

Article Overview

Leading suppliers of fiber optic acoustic sensing systems include Silixa, Sintela, Sensorlines, and AP Sensing, offering Distributed Acoustic Sensing (DAS) and Distributed Fiber Optic Sensing (DFOS) solutions for industrial, infrastructure, and security applications.

Key Suppliers and Their Offerings

Silixa provides advanced distributed acoustic (iDAS) and temperature sensing (DTS) solutions for sectors such as oil & gas, energy, and industrial monitoring. Their systems enable real-time monitoring of pipelines, infrastructure, and environmental conditions, supporting applications like carbon capture, offshore operations, and tactical asset monitoring . Sintela specializes in ONYX(TM) Distributed Acoustic Sensing (DAS) systems, offering high-performance and low-power solutions for pipelines, railways, borders, highways, and smart cities. Sintela's DAS technology is recognized for its precision, reliability, and global deployment, including over 45,000 km of assets monitored worldwide . Their systems detect strain, temperature, and acoustic changes with high sensitivity, supporting security and operational optimization. Sensorlines delivers DAS and DTS systems that transform standard optical fibers into continuous arrays of acoustic and temperature sensors. Their solutions are used for pipelines, railways, power grids, and critical facilities, providing intrusion detection, leak detection, and seismic monitoring with high spatial resolution . Sensorlines emphasizes integrated sensing platforms that reduce deployment complexity and cost. AP Sensing offers Distributed Fiber Optic Sensing (DFOS) solutions for monitoring underground and submarine power cables, overhead transmission lines, and other critical infrastructure. Their systems combine fiber optic and electrical condition monitoring to detect faults early, optimize asset utilization, and improve network reliability. AP Sensing leverages decades of expertise in photonics and optical measurement to deliver reliable, long-term monitoring solutions .

Applications

These suppliers' systems are widely used in:

- o Energy and utilities: pipelines, offshore wind farms, power grids
- o Transportation: railways, highways, and smart city infrastructure
- o Security and perimeter monitoring: borders, critical facilities, and industrial sites
- o Environmental monitoring: seismic activity, temperature profiling, and leak detection

Summary

For organizations seeking fiber optic acoustic sensing systems, Silixa, Sintela, Sensorlines, and AP Sensing



Fiber Optic Acoustic Sensing System Supplier

represent leading providers with proven global deployments, high-precision DAS and DFOS technologies, and applications across energy, infrastructure, and security sectors. Each supplier offers unique strengths in sensitivity, deployment flexibility, and integrated monitoring capabilities, making them suitable for a wide range of industrial and critical infrastructure projects.

DAS Technology Explained: Learn about Distributed Acoustic Sensing systems and its applications. DAS offers Real-time acoustic

In this paper, a fiber optic based acoustic sensing system (FOTAS) is presented. Utilizing such cables as hundreds of

Fiber optic distributed acoustic sensing serves various applications including seismic sensing, border and perimeter security, pipeline

Detect the Slightest Acoustic Disturbances Around Critical Structures with pico DAS(TM) -- the World's Most Sensitive Distributed

Distributed sensing is a technology that enables continuous, real-time measurements along the entire length of a fibre optic cable.

<p>Acoustic sensing is nowadays a very demanding field which plays an important role in modern society, with applications

Sintela delivers industry-leading fiber optic sensing solutions with unmatched DAS expertise, helping businesses deploy intelligent

Optromix Distributed Acoustic Sensing (DAS) system allows the detection of ground vibrations at the distance of up to 100km along a

Distributed Acoustic Sensing (DAS) offers numerous advantages, including resistance to electromagnetic

Distributed Acoustic Sensing technology uses simple fiber optic cables and can even leverage existing

Distributed Acoustic Sensing solutions. Operation range up to 100km. High precision of event's position detecting (down to 10m).

We apply fiber-optic sensing approaches, and specially Distributed Acoustic Sensing (DAS) for imaging and monitoring the



Fiber Optic Acoustic Sensing System Supplier

The fiber-optic Sagnac interferometer is also one of the most explored configurations for optical acoustic sensing [6, 17]. This

Discover monitoring solutions utilizing distributed fiber optic sensing technology and real-time applications for high-value assets.

HAWK's Fiber Optic Sensing Solutions HAWK's Praetorian Fiber Optic Sensing System is the only system on the market that offers a

Fibre optic distributed acoustic (iDAS) and distributed temperature sensing (DTS) solutions for the oil & gas

Web: <https://www.in-au.co.za>

