Future Fibre
TECHNOLOGIES

Securing Oil and Gas Infrastructure with Confidence

Intrusion Detection
Fibre Security Technology

fftsecurity.com

Why Oil and Gas Infrastructure Needs Stronger Protection

Oil and gas infrastructure is critical to energy security, economic stability and supply continuity. As oil price volatility rises and global supply chains come under pressure, production assets, terminals and pipeline infrastructure remain high-value targets for threats that can disrupt operations, compromise safety and environmental protection, and interrupt product flow.

Even brief security incidents can escalate into major operational disruption, safety risks and significant financial losses. In highly interconnected oil and gas networks, a single point of failure, particularly along pipeline infrastructure, can have cascading impacts across supply chains, export capacity and energy markets.

- Unauthorised access to secure perimeters, production facilities, pumping stations and pipeline corridors
- Breaches of fences, barriers or exclusion zones protecting critical oil and gas assets
- Tampering with surveillance, power, control and communications systems critical to operations
- Vandalism or damage to pipelines, valves, compressor stations and critical access routes
- Illegal tapping, siphoning and other third-party interference (TPI) that can result in theft, pressure loss, safety risks and environmental damage

The FFT advantage

We deliver multi-layered, integrated security solutions that protect critical oil and gas infrastructure from the perimeter through to core operations.

PERIMETER INTRUSION DETECTION
FFT's fence-mounted or buried systems monitor oil and gas sites, delivering high-confidence detection with low nuisance alarm rates.

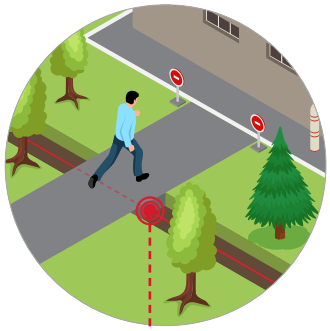
PIPELINE MONITORING
DAS fibre sensing detects suspicious movement, digging, tapping and other third-party interference around pipelines in real time, helping operators respond before threats escalate.

DATA NETWORK PROTECTION
FFT monitors the physical cable layer to deliver clear network security and health insights, either stand-alone or alongside existing NMS platforms.

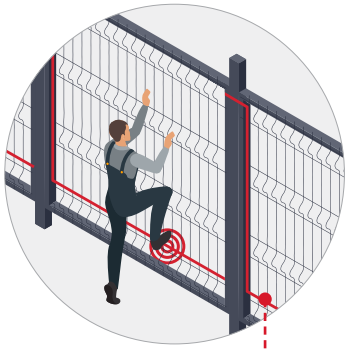
With operations across six continents and thousands of sites protected worldwide, FFT is trusted by governments, military, and industry leaders in over 80 countries.

