SORHEA

by HIRSCH

MANUFACTURER OF PERIMETER
INTRUSION DETECTION SYSTEMS
FOR SENSITIVE SITES

EUROPEAN LEADER IN PERIMETER DETECTION

Since 1987, SORHEA has been designing, manufacturing and marketing electronic perimeter intrusion detection systems for the protection of sensitive sites.

Our SORHEA teams work towards a single goal: to find the best solution to the security problems of the sites to be protected. Our strengths:

- **OUR TEAMS ARE COMPETENT, COMMITTED AND REACTIVE**
- **RELIABLE PRODUCTS OFFERING THE HIGHEST LEVEL OF PERIMETER SECURITY ON THE MARKET**
- **THE WIDEST RANGE ON THE MARKET**
- **SOLUTIONS THAT ADAPT TO ALL PERIMETER SECURITY REQUIREMENTS**

GOOD TO KNOW

Our perimeter intrusion detection provides:

- **Early intrusion detection**
- **Early alarm verification** upon receipt of alarm information
- **Early intervention** triggered thanks to centralised alarm information

THE EXTRA SERVICES

SORHEA, our teams at your service:

- customised support at each stage of your security project:

  SITE **SURVEY**   TECHNICAL **TRAINING**
  ON SITE **DEMONSTRATION**   **COMMISSIONING** ASSISTANCE

- employees committed to your service: pre-sales and administration, after sales service with dedicated hotline
- tools to make your job easier: website, digital product catalogue, interactive diagrams, etc

CERTIFICATION
SORHEA CERTIFIED
ISO 9001 AND ISO 45001

Customised support at each stage of your project

HOTLINE

Our technical assistance team can help you diagnose problems and guide you through the right procedures.
You can contact our experts from Monday to Thursday from 8:30am to 5pm and until 4:30pm on Fridays.
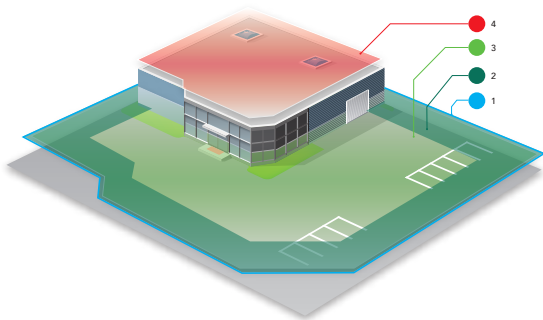
WHAT DO WE DO?
INTRUSION DETECTION

The earlier the detection, the lower the risk of intrusion, potential malicious act or theft at a site.

Each client and each site has its own detection requirements:

REQUIREMENT NO.1 → detect intrusion at the perimeter boundary

REQUIREMENT NO.2 → detect movement around a site

REQUIREMENT NO.3 → detect approach towards a building

REQUIREMENT NO.4 → detect intrusion to a building

SORHEA HOTLINE

by telephone: **+33 (0)4 87 24 20 20**

by email: **sav@sorhea.fr**

SORHEA, COMPANY OF THE Vitaprotech **GROUP**

Vitaprotech is a French Group with an international presence, specializing in the design and manufacture of security solutions:

| Intrusion & Perimeter | Access Control | Vidéo & Unified Platform |

- **153 M€** turnover
- **+700** employees throughout the world (55% EMEA ; 45% Americas)
- **10 %** reinvested in R&D

⊕ **ITS MISSION: TO ENSURE SECURE ACCESS TO SENSITIVE SITES WORLDWIDE**

Vitaprotech is adopting a new go-to-market strategy structured around four strong brands, each dedicated to a specific sales channel: integrators, distributors, OEMs, and end users.

This customer-centric organization enables a comprehensive and integrated technological offering, accessible through a unified platform, to meet all needs in **access control, perimeter intrusion detection, hypervision, and video analytics.**

➤ *Integrators*

FOR EACH OF YOUR SITES,
A CUSTOMISED DETECTION SOLUTION

ENERGY

Nuclear, thermal, hydroelectric and solar power plants

INDUSTRY

Production sites, agri-food, petrochemical, pharmaceutical, SEVESO sites

PRISON

High security sites, detention and short term detention centres

LOGISTIC & TRANSPORT

Logistic platforms, car dealerships and car fleets, seaports, airports, railway networks and depots

UTILITIES

Water treatment, power production, telecommunications, waste recycling

VILLAS & MONUMENTS

Private villas, museums, historical monuments

SERVICES SECTORS

Datacenters, administrative buildings, headquarters

MILITARY

Military sites, borders

OUR VALUES

EXCELLENCE

STRICT AND DEMANDING WORK PROCESSES

Every day, our employees strive for the highest standards in performing their tasks. We seek perfection and do not hesitate to challenge ourselves. Excellence drives us in every stage of your security projects: from the design of the solution to the after-sales support of our products on site.

