Future Fibre
TECHNOLOGIES

Securing Telecommunications Infrastructure with Confidence

Intrusion Detection
Fibre Security Technology

fftsecurity.com

Why Telecommunications Infrastructure Needs Stronger Protection

Telecommunications infrastructure is critical to national resilience, economic stability and community safety. From above-ground assets such as street cabinets, pit lids, conduit routes, fibre and power cables, towers and exchange sites to critical subsea cable infrastructure, these networks are high-value targets for physical and environmental threats that can disrupt connectivity, compromise safety, and affect service continuity.

Even brief security incidents can escalate into major outages, operational disruption and significant financial losses.

- Unauthorised access to secure perimeters, exchange facilities, landing stations and critical telecommunications assets
- Breaches of fences, barriers or exclusion zones around key network infrastructure
- Tampering with monitoring, power, fibre, conduit or communications systems critical to service continuity
- Vandalism or damage to towers, cabinets, underground pits, pit lids and cable routes
- Uncontrolled access to restricted, high-risk or operationally critical areas, including subsea cable infrastructure and landing points

The FFT advantage

We deliver multi-layered, integrated security solutions that protect critical telecommunications infrastructure, from exchange sites and cable routes to landing stations and subsea assets, from the perimeter through to core network operations.

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

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

POWER CABLE MONITORING
DAS fibre sensing detects cable tampering and disturbance events in real time, helping operators respond at the earliest stage.

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

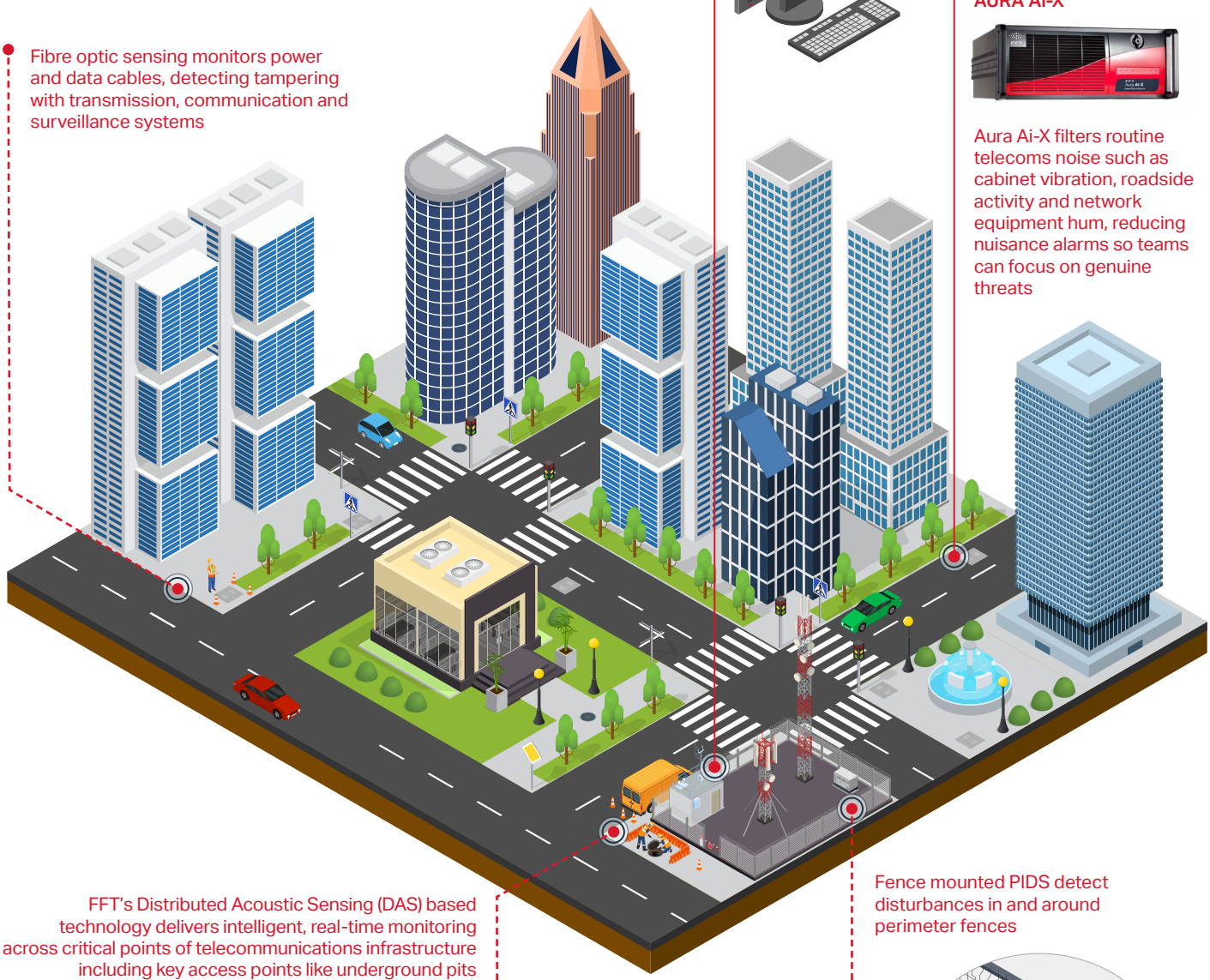
By integrating multiple detection strategies, **FFT delivers a seamless, layered defence for telecommunications infrastructure.** From remote transmission sites and exchange facilities to underground pits, cable routes, landing stations and other critical access points, each layer is designed to enable rapid response to intrusion alerts and help protect network availability and service continuity.

Designed to display, monitor and control alarm signals from individual or multiple FFT controllers on a single or number of sites, **FFT CAMS** brings all sites together into a simple to understand Graphical User Interface (GUI)

AURA Ai-X

Aura Ai-X filters routine telecoms noise such as cabinet vibration, roadside activity and network equipment hum, reducing nuisance alarms so teams can focus on genuine threats

Fibre optic sensing monitors power and data cables, detecting tampering with transmission, communication and surveillance systems



FFT's Distributed Acoustic Sensing (DAS) based technology delivers intelligent, real-time monitoring across critical points of telecommunications infrastructure including key access points like underground pits

Fence mounted PIDS detect disturbances in and around perimeter fences

From perimeter to core: How Future Fibre Technologies secures Telecommunications Infrastructure

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

Seamlessly integrating with existing security systems, FFT solutions provide reliable detection with minimal false alarms, helping protect both physical infrastructure and critical telecommunications assets.

PERIMETER INTRUSION PROTECTION

While perimeters can range from 50m to hundreds of kilometres, telecommunications sites require the same level of protection. Whether fence mounted or covert buried, FFT's intrusion detection technology is well suited to all types of telecommunications infrastructure, from remote transmission sites and exchange facilities to data centres, landing stations and cable routes, performing reliably in demanding environments while delivering high probability of detection with low nuisance alarm rates.

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 across critical telecommunications infrastructure.

POWER CABLE MONITORING

Power cables are subject to a range of threats, including theft, tampering and malicious damage. To make the fast and well-informed decisions needed to protect critical cable infrastructure, operators require a solution that detects damage at the earliest possible stage. Using DAS-based fibre optic sensing technologies along the cable, tampering, theft and disturbance events can be detected in real time.

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 Telecommunications Infrastructure Today

Contact FFT to discover how our integrated solutions can protect your energy infrastructure, assets and uptime.

FFTSECURITY.COM

For more information about our products, visit: **www.fftsecurity.com**
Contact us: info@fftsecurity.com

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