Multi-layered protection in action

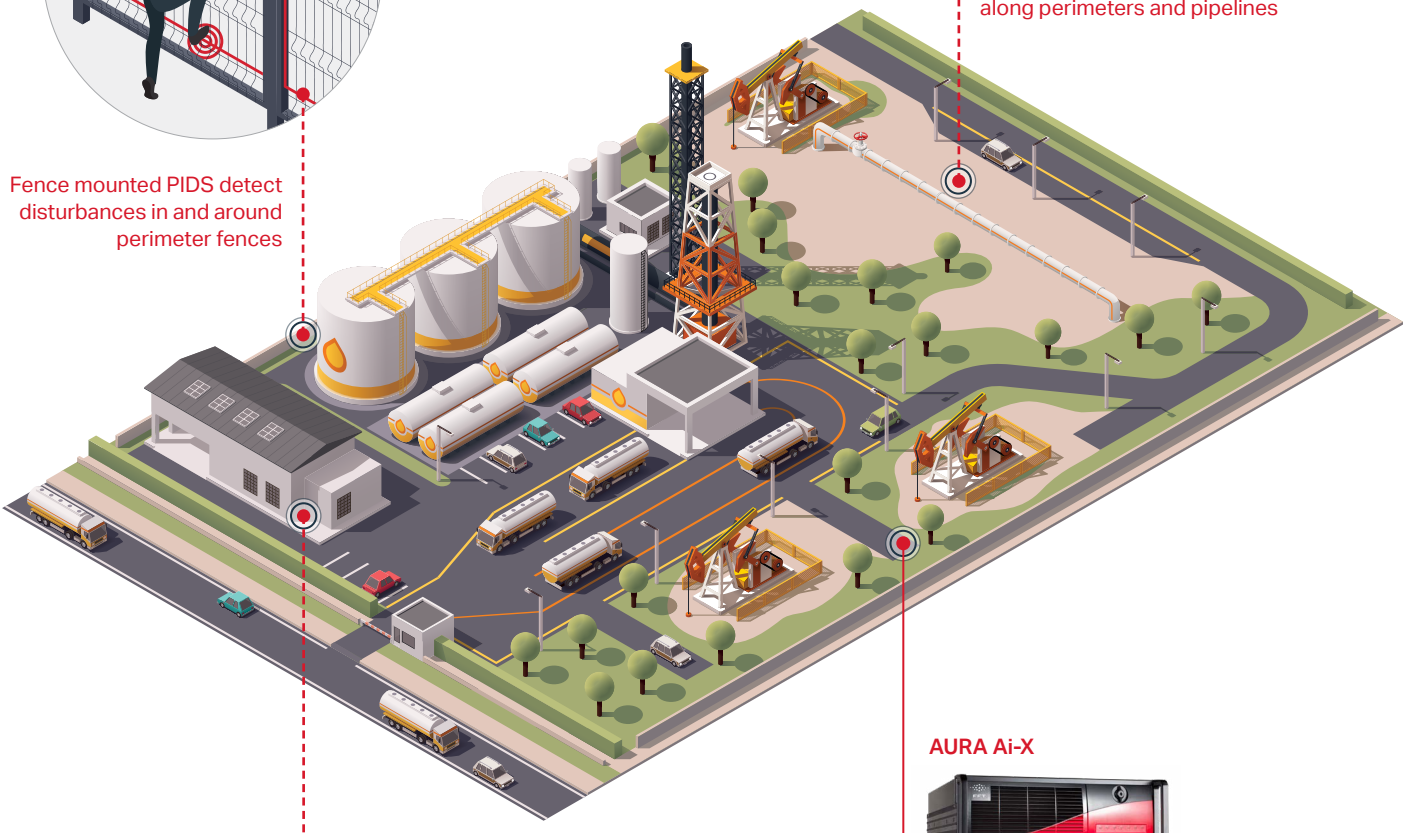
By integrating multiple detection strategies, **FFT delivers a seamless, layered defence for oil and gas infrastructure.** From detecting approach and climbing at the perimeter to monitoring pipelines for illegal tapping, tampering, siphoning and leakage, each layer is designed to enable rapid response to intrusion alerts and help operators stay ahead of evolving threats.



Covert buried or Linear Ground Detection System (LGDS) PIDS provides discreet detection of intrusions and breaches along perimeters and pipelines



Fence mounted PIDS detect disturbances in and around perimeter fences



Fibre optic sensing monitors power and data cables, helping detect tampering that may affect communication, surveillance and access control systems.

AURA Ai-X

Aura Ai-X filters environmental and operational noise common at oil and gas sites, such as pump vibration, compressor noise and general plant activity, helping reduce nuisance alarms and maintain focus on genuine threats.

From perimeter to core: How Future Fibre Technologies secures Oil and Gas Facilities

FFT's DAS (Distributed Acoustic Sensing) based fibre optic sensing technologies deliver real-time, location-specific alerts for perimeter breaches, pipeline interference, infrastructure tampering and unauthorised access. It can also monitor the health of critical cables, helping operators identify issues early before they impact operations, safety or supply continuity.

Seamlessly integrating with existing security systems, FFT solutions provide reliable detection with minimal nuisance alarms, helping safeguard critical infrastructure and oil and gas assets.

PERIMETER INTRUSION PROTECTION

While perimeters can range from 50m to hundreds of kilometres, oil and gas sites require the same high level of protection. Whether fence mounted or covert buried, FFT's intrusion detection technology is well suited to all types of oil and gas infrastructure, performs reliably in demanding environments, and delivers high probability of detection with low nuisance alarm rates.

PIPELINE MONITORING

Pipelines are exposed to a range of threats, including deliberate digging, illegal tapping, siphoning, third-party interference and tampering. To make the fast, well-informed decisions needed to protect pipeline infrastructure, operators require a solution that detects interference and damage at the earliest possible stage. Using DAS-based fibre optic sensing technologies along the pipeline, tampering, theft and disturbance events can be detected in real time.