INNOVATION

10% OF ANNUAL TURNOVER REINVESTED IN R&D

Our engineering team designs innovative products such as solar powered systems, IP solutions and critical features like embedded cyber security. For our R&D engineers, it's all about developing tomorrow's technology and ensuring the highest level of technology for our current products in order to anticipate component obsolescence, the arrival of new regulations and the use of alternative resources.

ENGAGEMENT

COMMITTED EMPLOYEES

At SORHEA, we share a strong corporate culture where every employee is driven by professionalism, mutual help, respect and goodwill. These shared values, that are part of our daily activities, aim to guarantee customer satisfaction.

WELL KNOWN EXPERTISE

QUALIFIED TECHNICIANS
Monitoring and maintenance by our aftersales service

SPECIALISED ENGINEERS
Development by our French R&D team

MADE IN FRANCE
Products assembled and quality tested in France

OUR CSR POLICY

Every day, SORHEA undertakes to have a positive impact on the environment and on the health and well-being of its employees.

SHORT SUPPLY CHAINS
for our equipment

TRANSPARENCY
required from all our suppliers

LOW ENERGY CONSUMPTION
of our solutions

DURABILITY
and robustness of our products

RECYCLING
of our electronic waste

PROMOTING
the integration of disabled employee

OUR QUALITY COMMITMENTS

Commitments that make the difference:

- **Quality guarantee:** 38 years' of expertise at the service of our clients
- **Recognised quality:** SORHEA has been ISO 9001 certified since 1999 and ISO 45001 certified since 2016
- **Registered patents:** G-FENCE, ACTI-FENCE®, SILUR technology
- **Customised service offer:** to support you at every stage of your project
- **Experts available:** to get your site up and running
- **An international network of integrators and installers** trained in our products
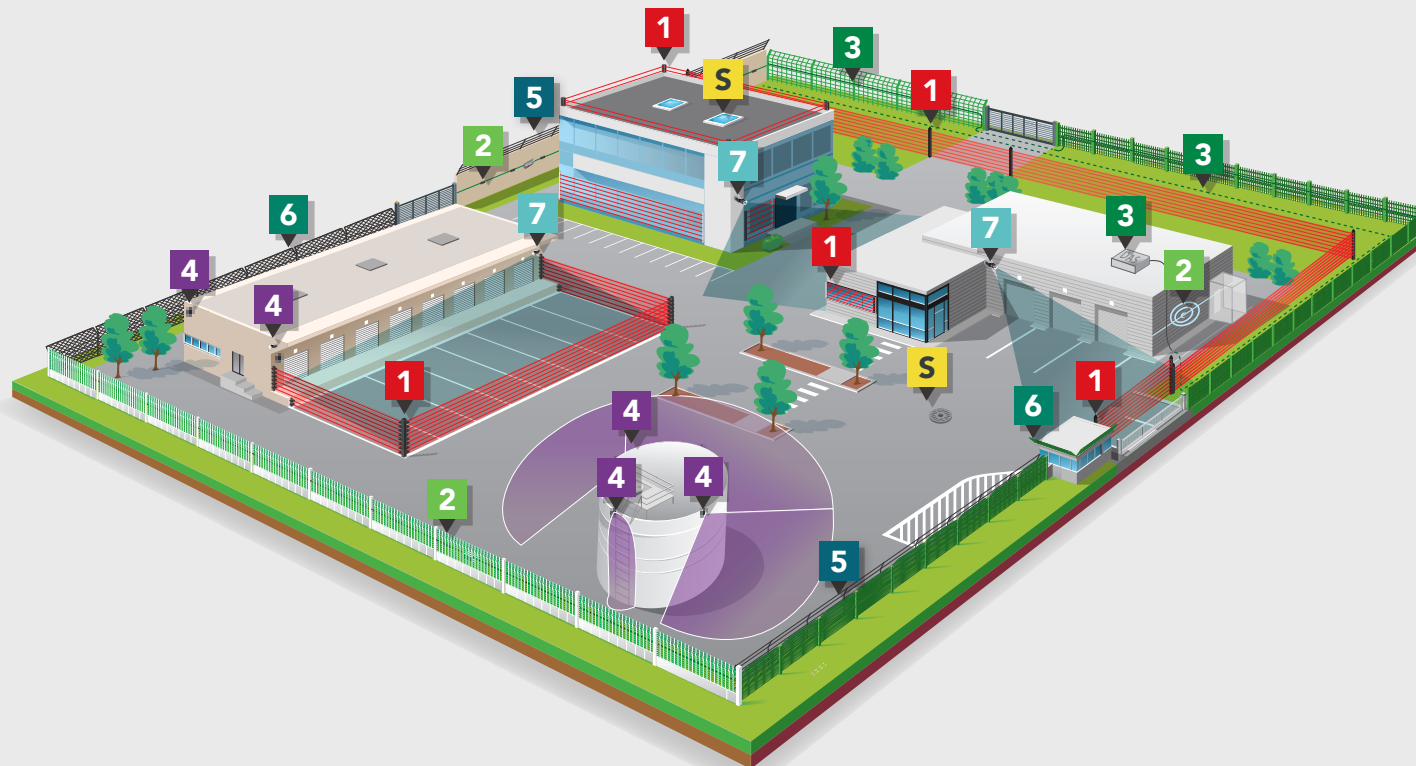
INNOVATIVE PRODUCTS FOR
THE PERIMETER SECURITY OF YOUR SITES

