![Future Fibre Technologies logo]

Subsea and Terrestrial Power Cable Monitoring

Power cables are subject to a range of threats – from copper theft and malicious damage to anchor drag.

To make the fast and well-informed decisions needed to protect cable infrastructure and deliver continued service, operators require a proven solution that detects criminal activity, malicious attacks or accidental damage at the earliest possible stage.

Using laser-based fibre optic sensing technologies along a cable, unauthorised or unplanned tampering, theft and disturbance events can be detected, located and managed along the entire length of the cable quickly and easily.

This advanced detection capability is not justlimited to the cable itself. By configuring the system's sensitivity appropriately, detection can extend anywhere in parallel to the subsea or buried power cable.

fftsecurity.com

Benefits

Pipelines longer than 110 kilometres (70 miles) can be protected by installing multiple controllers along the cable infrastructure, all monitored from a single location.

Delivers precise GPS co-ordinates of the alarm to security staff, combined with the ability to interface with and activate CCTV camera systems and a broad range of external physical information management devices and systems.

Identifies different events within the detected signal, differentiating between potential intrusions and background noise and removing nuisance events.
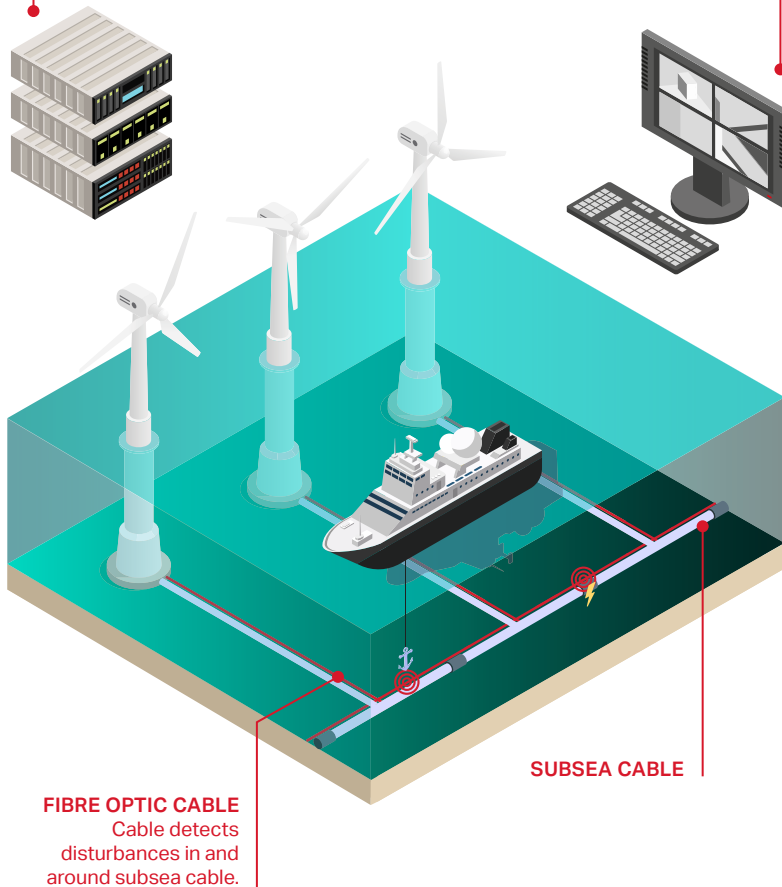
No electronics or power in the field. Intrinsically safe and immune to EMI/RFI and lightning.

Features

PINPOINT ACCURACY
Protects up to 110 kilometres (70 miles) of cable and locates interference in real time to within ± 5 metres (17 feet) of the disturbance – delivering the highest probability of detection with the lowest nuisance alarm rate.

MONITORING AND CONFIGURATION
Using the FFT CAMS monitoring software platform, control alarm signals from individual or multiple controllers on a single site or group of sites can be displayed together in a simple to understand Graphical User Interface.

SEAMLESS INTEGRATION
Integrates with industry leading physical security systems, video management and situational awareness platforms using standard and proprietary interfaces to combine inputs from a wide range of security devices with intrusion detection information.

FULL CUT RESISTANCE
Even when a sensor fibre is cut or damaged, FFT technology continues to detect events occurring between the controller and the cut. When sensor fibres are connected to two channels of the controller (or two controllers) in a redundant loop configuration, events can be detected to within 10 metres (33 feet) either side of the cut.

RACK MOUNTED CONTROLLERS
Emits and receives laser light and applies complex algorithms, including Deep Learning, to detect and identify intrusion type and location.

DISTURBANCE ALARM
Displays real time locations of alarms on maps and/or interfaces to other systems.

SUBSEA CABLE

FIBRE OPTIC CABLE
Cable detects disturbances in and around subsea cable.