameras	9
Subsea Cameras	9
<hr/>	
<b>Functional principles</b>	<b>10</b>
<hr/>	
<b>About Us</b>	<b>11</b>
Mission, Vision	11





## IP CCTV SOLUTIONS

**Operating in high risk and harsh environments is challenging. Visual information is often key for monitoring and safeguarding your processes, but is also hard to come by.**

Our sophisticated CCTV systems will give you all the images you need to guarantee a safe and efficient operation. It is modular, dedicated for harsh and remote environments, and will allow you to save time and money.

## BENEFITS

- ✓ Automated alarms through object tracking and detection
- ✓ Recording of operations or specific events
- ✓ Dedicated CCTV solutions for any operational challenge
- ✓ Suitable for harsh environments; available in Ex and Non-Ex
- ✓ Any type of application: platform, crane, offshore wind, subsea



*Ex Pan Tilt Camera with 432x zoom*



*Compact subsea camera*



# OFFSHORE DRILLING, PRODUCTION & SPECIAL MARINE

## Derrick & drill floor monitoring

For monitoring stabbing & monkey board, unwanted movements on the drill floor; automated recording and storage of events.

## Helideck monitoring

Auto-tracking and recording of approach and take-off of helicopter motion and communication.

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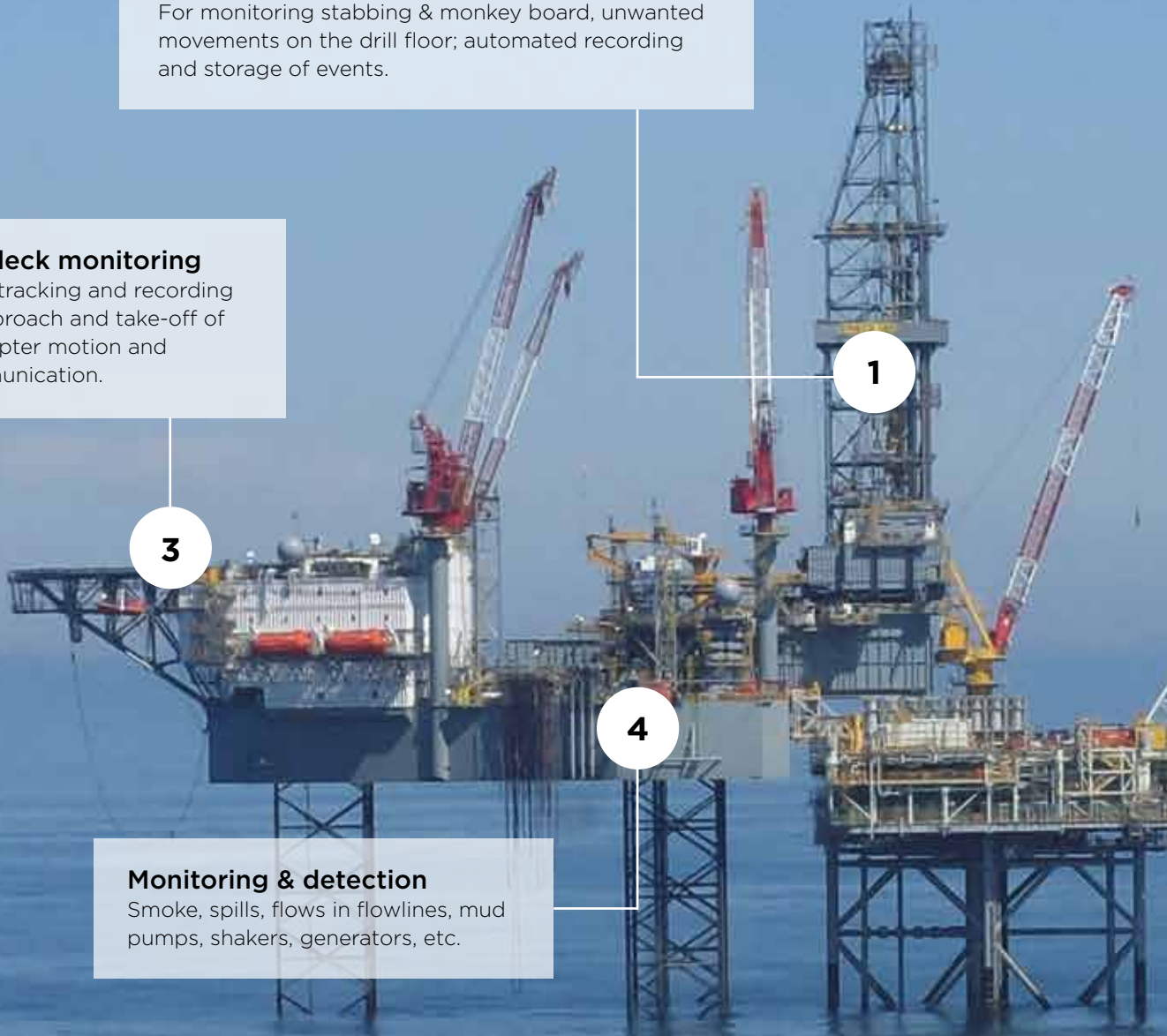
## Monitoring & detection

