



# Transforming Perimeter Security with Fiber Optic Sensing

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## Introduction:

Modern security challenges demand smarter solutions. Traditional surveillance methods, like cameras and motion sensors, rely heavily on human monitoring, making them prone to delays and oversight. As threats grow more sophisticated, organizations need an autonomous, cost-effective system that can detect and report suspicious activity instantly—without requiring constant supervision.

## Solution Overview:

NetworkSense Solutions offers an advanced security approach using Distributed Acoustic Sensing (DAS) technology. Our system turns standard fiber optic cables into highly sensitive monitoring networks, capable of detecting movement, vibrations, and disturbances along perimeters. Whether installed underground or on fences, these cables act as thousands of virtual sensors, providing continuous, real-time protection.

## Key Features:

### UNDETECTABLE, TAMPER-PROOF SECURITY

- Buried fiber optic cables remain invisible, making them impossible for intruders to locate or avoid.
- Resistant to metal detectors, electromagnetic interference, and extreme weather conditions.
- Can be configured to maintain functionality even if cables are cut, ensuring uninterrupted surveillance.

### EXTENSIVE COVERAGE, SEAMLESS INTEGRATION

- A single system can monitor up to 100 km (62 miles) of perimeter, reducing the need for multiple sensors.
- Uses existing fiber optic infrastructure where available, cutting down on installation costs.
- Works alongside current security measures, such as CCTV, thermal cameras, and alarm systems, for a fully integrated defence strategy.

### REAL-TIME ALERTS FOR FASTER RESPONSE

- Instantly detects intrusions with pinpoint accuracy—down to a meter-level location.
- Operates independently or within a larger security network, allowing teams to respond without tipping off intruders.
- Enhances security response times, increasing the likelihood of preventing unauthorized access.

MANAGING DIRECTOR John Burger



## Protecting Critical Information:

Beyond cybersecurity, physical security is essential for safeguarding sensitive sites. Government buildings, data centres, financial institutions, energy facilities, and transportation networks all require advanced perimeter monitoring to prevent unauthorized access and potential threats. Our solutions provide a proactive, always-on security layer to protect these critical environments.

## Solution Deployment:

NetworkSense Solutions works closely with security integrators to customize each deployment to the specific needs of a site. Our Fiber Optic Sensing technology leverages existing telecommunications fiber, ensuring easy deployment and a seamless fit with other security systems.



### LONG DISTANCE PROTECTION LOGICAL DESIGN



## AIRPORT SECURITY FENCE Pinpoint, Long Distance Protection

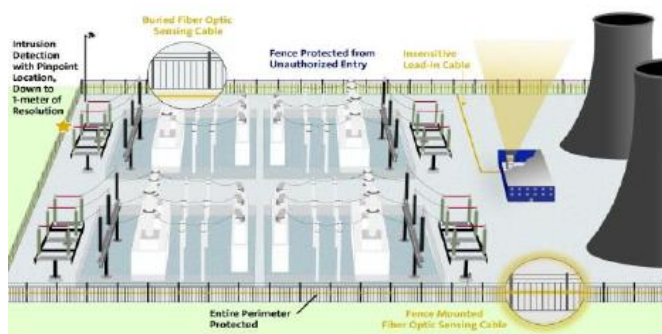
Securing an airport's perimeter is equally important as terminal security and is a vital component of any airport security solution. With that, airports present a unique set of outdoor challenges, that is the need to protect wide, expansive perimeters while dealing with a number of moving objects. Given the complexity – and threat level – knowing the exact location and type of an intrusion becomes critical for mobilizing a quick and effective response.





LONG DISTANCE PROTECTION LOGICAL DESIGN

## FACILITY PERIMETER FENCE Pinpoint, Long Distance Protection



On larger critical facilities, effective visual monitoring of the entire perimeter is almost impossible. Cameras are installed as a detection mechanism, but coverage issues and monitoring requirements frequently relegate them to the role of identifying what happened after the fact. Without detection, responders are often blind to an intrusion until the intended attack is executed. With a complex, larger perimeter, knowing the exact location and type of an intrusion becomes critical for mobilizing a quick and effective response.



### Conclusion:

By combining cutting-edge technology with intelligent automation, NetworkSense Solutions delivers unmatched perimeter protection. Our Fiber Optic Sensing system provides continuous, covert, and reliable monitoring—ensuring organizations stay ahead of evolving threats.

For security that works without compromise, choose NetworkSense Solutions to safeguard your most valuable assets.

