High resilience pipeline protection

Pinpointing the location of TPI or illegal activities on high risk oil, gas, chemical or water pipelines

FFT AURA™

Protecting buried pipelines and their contents against damage and theft.

FFT Aura™ LR detects and locates intrusions and Third Party Interference (TPI) on buried pipelines in real-time, before pipeline damage occurs.

It uses a standard fiber optic cable as the sensor and can often use an existing SCADA cable for significant cost savings.

FFT Aura™ LR can detect drilling, cutting or digging activity along the entire pipeline, and locate this to within ten meters.

Only from FFT – The ultimate force in fiber optic intrusion detection

www.fftsecurity.com

FFT Future Fibre Technologies™
Light years ahead in sensing and security

FFT Aura™ LR is sensitive enough to protect critical buried pipelines that demand a hardened intrusion detection solution.

It sets the standard for detection sensitivity and resilience.

The simple installation, reliability and maintenance free operation delivers a low Total Cost of Ownership (TCO).

Key Benefits

- Simple installation and virtually maintenance free operation delivers a cost effective yet flexible pipeline protection solution without compromising on performance.
- Detect digging activities and vehicle movements occurring above the pipeline—before the pipeline itself is reached or damaged.
- Know the exact location to dispatch your security and maintenance staff to, as FFT Aura LR can pinpoint the precise location of events to within ten meters (30 feet) or better.
- One controller protects up to 40km (25 miles) of pipeline. With a controller at each end, the system will continue to keep working normally, even if the sensing cable is damaged or cut.
- Powerful interfacing options through FFT CAMS™ to other FFT products, plus third party devices and systems.
- Peace of mind with FFT's two year warranty backed up by their global network of offices providing support in more than 55 countries.
- Flexible sensor cable routing and positioning.

FFT Aura™ LR – Resilient fiber optic pipeline protection

How FFT Aura™ LR Works

This highly sensitive distributed acoustic sensing system sends a pulse of laser light along a single mode fiber optic sensor cable then monitors the light reflected back for any variations. It is capable of detecting even the smallest vibration, movement, or pressure acting on the earth surrounding the pipeline that the sensor cable is buried in.

Event analysis is used to identify different events within the detected signal, differentiating between potential intrusions and background noise, removing those nuisance events while retaining legitimate intrusion information.

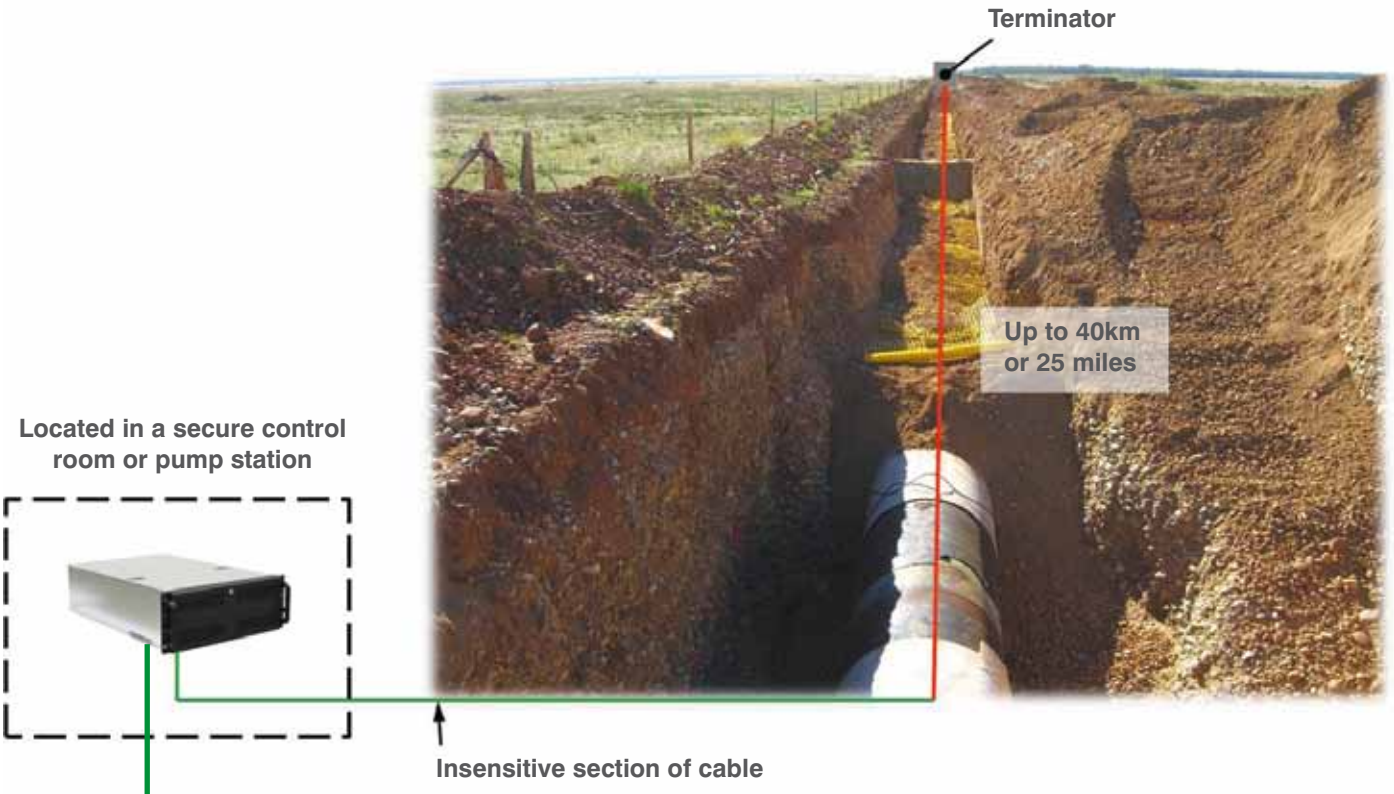
FFT Aura™ LR delivers the precise information your security staff need, combined with the ability to interface with and activate CCTV camera systems, lighting, SCADA, plus a broad range of external devices and systems.