DATA NETWORK PROTECTION

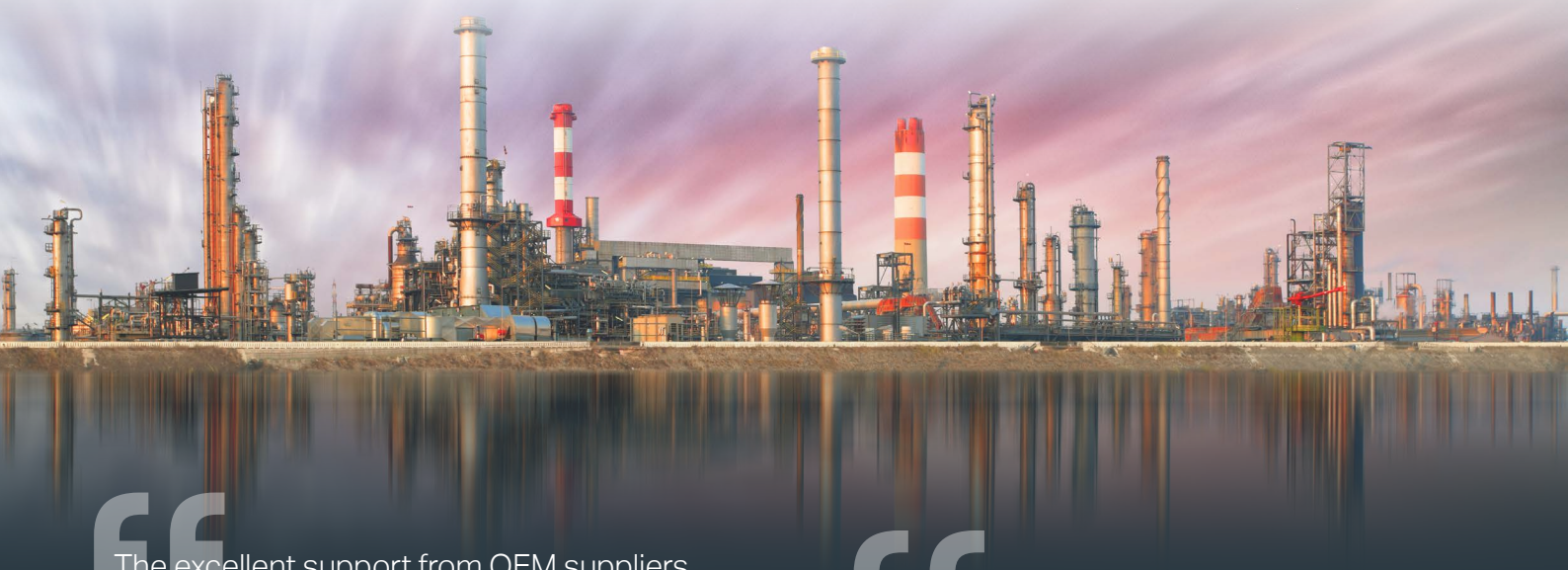
Network management systems typically focus on higher-level network protocols and transactions, only detecting malicious activity based on interface and data flow health. At this point, the damage may already be done. Working stand-alone or in conjunction with existing NMS platforms, FFT's data network solution delivers a complete snapshot of physical network security and operational health by monitoring surveillance, power and communications cables.

Trusted worldwide

- 80+ countries served
- Tens of thousands of installations
- Proven across critical infrastructure, government, and commercial sectors

Honeywell · M.C. DEAN BUILDING INTELLIGENCE · SIEMENS · Telstra · ExxonMobil

Johnson Controls · U.S. AIR FORCE · Transport Sydney Trains · U.S. Department of Homeland Security · Australian Government Department of Defence



> The excellent support from OEM suppliers contributed to the overall success of the project and **I would have no hesitation in recommending FFT's solution** for future projects.

— US REFINERY OPERATOR

> By far, FFT was the best proposal, best value, and as it turned out, theirs was the lowest price. Both the integrator and the customer were **extremely impressed with FFT's performance, timeliness, professionalism, as well as service after the work was completed.** The system is the best we have seen or heard of to date. **Every facet of the system exceeded our expectations.**

