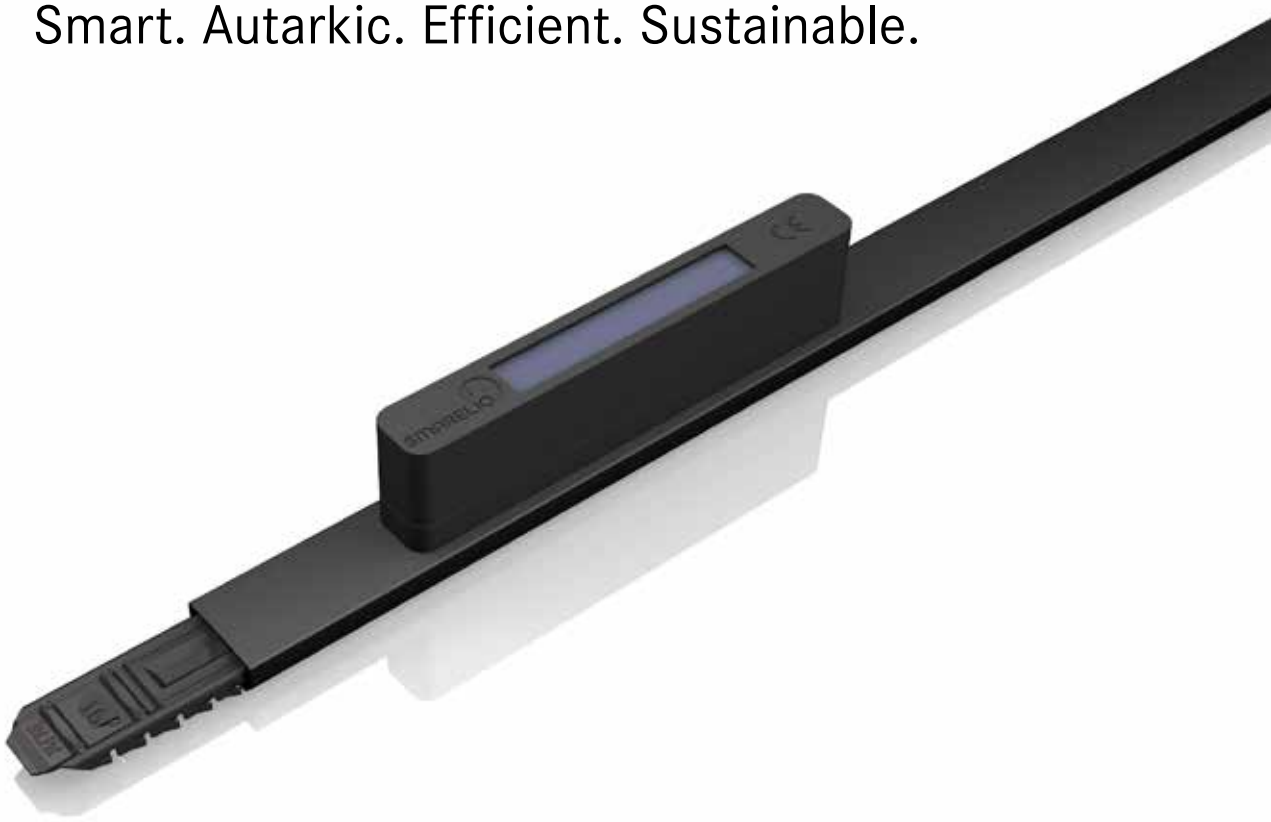
SMARELiO®
Protect

Smart. Autarkic. Efficient. Sustainable.



EXCLUSIVELY BY
EDUARD KRONENBERG GmbH

MADE IN GERMANY.

SMARELiO® Protect

SMARELIO, a start-up company of Glaszentrum Magdeburg and EDUARD KRONENBERG GmbH (EK,) is launching a completely new, smart monitoring technology for insulating glass. The self-sufficient, wireless alarm module for insulating glass panes detects glass breakage, vibrations as well as tilt at the window and immediately activates an alarm.

The special feature of the sensor 'SMARELIO Protect' compared with other products is its complete integration in the insulating glass unit. It is inserted as part of the spacer frame during the production of the insulating glass. Furthermore, the sensor is equipped with a radio module, which allows wireless information transmission to an alarm control center (smart home). Glass breakage and other vibrations caused by attempted break-ins are detected at an early stage by a sensor system on the module. The position of the window is also queried by the alarm module and can be supplemented by a window handle sensor system

The energy supply is realized via a combination of solar cells and electrical buffer storage, so that a completely wireless and self-sufficient operation of the alarm module is made possible for a period of use of up to 15 years. Due to its special energy management, the sensor can operate completely autarkic without light for up to 3 weeks at a time with active monitoring and communication with the alarm control panel. It has also been designed so that even dim light maintains operation. Even artificial light charges the alarm module.

The condition of the glass is monitored cyclically with regard to breakage and lever-out attempts. The alarm module communicates securely with almost any central control system via the ENOCEAN radio standard. Given a suitable interface, the sensor can be integrated into most alarm systems. If there is no smart home or alarm system in the property, the Smarelio app can be used as a management tool for the installed modules.

Installing the sensor into the insulating glass is done using commercially available hollow spacer profiles with connecting elements and is exclusively available for products manufactured by EDUARD KRONENBERG GmbH from a pane gap of 12 mm onwards.

The SMARELIO monitoring technology is future-proof and can be easily extended to include further applications and functions.

Technical data

- Wireless version
- Transmission frequency: 868.3 MHz in Europe
- Range: up to 30m indoor / 100m outdoor / possible extension with a repeater
- Security: rolling code with AES128
- Transmission cycle: approx. 100 seconds cyclic / immediately in case of strike and lever detection
- Operating time (without light): 3 weeks
- Time to operation after discharge: approx. 100 seconds at 600 lux
- Lifetime: up to 15 years
- Supply voltage: < 4V
- Power consumption: approx. 30µW, 75mW peak in transmit mode
- Temperature range: -20°C to 85°C / -4°F to 185°F
- Module size: 82x20x11mm (+/- 0.3mm)
- Fogging free materials / components
- Suitable for spacer widths from 12mm

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