

FIBRELOOP

ANTITHEFT PROTECTION USING OPTICAL FIBRE



FIBRELOOP is a family of optoelectronic sensors that use a fibre optic line to protect any kind of goods from theft. The system offers unsurpassed reliability by delivering **zero false alarms** while being impossible to defeat by any means.

FIBRELOOP is used like a traditional security chain and its principle of operation is very simple: A fibre optic cable is run through an opening on each item to be protected and its ends are connected to an optoelectronic device. This way, all items are secured within a closed loop and no item can be removed without being detected. Cutting the optical fibre, disconnecting the optical fibre from the device, tampering with the device or removing the power supply will immediately signal the alarm panel.

Perimetrica's special optical fibre line is durable and very easy to handle. No expensive tools or special knowledge are required for its termination, connection and repair. The electronic devices are available in single- and dual-channel versions, i.e. able to accommodate one or two independent fibre optic loops.

FIBRELOOP is flexible. It can be deployed quickly and with great ease. It has a very low cost and requires no adjustments, maintenance or periodic inspection. Its applications are countless and range from outdoor restaurant furniture and beach beds to construction site machinery and materials, earth moving machines, scaffolding, solar panels, etc.

Key points

- ▶ **Most dependable protection** against theft of goods
- ▶ **ZERO false alarms** – by any cause!
- ▶ **Uninterruptible operation**, unaffected by environmental conditions such as rain, wind, hail, fog, snow, storm, etc.
- ▶ **Fibre optic technology**, immune to EMI/RFI, nearby lightning or thunder, strong electromagnetic fields
- ▶ **Built-in diagnostic functionality** that measures the optical signal and helps prevent future problems
- ▶ **Quick installation without connectors or sanding** – the optical fibre is cut and inserted directly to the device
- ▶ **No need for adjustments, calibration, periodic checks** or any other procedures
- ▶ **Special fittings** available for easy deployment on solar panel rows without voiding their warranty
- ▶ **Designed and made in Greece**

Technical characteristics

Fibre optic channels (loops): 1 or 2
Optical fibre length: Up to 300m per loop with redundancy for at least two splicings
Outputs: 1 or 2 alarm outputs (dry contacts, NO/NC selectable, contact rating 30V/0.5A)
Power supply: 9-24 V DC (50 mA max) with reverse polarity protection
Calibration: Fully automatic
Surge protection: 3-stage protection networks on power input and all dry contact outputs
Tamper protection: Tamper switch activates all available outputs on slightest displacement of lid
Built-in diagnostic function: Measures optical signal power and optical leakage on each loop
Indications: Bicolour “Status” LED on each channel, visible with the device lid in place or removed
Ingress protection: IP65
Operational temperature: -40 to +85 °C
Physical dimensions: 149 x 120 x 60 mm

The FIBRELOOP sensor family:

FBL-TRX-201 1-channel optical transceiver
 FBL-TRX-202 2-channel optical transceiver