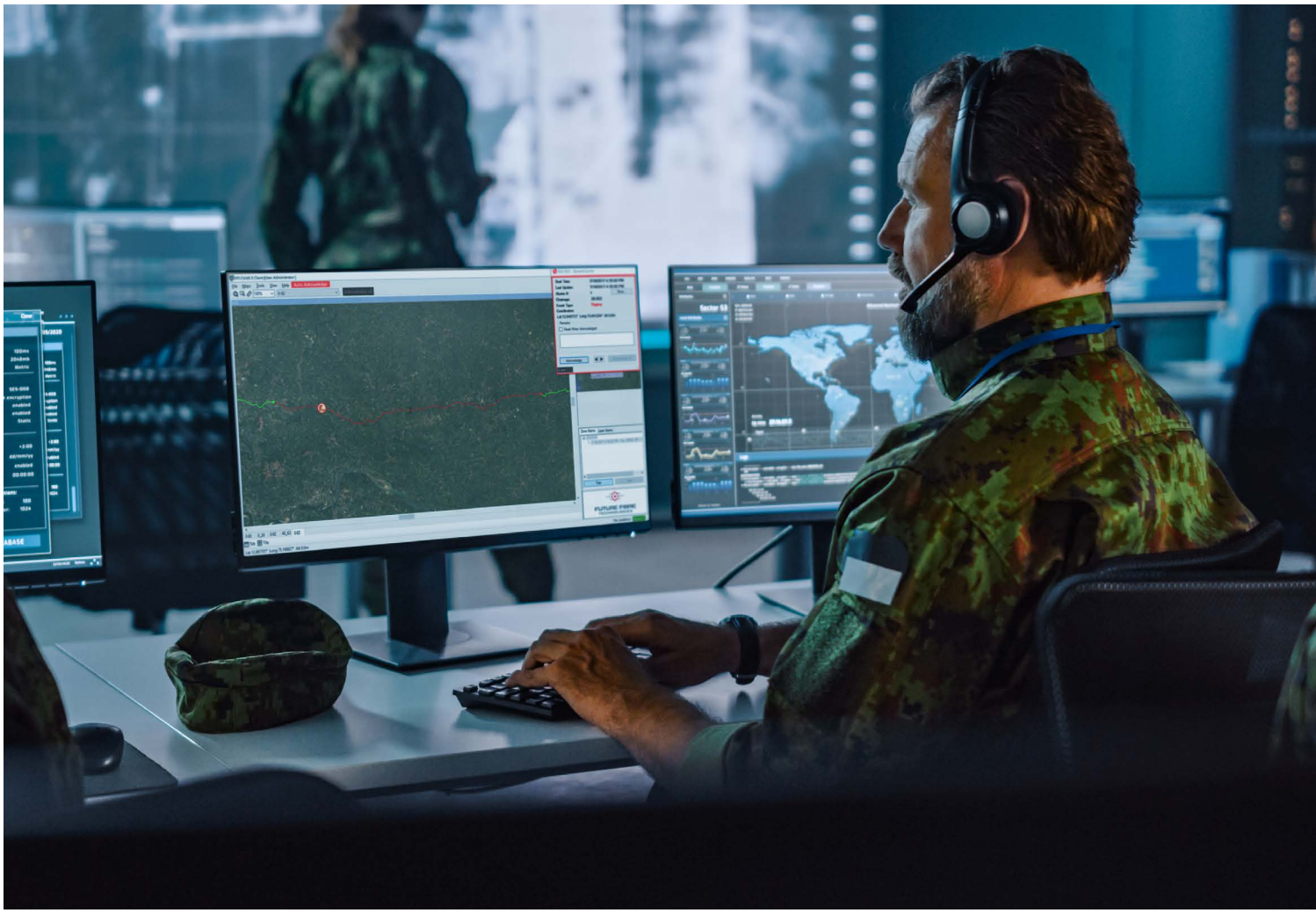
— US ARMY SECURITY CONTRACTOR

> Risk mitigation of unauthorised access to the Photovoltaic Alex Farm was the major challenge, especially considering its vast territorial expanse. The security solution (comprising PTZ cameras, horn speakers and FFT's fibre optic intrusion detection) allows the security team to act effectively in the analysis, detection and response of flagged occurrences.

— PROJECT MANAGER, ELERA RENEWABLE

> Fence security at Istanbul Airport is **smarter and more sensitive thanks to Future Fibre Technologies.**

— IGA ULV SYSTEMS GROUP MANAGER



Integrations

PARTNER SUPPLIED INTEGRATIONS*

Advancis WinGuard
Axone Systems
AxxonSoft
BEL Command and Control (Bharat Electronics Limited)
braXos Security Steward
Carnoustie Security
ECIL – Scada Integration
Ekin Red Eagle
FLIR 360 Surveillance
Genetec Security Centre RSA
GEW Technologies
Havelsan
HERNIS (Eaton)
Honeywell EBI
Honeywell HUS
Honeywell ProWatch
IP Fusion
KocSistem
Linc
Mindtree
NCS
Nightingale Intelligent Systems BrdsEye
Nirasys
Qognify
Siemens Siveillance Vantage
Sinpro
Sterlite
Synectics Synergy3
Tata Advanced Systems
Thales Airport Operation Control Centre (AOCC)
Tyco CEM Systems AC2000
Tyco Proximex Surveillint
Vector InfoTech
Verint Fusion SMC
Videonetics
Vidsys
Viettel Surveillance System

FFT SUPPLIED INTEGRATIONS

Avigilon Control Centre
Bosch Video Management System
FLIR Latitude
G4S AMAG Symmetry Enterprise
Gallagher Command Centre
Hikvision
IndigoVision Control Centre
Lenel S2 - Onguard
Milestone XProtect
Pelco VideoXpert
Sick Laser Scanner
Tyco Software House C-Cure 9000

CAMERA CONTROL INTEGRATIONS

Axis Cameras
ONVIF Compatible Cameras

INDUSTRY STANDARD INTERFACES

Configurable ASCII Device output
Email output
Modbus PLC
SMS output
SNMP v1 and v2

Secure Your Oil and Gas Infrastructure Today

Contact FFT to discover how our integrated solutions can protect your oil and gas infrastructure and assets.

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Contact us: info@fftsecurity.com

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