To respond to all the specific features and constraints of your site, we offer **7 technologies.** Each has its own operating method, technical characteristics and installation recommendations. Together we design your security solution as part of a well-managed project.

The technologies developed cover **all perimeter security applications: intrusion detection, approach detection, protection and even repulsion.**

To optimise alarm processing, the MAXIBUS concentrator centralises alarm information from various Sorhea and third-party products in a single point.

1 ACTIVE INFRARED BARRIERS
- MAXIRIS
- SOLARIS NG
- APIRIS

2 SHOCK DETECTION CABLES
- G-FENCE 2400
- G-FENCE 3000

3 FIBER OPTIC
- LUMOR

4 DUAL TECHNOLOGY DETECTORS

5 ELECTRIC FENCES

6 FENCE PANEL AND OUTRIGGER DETECTORS

7 VIDEO ANALYSIS

S AND SPECIFIC PRODUCTS

TO DETECT

COMPLETE OFFER

DETECTION
⊕ ### INTEGRATION
⊕ ### SUPERVISION
⊕ ### SUPPORT & 10-YEAR WARRANTY

MAXIBUS

ALL TECHNOLOGIES IN ONE

⊕ **REINFORCED CYBERSECURITY**

OPERATION
TO VMS

WITH **SMART BRIDGE**

OPERATION
TO ALARM CENTERS

**HYPERVISION /
PSIM**

NEW

SPECTRA

TO TRANSMIT

TO OPERATE

THE LEADER IN PERIMETER PROTECTION **AT YOUR SERVICE**

ANNUAL SERVICE CONTRACT

SORHEA
10 YEAR GUARANTEE
ANNUAL SERVICE CONTRACT

The Annual Service Contract is a warranty service, the guarantee of a reliable and long-lasting security. SORHEA is committed to your peace of mind, and this Annual Service Contract offers you a 10-year warranty on products and parts.

Opting for **the Manufacturer's Service Contract** ensures the longevity of the installation thanks to our **exceptional 10-year warranty, spare parts included.** It's the promise of unparalleled peace of mind.

The Manufacturer's Service Contract includes an annual on-site **audit and technical support by our team** and always **in support of our integrator partner.** For each intervention, a detailed technical report is sent. This close-knit collaboration **ensures continuity of service and optimal performance of the security system.**

THE ADVANTAGES OF THE ANNUAL SERVICE CONTRACT:

- **Replacement of spare parts** during annual visit and throughout the year

- **Extended warranty on all electronic parts**

- **Audit and on-site commissioning assistance** included

SORHEA BY HIRSCH - MANUFACTURER OF PERIMETER INTRUSION DETECTION SYSTEMS FOR SENSITIVE SITES

SIMPLIFIED INTEGRATION,
OUR PRIORITY!

Are you looking for a solution that can **centralise alarm information from various products to a single point**? Our **MAXIBUS** can do this as well as making it possible to configure and maintain sensors remotely.

