

# MICROFLEX

## ADVANCED CLIMBING DETECTION FOR PALISADE AND METAL RAILINGS

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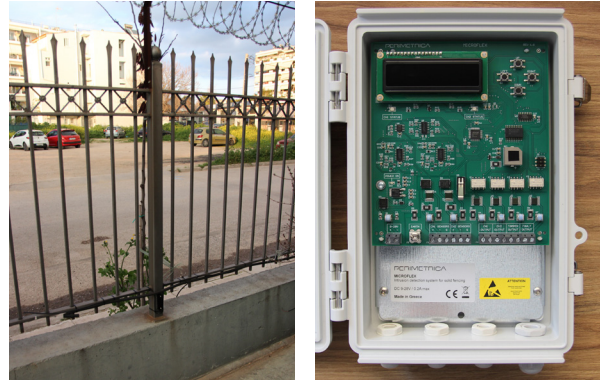
**MICROFLEX** is a state-of-the-art perimeter security system that detects climbing on rigid metal fences with exceptional reliability. It differs from other technologies in that it monitors the metal structure itself and not an “associated” physical quantity. MICROFLEX uses high accuracy sensors, placed at the lower part of the railing, which continuously supervise the microstructure of the material. The force of an intruder climbing the railing causes minuscule flexing within the material, which is invisible to the human eye but easily perceived by the system. Thus, the climbing attempt is acknowledged as soon as it starts to happen, even in the complete absence of noise or vibration.

MICROFLEX is designed to eliminate false alarms. It is unaffected by wind, rain, snow, hail, fog, sunlight and temperature variations. Bushes surrounding the railing, or tree branches in contact with it, do not affect system operation or trigger false alarms. The same applies to the presence of nearby traffic, machinery, animals or birds.

MICROFLEX will work flawlessly on most types of rigid fencing. The on-board alphanumeric display provides a multitude of configurable parameters, as well as real-time visualisation of the sensor response. This enables the system to be configured without the hassle of connecting to a laptop. Furthermore, it allows an initial suitability test to be performed in moments by simply attaching a sensor using F-clamps, rather than drilling holes, and powering the processor with a small battery.

## Main characteristics

- ▶ **Early and reliable climb detection** even in the complete absence of noise or vibration
- ▶ **Active 24 hours** – No need to disarm regularly
- ▶ **No false alarms**
- ▶ **Unaffected** by weather phenomena, tree branches, bushes even if they completely surround the railing
- ▶ **Detection of cutting or tampering** with the sensor cable
- ▶ **Detection of sensor removal** from the railing
- ▶ **On-board alphanumeric display** and navigation keys for quick and easy configuration without connecting to laptop
- ▶ **Live graphical representation of sensor response** while adjusting parameters in real time
- ▶ **Algorithm selection** (Event counter or Integrator) independently for each channel with a multitude of adjustments
- ▶ **On-board buzzer** with enable/disable option
- ▶ **Easy initial suitability test** – Affix sensor using F-clamps (no drilling) and power processor with 9V battery
- ▶ **Sensors preassembled** every 2.6m on special outdoor cable or custom-made with different spacing
- ▶ **Product of EU** – Developed and assembled at Perimetrica's laboratories in Athens, Greece



## Technical specifications

### PROCESSOR

**Coverage:** Two detection zones, 20+20 sensors (total nominal coverage 80-100m but this depends on fence construction)

**Outputs:** Four relays with independent NO/NC mode selection (Zone 1, Zone 2, Tamper, Fault)

**Power supply:** 9-28 V DC/200 mA max, with reverse polarity protection

**Surge protection:** Very high efficiency 3-stage network on every input & output (power input, sensor inputs, relay contact outputs)

**User interface:** 16x2 character OLED display, navigation keys, bicolour "STATUS" LEDs

**Ingress protection:** IP68

**Operating temperature:** -40 to +85 °C

**Dimensions:** 260 x 18 x 56 mm

### SENSORS

**Sensor spacing:** 2.6m or custom spacing

**Ingress protection:** Total submersion in water

**Operating temperature:** -40 to +80 °C

**Dimensions:** 90 x 25 x 21 mm

## Applications

- Villas – VIP residencies
- Office buildings – Government buildings – Embassies
- Hotel facilities – Resorts
- Schools – Universities
- Remote facilities of any kind