Smoke, spills, flows in flowlines, mud pumps, shakers, generators, etc.

## Subsea BOP inspection

Using dedicated subsea cameras to inspect degradation of critical subsea structures.

6



2

### **Crane camera / Load view**

An oil damped zoom camera allows for continuous Bird-eye view of the load and loading area.

5

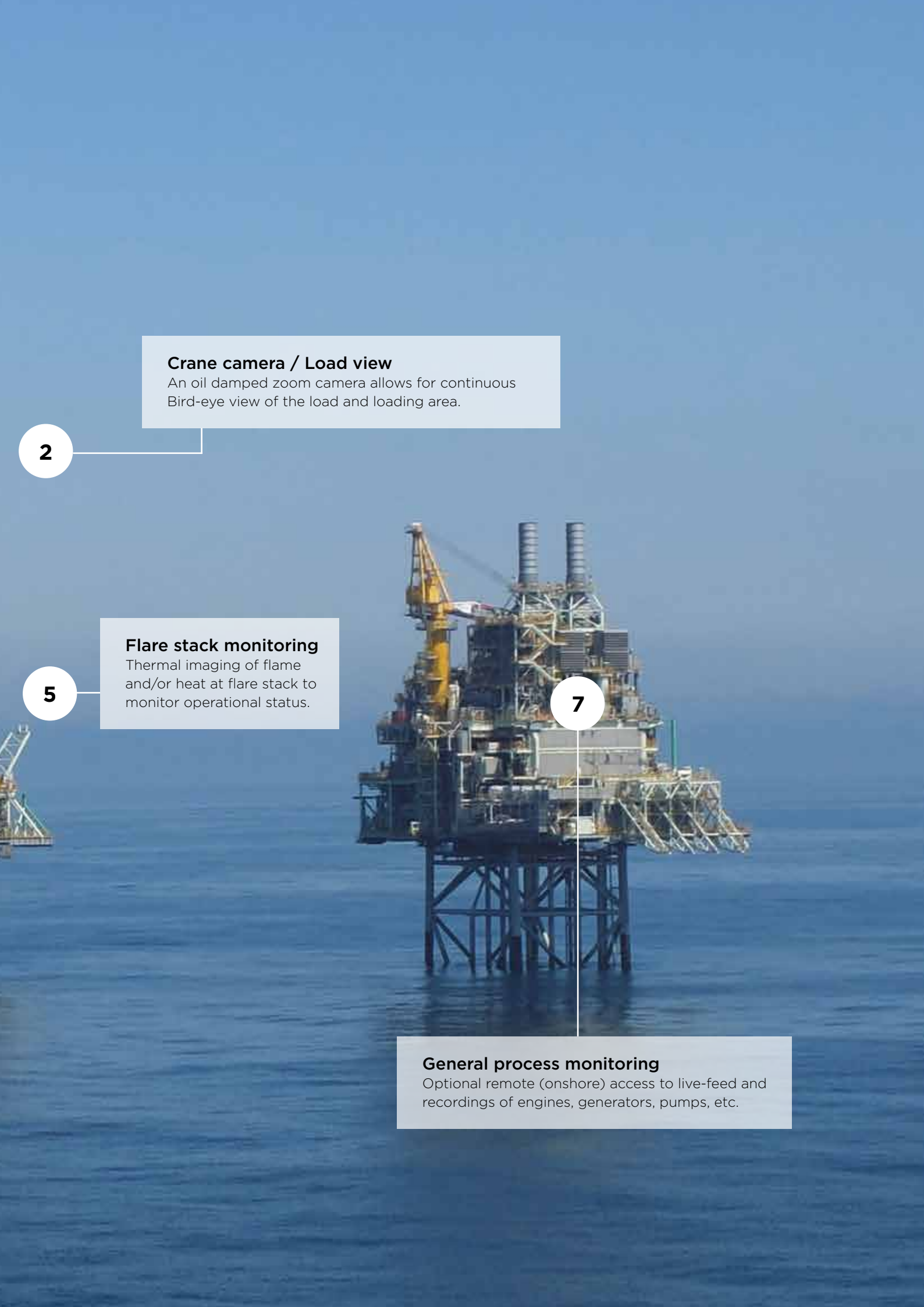
### **Flare stack monitoring**

Thermal imaging of flame and/or heat at flare stack to monitor operational status.

7

### **General process monitoring**

Optional remote (onshore) access to live-feed and recordings of engines, generators, pumps, etc.



## OFFSHORE WIND FARM

### Perimeter surveillance

Increased safety and security with a virtual fence by detecting and tracking approaching vessels.

### Remote (onshore) monitoring inside unmanned platform

Fleet-wide monitoring of offshore wind farm from your office through cable or SatCom.



### General process monitoring

Automated alarms and integrations of fire & gas systems.



A full-page photograph of an offshore wind turbine in the ocean. The turbine has a white tower with a yellow base, three white blades with red tips, and a white nacelle. It is set against a blue sky with light clouds and a dark blue sea with white-capped waves. A white circle with the number '4' is positioned to the left of the nacelle, with a thin white line connecting it to the text box on the right.

4

#### **Turbine monitoring & inspection**

Dedicated (fixed) surveillance cameras at turbine house, shaft, rotor blades, etc.

# CHEMICAL PLANT / REFINERY

4

## Safety & Security monitoring

Automated video analytics to detect and record undesirable events.