MAXIBUS

ALARM INFORMATION HUB

❄ **CENTRALISATION** of all alarm information to a single point, via networking: SORHEA products and third-party products

⚙ **MANAGEMENT AND REMOTE MAINTENANCE** of sensors

🔒 **SECURE TRANSMISSION OF ALARMS : CYBERSECURIY**

👍 **INTEGRATION WITH VMS, OPTIMISED CUSTOMER OPERATION**
PSIMs

SMART BRIDGE

VMS CONNECTION SOFTWARE

◾ **SIMPLE AND QUICK TO SET UP**

◾ **COMPATIBLE WITH:**
  - MILESTONE XPROTECT VMS
  - GENETEC SECURITY CENTER
  - GENETEC RSA
  - QOGNIFY CAYUGA
  - AVIGILON
  - EXACQ VISION
  - FLIR LATITUDE

CYBERSECURITY EMBEDDED IN ALL

✔
**Communication
with 802.1X networks**
for a communication
on secured networks

✔
HTTPS

Encryption of data

SPECTRA

SUPERVISION SOFTWARE OF SORHEA'S PRODUCTS

ADVANCED SUPERVISOR
Intuitive interface, Installation dashboard

OPTIMISED INTEGRATION PLATFORM
Through driver adaptation

ROBUST CYBERSECURED SOLUTION
Cybersecurity tested byan independent laboratory: CESTI, ANSSI approved

CUSTOMISZABLE SOLUTION
Interface customisation and features available upon request

SOLARIS NG | MAXIRIS | G-FENCE 3000 | PIRAMID

RS 485

MAXIBUS **LUMOR** **G-FENCE 2400** **CAMERAS**

IP NETWORK

OUR SYSTEMS

Certificates
Customised security management

SPECTRA

PSIM

VMS SOFTWARE

Genetec Security Center.

milestone | XProtect

Qognify

avigilon

SORHEA BY HIRSCH - MANUFACTURER OF PERIMETER INTRUSION DETECTION SYSTEMS FOR SENSITIVE SITES

ACTIVE INFRARED BARRIERS

SORHEA'S INFRARED

- **More than 38 years experience** in active infrared perimeter detection

- **Highly reliable active infrared technology** by SORHEA thanks to our multiplexing technology

- Optimised **installation and maintenance** and easy operation: alignment tool

The different detection modes that can be configured on our barriers ensure a high level of detection reliability. These different detection modes (time-controlled dual-detection, mono-detection, time-controlled lower beam mono-detection) can function simultaneously, making it possible to filter out unwanted alarms (birds, animals, etc.).

HOUSINGS DESIGNED FOR OUR ELECTRONICS

CLASSIC

3000 HOUSING

- Small footprint
- Easily adaptable
- Easier wall or overhang attachment
- Height: up to 5 m

3100 HOUSING

- Control of cell height in double direction
- Built-in anti-climbing cap
- Height : up to 3 m

CUSTOM

3200 HOUSING

- Application for steep slopes
- Control of cell height in double direction
- Height: up to 5 m

3400 HOUSING

- Marine applications: resists humid and salty environments
- Withstands sea spray and waves

THE ESSENTIALS

COLIRIS

From 1 m - 3 cells to 2 m - 4 cells

TIME AND MONEY SAVINGS
- Easy cabling

SIMPLE COLUMN INSTALLATION
- Identical columns

MAXIRIS

| 2 m 6 cells | 3 m 10 cells* |

HIGH DETECTION CAPABILITY
- High-performance columns with high cell density

REMOTE MAINTENANCE
- Connection of the system to network
- Diagnostics: a live history log of settings and beam visualisation
- Remote visualisation

RELIABLE DETECTION
- Multiple simultaneous detection modes
- Zoning functionality in association with video alarm verification

*Up to 18 cells for 5 m high columns (on demand)

SOLARIS NG

↕ from 2 m - 5 cells to 3 m - 10 cells

✔ **HIGH PERFORMANCE AUTONOMOUS BARRIER**
- High cell density columns
- Long-range IR for a standalone barrier: 100 m

€ LOWER COSTS
- No civil engineering: solar powered with a DRN dynamic mesh radio network

ADVANCED FEATURES
- Train filtering functionnality
- Polyacetal housing for a 100% plastic column (optional)

APIRIS

FOR CORRIDOR DETECTION APPLICATIONS

➤ **COMBINES VOLUMETRIC DETECTION WITH AN INFRARED BARRIER**
- A microwave barrier combined with MAXIRIS technology

✔ **VERY HIGH PERFORMANCE SOLUTION**
- Simultaneous multimode detection & Zoning function
- High performance and high cell density columns
- MAXIBUS networking

BIRIS

FOR SINGLE ZONES

€ COST-EFFECTIVE SOLUTION

⊕ IDEAL FOR THE PROTECTION OF SPECIFIC LOCATIONS
- Gates
- Top of walls
- Roofs

MINIRIS

FOR FAÇADE APPLICATIONS

DESIGNED FOR DISCREET INSTALLATION ON BUILDING FAÇADES
- Customized painting on request
- Adjustable hinges

