

# Using smart surveillance to minimize danger in hostile environments

Managing risk in the oil and gas industry is mandatory, especially in the midstream sector. Pipelines are often exposed to harsh environments, while trespassers and theft can even pose danger to the infrastructure. Reliable, real-time video surveillance of the pipelines across long distances is mandatory to prevent damage and sabotage, to protect employees and the environment, and to ensure the continuity of business operations. And with remote monitoring from a central location, companies can make faster decisions and efficiently manage incidents no matter where they occur.

## Advantages

- Reliable surveillance and data transmission 24/7 via redundant network structures
- Secured and independent communication due to double redundant network, ring topology and VPN
- Increased availability thanks to high redundancy security solution control system
- Coverage of different distances between stations of up to 120 kilometers powered by fiber optic networking

## Products used for this application

- **Industrial Ethernet switches – SCALANCE X**  
SCALANCE X offers comprehensive portfolio of managed and unmanaged switches for specific networking tasks.
- **Industrial Security – SCALANCE S**  
SCALANCE S security appliances are specifically used in automation, yet connect seamlessly with security structures of the office and IT world.
- **Process Control System – PCS 7**  
Flexible, scalable, powerful: the innovative distributed control system PCS 7 enables quick responses to constantly changing market requirements.