1

## Tank farm monitoring

Monitoring the status and stability of stored goods using thermal imaging and adjustable PTZ cameras.

2

## Day/night surveillance

To detect potentially hazardous events or unauthorized persons.



A large industrial facility, likely a refinery or chemical plant, is shown at night. The scene is illuminated by numerous bright lights, creating a high-contrast environment. In the foreground, there are large, white, cylindrical storage tanks with red railings and ladders. In the background, several tall, dark structures, including flare stacks and distillation columns, rise into the sky. A large, bright yellow sun or moon is visible in the upper center of the frame. The overall atmosphere is industrial and active.

5

### **Flare stack monitoring**

Thermal imaging of flame and/or heat at flare stack to monitor operational status.

3

### **General process monitoring: catalytic reformer, distillation, waste water, etc.**

Fixed, dome and PTZ cameras for inspection and monitoring of critical operating equipment.

### **Perimeter surveillance**

Detecting and tracking potentially unauthorized persons at critical locations or near the fence.

6



## ADVANCED VIDEO MANAGEMENT

Due to increasing safety and efficiency goals you cannot operate without a reliable and smart CCTV solution. Our CCTV systems basically have three levels of automation:

**1. Operational assistance:**

Our crane camera system or subsea cameras during subsea positioning, as a direct (live) operational aid.

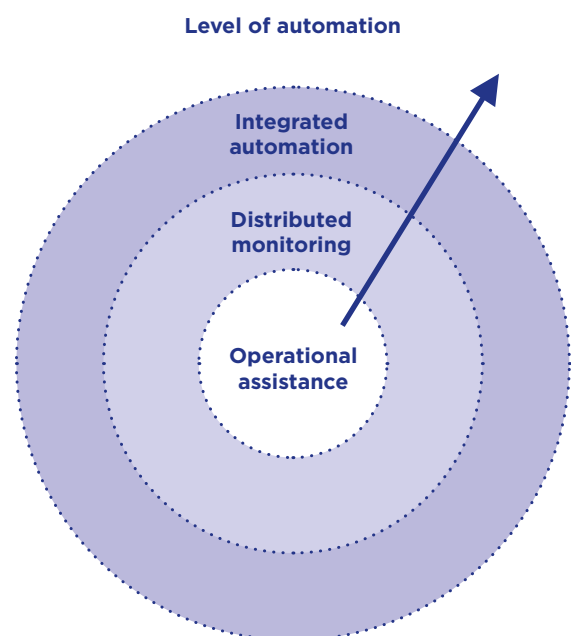
**2. Distributed monitoring:**

Complete CCTV systems to monitor and record complete operations.

