OIL AND GAS
SOLUTIONS

Rugged and reliable solutions
for 24/7 monitoring

PELCO
a Motorola Solutions Company

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SECURITY THAT DOES MORE:
INTELLIGENT VIDEO FOR OIL AND GAS

From the relentless sub-zero temperatures of Arctic oil pipelines to the scorching heat of desert drill sites to the heavy winds and corrosive elements of offshore rigs, Pelco has engineered end-to-end solutions designed to meet tough requirements and stringent regulations for upstream, midstream and downstream installations.

MANAGING SECURITY RISKS

Ensuring that security risks are accounted for is an essential business activity within the global upstream oil and gas industry. The range of security threats posed varies in scope and intensity and companies should ensure they have comprehensive security awareness and knowledge.

Without consistent security risk management strategies, companies may be exposed to an increasing level of security instability and unpredictability.

RUGGED AND RELIABLE SOLUTIONS CERTIFIED ACROSS INTERNATIONAL REGULATORY STANDARDS

The ExSite® Enhanced Explosion-Proof camera line is purpose-built to monitor operations and control processes in hazardous locations with risks of explosion due to the presence of flammable liquids, gases or dust. Available in fixed, compact and PTZ form factors, these rugged outdoor cameras meet stringent explosion-proof and dust-ignition-proof requirements while complying with international standards (UL, CSA, ATEX, IECEx, EACEx).

All models feature rugged 316L stainless steel construction that has been subjected to extensive vibration and environmental testing, making them ideal for use in the most extreme conditions of temperature, moisture, ice, dust and wind.

DESIGNED TO SURVIVE IN THE HARSHEST CONDITIONS

The ExSite series and Esprit Enhanced are both designed to survive in the harshest conditions.

EXSITE ENHANCED 2 IR PTZ

The ExSite Enhanced 2 IR PTZ Series is an explosion-proof, Day/Night Pan-Tilt-Zoom (PTZ) camera with built-in IR illumination.

- IR illuminator provides clear object detection up to 200m away, even in total darkness and at different zoom levels

- Designed with AISI 316L stainless steel and micro-shot, electro-polished surfaces, it offers maximum resistance in corrosive environments

- IP66/67/68/69, NEMA Type 4X and Type 6P ratings, ensuring protection against extreme conditions, including water and dust

ESPRIT ENHANCED

- An optional IOC system that contains dry nitrogen pressurized 10 psig, which protects the environment inside the cartridge, eliminating internal condensation and corrosion.

- Metal housing meets IK10.

- Operating temperature range of –45° to 60°C (–50° to 140°F). And within two hours after power-up, the entire unit can de-ice and be operational from a temperature of –25°C (–13°F).

EXSITE ENHANCED 2 IR PTZ
Integrated optics package with an autofocus camera with 30x optical zoom

ESPRIT ENHANCED PTZ
Superior visibility and reliability in difficult lighting conditions

HELP MONITOR PROCESSES FOR CONTINUOUS OPERATIONS

The ability to monitor processes is a primary concern as even minor disruptions could have disastrous consequences on production costs, environmental impacts and liability, and most importantly, the health and safety of employees. Oil and gas organizations are constantly seeking ways to lower operational risks, boost productivity, ensure workplace safety, increase security and ensure compliance with environmental and safety regulations.

Pelco oil and gas security systems help monitor industrial plant equipment, gas flares and production flaring and provide you with visual confirmation of the data given by the industrial automation systems.

Oil and gas facilities need a proactive security posture to mitigate threats, concentrate efforts on achieving situational awareness and increase real-time response to threats and potential hazards. Energy providers can gather intelligent data to drive operational efficiencies and support machinery maintenance using video security tools. Sensor alarms and readings can be visually confirmed with video data to reduce risks, repair costs and service interruptions. Video security helps manage processes and detect potential issues remotely, helping to avoid exposing personnel to site risks.

EASE OF INSTALLATION AND MINIMAL MAINTENANCE

Installation and maintenance of oil & gas security systems can be extremely challenging, time-consuming and costly within pipeline, refinery and well sites due to the site's remote locations, hazardous area lockout and safety procedures and camera mounting heights.

The ExSite Enhanced Compact 2 Series model makes installation easy with a compact, lightweight design. The ExSite Enhanced includes an embedded junction box with dual cable entry ports to separate data and power cables. Installation is made simple with a Safety Attach Point and simple wire termination methods, including an onboard fiber media port for an SFP module, making it easier to transmit network communications over long distances. Upright or inverted installation is also possible, with Automatic Orientation to autocorrect video to the right orientation and calibration.

The PTZ models include beltless and gearless, direct-drive motors that last longer, reducing long-term service and replacement costs, and leading to a significant reduction in total cost of ownership. The motor is steady and durable enough to continue operating in hurricane-force winds.

The ExSite® Enhanced will continue functioning normally in severe weather and harsh conditions—when you need it the most.

EXSITE ENHANCED COMPACT 2
Affordable 6 MP stainless steel

IR ILLUMINATION UP TO 200M

TRUE WDR UP TO 130 DB

H.264 AND H.265 SMART COMPRESSION

Retains image quality and critical information while reducing storage and bandwidth requirements up to 70% for lower cost of ownership.

MAINTAIN IMAGE CLARITY IN THE MOST DEMANDING CONDITIONS

ExSite Enhanced PTZ 1 Series provides you with crisp and clear details with up to 2 MP high-definition and 30x optical zoom, 130dB WDR and incredible low-light capabilities for dimly lit conditions common to remote sites.

