

ACTIVE INFRARED BARRIERS

VIRTUAL CROSS LINE INTRUSION DETECTION

Active infrared barriers consist of transmitter cells that emit invisible active infrared light beams and receptor cells that collect and analyse the beams received.

This way, active infrared barriers form a virtual wall. When one or more beams are interrupted, the system communicates alarm information. The columns are positioned facing one another and are installed around the perimeter of the site to be protected.

WHY THIS TECHNOLOGY?

- **Minimal floor space required**
(for the product itself and the virtual detection wall)
- **Limited maintenance**
- **Proven solution:** reliable and effective

OPERATING PRINCIPLE **SORHEA**

With more than 35 years' experience, we have been able to perfect our own technology: **multiplexing**. This makes our infrared columns the most reliable on the market.

Multiplexing allows for independent cell management. It consists of managing the cells individually with a scan of 1000 beams per second.

WHY SORHEA'S TECHNOLOGY?

- **More than 35 years' experience** in active infrared perimeter detection
- **Highly reliable active infrared technology by SORHEA thanks to our Multiplexing**
 - simultaneous multi-mode detection
 - time-delay alarm
- **Optimised installation and maintenance time and easy operation:** alignment tool

WHY OUR SOLUTION?

- ✓ **SORHEA INFRARED IS HIGHLY RELIABLE:** with more than 35 years of experience
- 🎯 **HIGH POWER OF DETECTION** with the reinforced virtual wall
- 🔊 **VERY LOW UNWANTED ALARM RATE:** with multi-mode simultaneous detection
- ⚙️ **EASY AND TIME SAVING** configuration and maintenance

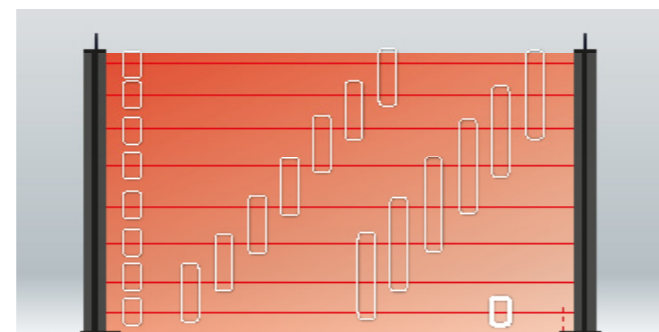
Our cells can manage the maximum number of cells per column. Our multiplexing creates a very high-density infrared wall that cannot be breached. Only our multiplexing technology can manage up to 18 cells per direction and offers several detection modes:

- **Alarm on interruption of an infrared cell** (mono-detection)
- **Alarm on interruption of two adjacent infrared cells** (dual-direction)
- **Alarm on interruption of three adjacent infrared cells** (tri-direction)

The simultaneous combination of detection modes (multi-mode detection) allows for **intruder size filtering**. Each detection mode has its own configurable response time from 40 to 800 ms.

In addition, **the time delay alarm** of the detection modes allows for **intruder speed of movement filtering**. A specific delay can be applied to the bottom beam to detect crawling as well as filtering the passage of birds and small animals.

The combination of these 2 filters (intruder size and speed) give our infrared barriers **unrivalled reliability**.



The various configurable detection modes on our barriers create reliable detection. These various detection modes can function simultaneously for unwanted alarm filtering (birds and small animals, plants, etc.).



SORHEA infrared has 4 selectable channels, i.e.: having one channel per barrier makes it possible to install multiple barriers in a straight line without them interfering with each other.

EASY AND RELIABLE IMPLEMENTATION:

Each column includes alignment tools: a visual indicator (LED) combined with an audio indicator (buzzer). The alignment tool means barriers can be set up by a single person.

EQUIPMENT STRENGTHS:

- **4 housings** available
- **pre-cabled columns**, all tested prior to shipment
- **thermostat heating** in columns

APPLICATION EXAMPLES




TRAIN DISTINCTION APPLICATION



SOLARIS – AUTONOMOUS COLUMN



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