**3. Integrated automation:**

Advanced video analytics are used to automate operations

All our systems provide direct live feed. Depending on your needs, we incorporate the additional functions.



## MANAGE YOUR RECORDINGS

Although you wish to prevent them, incidents may happen due to the unexpected. The most important thing is to make sure the same incident doesn't happen twice. Therefore it is essential to be able to learn from each incident, analyze it and adapt your procedures accordingly.

Our recording and remote access functionality provides you with the option to review what happened. You can access the recording on-site or at your onshore centralized office.





## ANALYTICS BEAT HUMANS

Humans are extremely creative and can adapt quite easy to unforeseen situations. For continuous monitoring however, automated video analytics beat human performance. Imagine having to monitor 20 or more video streams at the same time for a long period of time. You'll miss the majority of the events.

Our video analytic software will be configured according to your needs and is capable of detecting any undesirable event 24/7, 365 days a year.

*“24/7, 365 days a year.”*

Some of our many effective analytics:

- **Tracking & tracing** of objects and humans to prevent people entering restricted zones.
- **Virtual fence** to detect approaching vessels or objects to an unmanned platform
- **Integration with fire, smoke and gas detection**
- **Face recognition** for identification and entrance control
- **Digitalization of analogue meters and control** to reduce inspections and surveys







## A CAMERA FOR ANY SOLUTION

### PAN TILT ZOOM CAMERAS

High quality PTZ camera, designed for harsh offshore environments. Available as explosion proof and non-explosion proof version. Extensively tested and approved for shocks and vibrations.

<b>Resolution:</b>	752 (H) x 582 (V)
<b>Zoom capacity:</b>	480x (40x optical, 12x digital)
<b>Operating temp.:</b>	-40°C to +85°C (Ex: -40°C to +75°C)
<b>Ingress protection:</b>	IP69k / IP68
<b>ATEX approval:</b>	ATEX Ex II 2 G Ex mb px IIC T4 Gb
<b>Weight:</b>	6,8 kg (Al) or 15 kg (316L)



### FIXED CAMERAS

Explosion proof and non-explosion proof fixed camera. The smallest explosion proof camera in the world. Fixed lens with different angles.

<b>Resolution:</b>	795 (H) x 596 (V)
<b>Lens angles:</b>	12° to 170°
<b>Operating temp.:</b>	-40°C to +85°C (Ex: -40°C to +75°C)
<b>Ingress protection:</b>	IP69k
<b>ATEX approval:</b>	ATEX Ex II 2 G Ex mb IIC T6 Gb
<b>Weight:</b>	0,44 kg (Ex) or 0,21 kg (non-Ex)
<b>Optional:</b>	with LED lights



### DOME CAMERAS

Dome camera for in-/outdoor offshore use. Available as explosion proof and non-explosion proof version.

<b>Resolution:</b>	1920 (H) x 1080 (V)
<b>Zoom capacity:</b>	384x (32x optical, 12x digital)
<b>Operating temp.:</b>	-20°C to +60°C
<b>Ingress protection:</b>	IP68
<b>ATEX approval:</b>	Ex d IIC T6 Gb
<b>Weight:</b>	25 kg





## THERMAL CAMERAS

Thermal image camera, designed for harsh offshore environments. Extensively tested and approved for shocks and vibrations. Also available in explosion proof version and with pan & tilt unit.

<b>Resolution:</b>	324 (H) x 256 (V)
<b>Digital zoom:</b>	2x, 4x
<b>Operating temp.:</b>	-40°C to +85°C (Ex: -40°C to +75°C)
<b>Ingress protection:</b>	IP69k / IP68
<b>ATEX approval:</b>	Ex ib mb px IIC T4 Gb



## SUBSEA CAMERAS

Subsea camera designed to withstand water pressure and maintain clear images. Also available in low light or with LED lighting.

