

Marmon Sensing Solutions provides perimeter intrusion detection (PIM) for critical asset infrastructure based on fiber optic Distributed Acoustic/Vibration Sensing (DAS/DVS). A fence mounted sensing cable detects activity such as climbing or tampering or attempted entry, whilst a buried cable detects walking, digging and vehicular motion. Early detection and precise location of intrusion or third party interference (TPI) helps prevent damage or corruption.

Applications

- Refineries and process plants, government and nuclear facilities, military bases, airports, storage and construction sites
- Pipeline pump and valve stations, right of way
- Power plants, substations, power cable routes
- Routes and Roadways
- Country and zone borders
- Secure buildings and complexes.



Marmon's Perimeter Intrusion Detection Systems filter out nuisance alarms while interfacing with existing surveillance and communication technologies for optimal control.



Utilizing a standard fiber optic cable as the sensor, light-transmitted signals continuously captured along the entire length of the cable, are processed and analyzed to determine exactly where and what type of disturbance is taking place. The entire site can be protected with a single, distributed fiber sensing system.



Installation

- Ease of installation and rapid deployment, no power or electronics in the field
- Intrinsically safe, immune to EMI, RFI and lightning
- All data controlled and managed from one location
- No need for installation of power, copper cables and resource attendance along the infrastructure
- Project specific system design
- One interrogator monitors up to 50 miles (80km). Longer distances require additional interrogators
- Cost-effective solutions for small to medium perimeters

Marmon Sensing Solutions helps utilities and operators:

Detect leaks and anomalies in pipeline and LNG plant, please see:

MSS Pipeline and LNG plant Leak Detection Technical Information, or contact us.

Monitor the condition and performance of power cables, please see:

Marmon Sensing Solutions: Power Cable Monitoring Technical Information, or contact us.

- Compliments existing surveillance systems (e.g. thermal cameras, CCTV, UAVs) via integration using standard SCADA protocols
- Range of cabinet, UPS and battery back-up options
- Hardened solutions for sites demanding redundancy and sensor cable cut protection.

Features

- Robust and reliable system with field proven, cost effective technology
- Detects accidental damage by excavation or seismic activity
- Exceptional response and classification capability with high sensitivity, yet minimal false alarms
- Delivers real-time, accurate data which aid decision making and appropriate incident response
- User definable detection criteria and alarm thresholds as well as fiber break alarms
- Flexibility to set discrete zone lengths as required
- Instantly review historical data of all activity
- Minimal maintenance.

Our Mission

To provide customer value as an integrator of specialized cable products and services that optimize capital asset management.



A Marmon/Berkshire Hathaway Company