Equipped with Electronic Image Stabilization, the ExSite Enhanced reduces blurring associated with camera motion and compensates for pan and tilt of the camera to maintain clear footage even in high winds.

In addition, image defog, anti-bloom, 3D noise filtering and enhanced tone mapping all contribute to the finest video quality in the explosion-proof market. Supported by a long-range variable-zoom IR illuminator that adjusts automatically with the camera zoom, the rugged PTZ provides up to 200 meters of consistent illumination of the area of interest throughout the camera's zoom range for optimal visibility in complete darkness.

The Esprit® Enhanced features dual mode illumination option with IR and white light LED banks, enabling you to switch between the two to overcome difficult lighting conditions caused by external sources.

EXSITE ENHANCED PTZ 2 SERIES
Integrated Optics Package with an autofocus camera and 30x optical zoom

INCREASED SAFETY AND SITE INTELLIGENCE

Refineries, storage facilities, vessels, terminals, pumping stations and transportation infrastructure are exposed to a variety of challenges such as unauthorized access, fire, explosion, hazardous gas leaks and unusual behavior. Energy providers require comprehensive security planning and technology systems that can augment the capabilities of security personnel. Real-time video security solutions have become the standard for securing oil and gas facilities and assisting operators in maintaining a safe environment. Pelco provides intelligent video security solutions to help businesses achieve rigorous perimeter protection, high levels of safety, and full health and safety compliance to better protect employees and assets from harm. Intelligent video security enables organizations to prevent, respond to and investigate incidents quickly and efficiently. Analyzing critical data from security platforms enables you to proactively detect threats or anomalies while identifying potential vulnerabilities. Security leaders can then improve real-time responsiveness and ensure business continuity.

PELCO OCCUPANCY COUNTING SOLUTION

- Automate counting and monitoring of facility occupancy through individual doors
- Dashboards display real-time occupancy counts
- Set individual limits for different areas
- Generate occupancy data reports

CENTRALIZED MONITORING ACROSS MULTIPLE SITES

Pelco's VideoXpert video management system provides multi-site server access to allow you to view multiple remote sites from a single location. Live and recorded video can be viewed, exported and saved remotely, allowing for rapid investigation and incident management, as well as greater awareness across the organization. In many oil and gas installations in hazardous locations, cameras are placed at a considerable distance from the head-end. Pelco offers broad connectivity options, including UTP, Ethernet-over-Coax (EoC) and Integrated SFP/FSFP modules that support Fiber Ethernet connections allowing customers to connect their devices directly to a fiber optic cable, which minimizes network delays and maximizes bandwidth.

REDUNDANT SYSTEM FOR 24/7/365 COVERAGE AND COMPLIANCE

Oil and gas facilities are sensitive and highly regulated environments. Data must be safely stored, eliminating potential cybersecurity breaches. Pelco's video management system (VMS) has a redundant system architecture with failover and load balancing, reducing downtime. This stable system eliminates any single point of failure on the VMS — you can be confident that your investment is always available.

PELCO CAMERA LINK

Automatically track objects of interest with Pelco Camera Link, where you can link the Optera® and Spectra® Enhanced cameras that are mounted nearby.

VIDEOXPERT VIDEO MANAGEMENT SYSTEM

Highly reliable video management with an intuitive user experience.

SARIX TI 2 SERIES
Long-range detection in darkness

SPECTRA ENHANCED PTZ 7 SERIES
Detection with 4K PTZ technology

ENHANCE YOUR CAPABILITIES BY INTEGRATING WITH THIRD-PARTY TECHNOLOGY SYSTEMS

Pelco's open system architecture allows for seamless integration with third-party solutions, offering superior interoperability and collaboration between multiple environments.

The VMS platform works with any ONVIF compliant cameras. APIs integrate with best-of-class analytics partners, allowing either software or hardware integrations that can connect to third-party systems. Perimeter detection systems are one integration example. If a perimeter breach is detected, the combination (software or hardware) can prompt cameras to react to the incident.

Movement is tracked and analyzed in real-time throughout the entire event and can categorize the target and differentiate target type, speed, size and direction. Pelco solutions can also integrate with SCADA, fire detection and access control systems, unifying operations for improved efficiency and quicker response.

ADVANCED ANALYTICS	SMART ANALYTICS, POWERED BY MOTOROLA SOLUTIONS
Available on ExSite Enhanced, Esprit Enhanced, Spectra Enhanced, Sarix Enhanced	Available on ExSite Enhanced 2 models

ADVANCED ANALYTICS

- Abandoned object detection
- Intrusion detection
- Directional motion detection
- Adaptive motion
- AutoTracker
- Loitering detection
- Object counting
- Object removal
- Stopped vehicle

SMART ANALYTICS, POWERED BY MOTOROLA SOLUTIONS

- Detect people and object in the zone
- Classify people and vehicles and detect actual threats versus false alarms
- Objects in area
- Object loitering
- Objects crossing beam
- Object appears or enters area
- Object not present in area
- Objects leave area
- Object stops in area
- Direction violated

SARIX ENHANCED DOME 3 SERIES
High performance with superior visibility and analytics

SARIX PROFESSIONAL 4 SERIES
A versatile, analytics-enabled security solution

PELCO FISHEYE
Cost-effective 360-degree coverage free from blind spots

MORE
POWERFUL
MORE PELCO

Contact your local Pelco sales representative or visit pelco.com/oil-and-gas to learn more about the security solutions we offer oil and gas facilities.

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