The location of a pipeline intrusion along with the GPS co-ordinates is instantly displayed onto an overlay map and the event logged to a secure database.

This powerful yet intuitive FFT CAMS™ operator interface is also available in a range of languages and supports Android™ mobile devices.

FFT AURA™

Simple installation for buried pipeline protection against TPI



FFT CAMS™ Client & Server

Powerful yet easy to use operator interface also supports the use of Android™ mobile devices.

Features

- Provides valuable real-time warning of TPI activities
- A single system protects up to 40km (25 miles)
- Locates intrusions to within 10m (30ft)
- No electronics or power in the field – intrinsically safe
- Sensor cable cut resilience
- Two year warranty

FFT Aura™ LR Specifications

Fiber Optic Sensor	Approved commercial direct burial single mode fiber optic sensor cable. Only one dark fiber is required (two fibers for optional bi-direction redundancy). FFT Aura™ LR will continue to work up to the point of a sensor cable cut, or when configured bi-directionally, the sensor cable will continue to work to both sides of the cut point, providing full single cut protection.
Sensing Configuration	Distributed sensor with a maximum fiber length of 40km or 25 miles per controller. The controller is installed remotely from the pipeline to be protected.
Location Accuracy	Within ten meters (30 feet) or better anywhere along the sensor cable on FFT approved installations.
Lateral Detection	Depending on the installation quality and soil conditions, the system will provide lateral detection of foot traffic up to five meters (15ft), vehicle traffic up to 15 meters (50ft) and machinery up to 20 meters (65ft) from the sensor cable.
Operating Temperature Range	FFT Sensor Cables: -30°C to +70°C (-22°F to +160°F) Rack mount controller: +5°C to +40°C (+41°F to +104°F)
Controller Dimensions/Weight	177mmH x 482mmW x 559mmD (7.0”H x 19.0”W x 22.0”D) Weight 24Kg (53lbs), 19” rack mounted, 4U high
Electrical Specifications	Input voltage 115-230V AC, 50/60Hz, 260 watts typical consumption, 400 watts maximum. Note: All field installed components are passive and require no power, communications or electronics in the field.
System Interface	TCP/IP via FFT CAMS™ (Central Alarm Monitoring System) software. Can interface with other FFT products, plus third party devices and systems.
Warranty	Comprehensive two year warranty on hardware and software with ongoing warranty extension program available for the life of the product.

Certified System™
Quality
ISO 9001
SAI GLOBAL

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