APSENSING.

Perimeter Intrusion Detection

The Challenge

Large critical infrastructure like borders, airports, military installations or other high-risk sites require surveillance to protect people and assets with a reliable perimeter intruder detection system (PIDS). The overall objective of all perimeter security solutions is knowing exactly when and where an intrusion occurs. Accuracy and reliability are key, as many systems are susceptible to false alarms caused by animals or weather conditions.

There are various other challenges including the question of how to protect perimeters that are several kilometers in length with a reliable, simple and easy-to-service solution. To prevent sabotage or system deception, the installed solution must have low visibility. In addition, maximum flexibility is important so that system parameters can be optimized to enable reliable threat detection without generating nuisance alarms.

AP Sensing's PIDS solution aids in successfully managing and mitigating these challenges.

The Innovation

AP Sensing's intrusion detection system offers a ground-breaking combination of Distributed Acoustic Sensing (DAS) with unique machine learning algorithms. These algorithms are used to automatically classify, locate and alarm multiple intrusion events while filtering out environmental effects that may cause false alarms.

Our PIDS consists of a passive fiber optic sensor cable (up to 70 km single length) utilizing a standard telecom single mode fiber plus a one or two channel head-end interrogator. The sensor fiber itself does not require any power supply or data infrastructure, is insensitive to all kinds of electromagnetic fields and is also virtually maintenance–free. The sensor cable is small and easy to install on the fence or bury for better hiding.

Perimeter control

Our dual-channel system is single-cut immune, remaining operational after a fiber cut. Therefore, AP Sensing's offering is a very cost-effective, simple, versatile and reliable intrusion detection solution for large assets.

World-Class Systems

Acoustic measurements are collected with our world-class, phase-based DAS system. Our unique 2P Squared technology features stable signal linearity and high sensitivity over long distances.

AP Sensing's unique algorithms precisely detect, locate and classify multiple events in real time. These machine learning algorithms are customized to the project and its needs, creating a system balance between sensitivity and reliability/accuracy. With the sensor cable attached to a fence, events such as climbing, assisted climbing, cutting, and lifting – or in the case of a buried sensor cable – walking, digging and vehicle movement are detected, located and classified with precision.

The powerful, integrational SmartVision management software completes our AP Sensing PIDS solution by sensor fusion (integrating multiple sensors including CCTV), mapping the event location to an asset view, and by supporting the protocols for easy integration into any security system.

Reliable & Efficient

AP Sensing's intrusion detection solution provides a comprehensive, reliable and efficient system for the surveillance of large assets like nuclear, oil & gas, or chemical, electrical and water facilities, transportation hubs, military installations, borders, pipelines and data centers.

The passive, maintenance-free, long-range sensor is immune to all types of electromagnetic fields, environmental influences and intentional sabotage. Together with intelligent algorithms for real-time, simultaneous and multi-event detection, location and classification, these features make AP Sensing's perimeter security solution the system of choice for reliability and efficiency.

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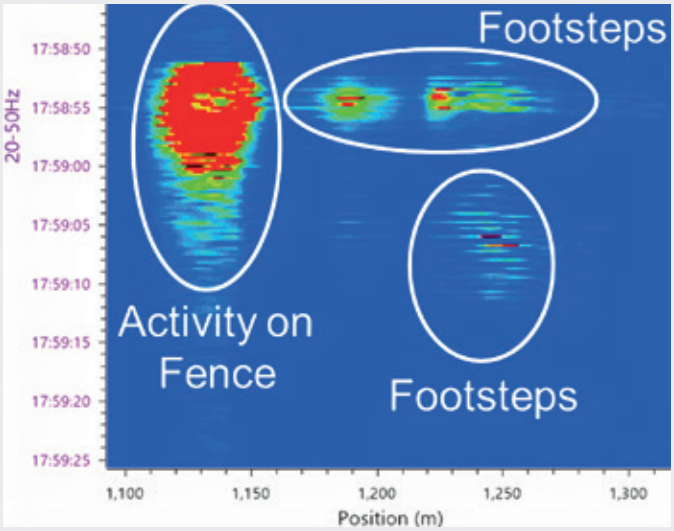
Passion for Plants.
For every unit sold, AP Sensing plants 100 trees.

Why AP Sensing?

- Industry-leading solution comprising DAS and SmartVision that offers excellent performance.
- Most reliable detection results due to unique technologies such as 2P Squared and machine learning algorithms.
- Longest range (beyond 100 km), high linearity and high sensitivity by phase-based DAS.
- Industrial quality supported by a complete set of type tests and certifications in compliance with internationally recognized standards.
- Project management, commissioning, and post-sales service; world-class support for project planning, design and installation.
- Network of regional partners and experts, and proven deployment in all regions in the world.



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