

# LEOPARD SOIL

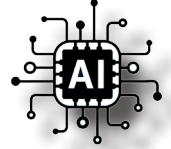
Invisible security, tangible protection for outdoor environments



## What is LEOPARD SOIL?

**LEOPARD SOIL** is a perimeter intrusion detection system designed for outdoor ground protection. It is installed underground to accurately detect footsteps from intruders crossing the perimeter.

The system learns from the behavior of the terrain over time, achieving optimal sensitivity while minimizing false alarms.



**LEOPARD SOIL** is completely discreet and invisible to the eye. It preserves the appearance of the area while adding a highly advanced and aesthetic security layer.

## How does it work?

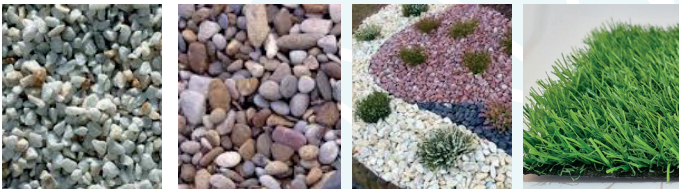
**LEOPARD SOIL** consists of two main components:

- Fiber optic sensor cable, installed underground in a zigzag layout within the area to be protected
- Control unit that analyzes and reports detected intrusions

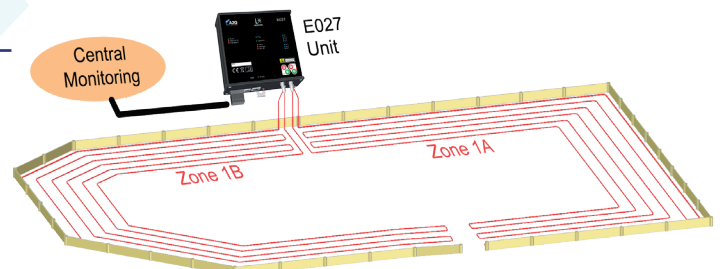
### Detection Process:

Vibrations detected by the sensor are continuously analyzed using FFT\* and then classified by a neural network, which allows the system to distinguish between real threats and harmless events, only triggering alarms when necessary.

## Installation



Ideal for soft or mobile surfaces such as mulch, gravel, decorative stones, synthetic grass, etc..



The sensor cable is installed underground in a zigzag pattern following the desired shape of the protected perimeter.

## Why choose LEOPARD SOIL?

- › Invisible system that does not reveal its presence or location to the intruder.
- › Immune to EMIs, RFIs, and other electromagnetic disturbances.
- › Learns the behavior of the terrain — the longer it operates, the more accurate it becomes.
- › Precise event localization.
- › First line of defense — gains time for reaction.
- › Active system with continuous self-diagnosis
  - › Easy to install.
- › High detection rate with very few false alarms.
- › Seamless integration with other security systems.
- › Flexible power options (PoE, battery, 15–48Vdc).
- › Low maintenance and excellent cost-efficiency.
- › Remote technical support included.
- › Backed by over 15 years of field experience.

## Where to install LEOPARD SOIL

- › Agricultural plantations
- › Livestock enclosures
- › VIP residences
- › Broadcast/telecom towers
- › High-voltage facilities
- › Airports
- › Explosive storage sites
- › Military bases
- › Borders
- › Prisons
- › Solar power plants
- › Other outdoor sensitive sites

**Analyzer Units.**

Up to 1000 m of sensor cable per analyzer (2 zones: 500 + 500 m)

**Models.**

**E027 / E027P** – Dual zone, IP and USB connection, battery or PoE\*.

**E023 / E023P** – Single zone, IP and USB connection, battery or PoE\*.

**Detectable Events.**

- Footsteps (human or vehicle)
- Power supply outage.
- Low battery.
- Sensor cable cut (sabotage).
- Equipment tamper alarm.
- Digital input alarms.
- System faults.

**Detection Zones.**

1- 2 zones.

**Event Localization Accuracy.**

100%.

**Processor Type.**

Next-generation ARM processor with integrated DSP.

**Voltage and Power Consumption.**

15-48Vdc. / <5w.

**POE\***

48-52v IEEE802.3AT.

**Operating Temperature Range.**

-40 °C a +75 °C.

**Laser Type.**

ClasS III-B.

**Auxiliary Inputs.**

2-4 digital inputs (depending on model).

**Outputs.**

2-7 relay contacts, 120VAC / 0.3A (depending on model)

**Configuration and Monitoring Interfaces.**

USB, IP, and RS485 connections.

**Power Cut-Off Control.**

Supports external 12V battery with monitoring and charging supervision(Accessory: BATT01)

**Fiber Optic Sensor Cable****CVO (Standard)**

Multipurpose sensor cable.  
1x sensing fiber.  
PVC outer sheath.  
Internal galvanized steel mesh.  
Multimode 200/230Qm fiber.  
Rodent-repellent.  
Fire-resistant (UNE-EN 50266).  
Low halogen content (UNE-EN 50267).

Low smoke emission (UNE-EN 50268).

**Upgradeable Firmware.**

Yes, even via IP.

**Event Memory Storage.**

Up to 1,000 events stored.

**Auxiliary Units.**

**R220IP** module for remote event monitoring and connection to a Central Alarm Receiving Station (CRA).

**Graphical Monitoring Software.**

Yes, our software is compatible with: MILESTONE, DESICO, VIDSYS, AVIGILON, ODEKIA, GUNNEBO SMI, LEOPARD CONTROL CENTER, and more...

**FFT\***: Fast Fourier Transform – mathematical operation for analyzing the frequency spectrum of an electrical wave.

**PoE\***: Power Over Ethernet – RJ45 connection that provides both data and electrical power via the Ethernet port..

Request a demo or personalized quote today..

