

CANN-10 Distributed Acoustic Sensing System

Description:

CANOVATE presents completely unique system on the market, comprising a multipurpose surveillance system using standard telecommunication optical fiber as a distributed sensor. The technology is based on analyzing signals in optical fiber, which changes characteristics based on vibration in its area. The system can also be integrated with another security systems. This device is capable of detecting noise and vibration up to 10 km.

The CANN-10 is a security and monitoring system that delivers real-time data and detects, tracks and classifies a wide range of threats. A typical example of the benefits that our system brings is the ability to respond to emerging situations at the time of their occurrence, and thus prevent much larger problems, as subsequent solutions are always considerably more expensive than when dealing with the problem promptly.

Fields of use:



Large perimeter protection:

state borders, airport areas, military bases, drinking water sources, railroads, highways, oil and gas pipelines, power plants, etc.

Detection of failure and sabotage:

gas and oil pipelines, EHV lines, railroads, highways, bridges, tunnels etc.

Monitoring the movement of vehicles along the sensor cable:

determining the position of a train in real time

Unusual situation detection:

events such as an emergency brake being used on a train, accidents on the highway, detection of traffic jams, etc.

**Features:**

- Distance range up to 10 km
- Position accuracy ± 10 m
- Alarm system
- Multi-point simultaneous detection
- Intelligent identification of event type (self education system)
- Integration with another security systems
- Standard optical fiber G.652 as distributed sensitive element
- Up to 4 fibers

Specifications:**Performance**

Input Voltage	220 V \pm 10%, 50 Hz \pm 5%
Rated Power	80 W
Frequency Response	10 Hz to 100 kHz
Measuring Range	40 km
Signal Response Time	< 3 s
Positioning Accuracy	10 m
Operating Temperature	0 °C to + 40 °C
Operating Humidity	10% to 90% at 25 °C non condensing
Fiber Connector	FC/APC
Dimensions (L x W x H)	482.6 mm \times 458.4 mm \times 133.5 mm (19" rack mount)

Sensing Optical Fiber Cable

Optical Cable Type	Single Mode Optical Fiber Cable
Operational Life Span	> 15 years
Optical Cable Loss	< 0.20 dB/km
Temperature	-40 °C to +70 °C