



StepGARD®

Invisible and non-detectable perimeter surveillance

Fibre optical sensor system for access control, premises supervision, assets protection

StepGARD® is a side pressure sensitive fibre optic cable that modulates its light transmission properties according to the side pressure applied.

An optoelectronic converter and evaluation module perceives the fibre optical signal and generates a free programmable, electrical alert signal. Selecting the suitable parameters, changes in side pressure from a few grams up to several tons can be detected and stored. Depending from the actual requirement various multimode fibre optic cables, made from glass or plastic as core material, are deployed. So both, the protection of persons (especially in case of underground installation of the line sensor) and exhibits (museum, galleries, exhibitions etc.) are possible.

Due to the deployment of totally metal-free components, the StepGARD® fibre optical sensor system cannot be tracked down by any kind of metal detector or magnetic field probe.

- Applicable StepGARD® Sensors
- plastic optical fibres with 1 mm core diameter and 6 mm outer diameter
- glass optical fibres with 50µm core diameter and 6 mm outer diameter
- operational temperature range of the glass optic fibre: -40 °C up to +85 °C
- connector systems for modular design of the over all system with protection class up to IP67

Various kinds of embodiments (pavement modules, artificial turf modules) are available on request.



Technical Data

supply voltage min ... max	DC 24V
ripple	< 10 %
power consumption	< 50 mA
switching output	PNP, NPN, Q
analogue output	yes
analogue output min ... max	4 ... 20 mA
switching mode	light/dark, selectable
max. output current I _a max	<100 mA
time delay	programmable 0 ms ... 9,999 ms
time type	programmable OFF/TOFF/TON/ONESHOT
connection type	cable (2m)
cable material	PVC
no. of scores	4
VDE protection class	III
protection grade	IP66
ambient operation temperature, min...max	-25°C ... +55°C
housing material	ABS, PC