<b>Resolution:</b>	1920 (H) x 1080 (V)
<b>Zoom capacity:</b>	432x (36x optical, 12x digital)
<b>Operating temp.:</b>	0°C to +45°C (Storage: -20°C to +60°C)
<b>Sensitivity:</b>	12 lux (F1.8)
<b>Operating depth:</b>	0 - 6.000 meters

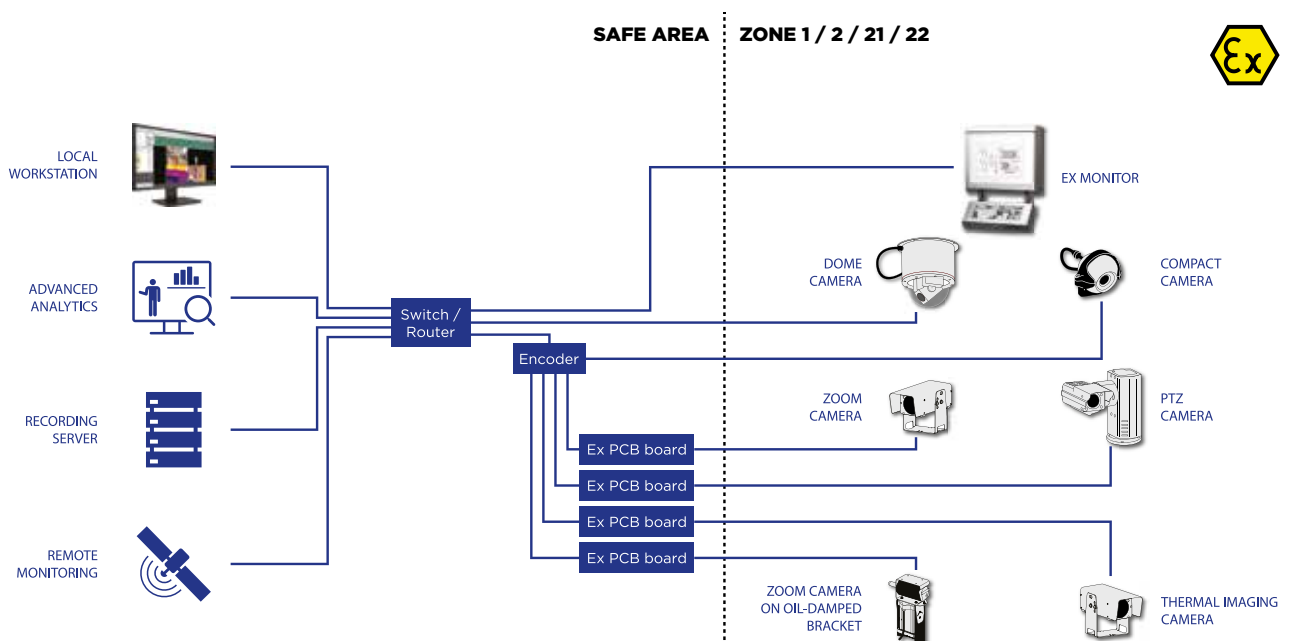


Visit our website [www.rolloos.com](http://www.rolloos.com) for more cameras and specifications.

## FUNCTIONAL PRINCIPLES

Our CCTV systems consist of four major parts:

- **Dedicated cameras:**  
Depending on application PTZ, dome, subsea, etc.
- **Workstations:**  
Displays at multiple locations, configured to the needs at hand
- **Scalable IP network:**  
IP backbone is easy to expand with group cabinets and cameras
- **Advanced functionalities:**  
Remote access, automatic recording, face recognition, object tracking, etc.







## ABOUT US

Rolloos contributes to a more efficient and safe heavy industry through innovation and excellent service. We aim to create solutions that provide you with the best possible insights to make your operation excel. Whether that is a precise weight indication of your load, automated alarms and image detection within your CCTV system or direct communication through our connectivity solutions: Rolloos leverage accurate, fast and secure information into valuable insights. With Rolloos you improve your safety and efficiency.

## OUR MISSION

To make working in harsh and hazardous industries more efficient and safe.

## VISION

Rolloos strives to create innovative, integrated solutions that leverage information into insights. It is our goal to utilize these insights and make them available across all aspects of harsh and hazardous operations. To be a strategic partner to our customers for CCTV, mobile communication, weighing, crane safety and industrial cyber security.





## **CONTACT**

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