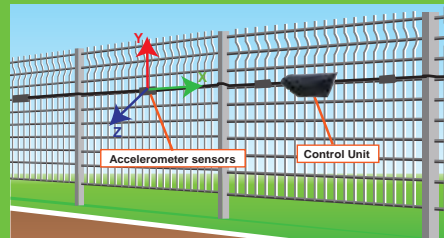**SORHEA BY HIRSCH -** MANUFACTURER OF PERIMETER INTRUSION DETECTION SYSTEMS FOR SENSITIVE SITES

SHOCK DETECTION CABLES

SORHEA'S ACCELEROMETER

Unlike other shock detection cables, our cable offers **sensors with inbuilt accelerometers** in a standard cable, making the system easy to install. It is weatherproof (unaffected by strong winds, heavy snow, heavy rain) and can be **installed on any type of fencing,** even on different fencing at the same site.

Accelerometer-based shock detection cable technology can detect movement in fencing or panelling in all three vectors (x, y, z). The acceleration of the three vectors combined, measures the desired signal intensity that will be used to trigger the alarm.

SYSTEM SUITABLE FOR SPECIFIC MOUNTING

In addition to being perfectly designed for installation on any type of fence, our G-FENCE cable can be installed on walls or cladding.

Our shock detection cable solutions can therefore be installed inside a building to be protected.

THE ESSENTIALS

G-FENCE 600	G-FENCE 600Z

SIMPLE AND ADAPTABLE SOLUTION

€ ECONOMIC SHOCK DETECTION CABLE SOLUTION
- Quick and easy to install
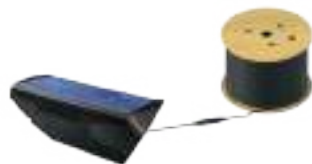
👍 ADAPTABLE TO THE SITE ENVIRONMENT
- Set-up and fine-tuning via an embedded web server: simplified set-up of sensitivity and number of impacts

🎯 PINPOINTS THE LOCATION OF THE INTRUSION: G-FENCE 600Z
- Integrated Zoning function that can create up to 10 detection zones per control unit (for 600m)
- Timestamping of the last 1,000 events

G-FENCE 2400

MULTIMODE ALARM TRANSMISSION

SIMPLIFIED ALARM TRANSMISSION
- Direct integrability with VMS
- Simultaneous multimode alarm transmission: dry contact outputs, IP network Modbus/API outputs, BUS output to MAXIBUS

SUITABLE FOR ALL YOUR SITES

REMOTE CONFIGURATION, MAINTENANCE AND UPGRADES
- Reduction in onsite interventions thanks to the "all-remote" approach

UNPARALLELED EASE OF INSTALLATION
- Up to 600 m per CU and timestamping of the last 50,000 events

G-FENCE 3000

AUTONOMOUS SOLUTION FOR LARGE PERIMETERS

PROVIDES LONG-DISTANCE PERIMETER PROTECTION
- Up to 3200 m per system and up to 4 x 3200 m of detection cable per MAXIBUS
- Fully redundant alarm information

LIMITED CIVIL WORKS COSTS
- Powered by solar panels

INTEGRATION INTO VMS SOLUTIONS
- Compatible with VMS systems via our MAXIBUS hub

SET-UP AND DIAGNOSTIC INFORMATION
- Integral cartography
- Zoning: up to 128 zones per 3200 m

REINFORCED CABLE

FOR BARBED WIRE APPLICATIONS

EXTRA CABLE PROTECTION
- For installation on barbed wire where a standard cable could be damaged

EFFICIENT MATERIAL SOLUTION
- Resistant and protective tube that encloses the G-FENCE cable
- Available across the entire G-FENCE cable range

FIBER OPTIC
DETECTION SYSTEM

SORHEA'S DAS ANALYZER

The SORHEA fiber optic intrusion detection system is based on a next-generation **DAS analyzer.**

The **DAS (Distributed Acoustic Sensing)** technology allows the securing of very long distances with a simple optical fiber cable deployed on the site to be protected.

Fence-Mounted Optical Fiber

Buried Optical Fiber

A QUANTITATIVE DAS TECHNOLOGY
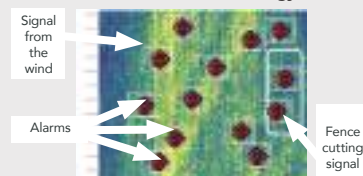## THAT MAKES THE DIFFERENCE

Unlike qualitative systems that use fixed thresholds, which are often set too low and generate numerous false alarms, **quantitative technology offers adjustable sensitivity.** This allows it to ignore minor disturbances such as wind while reliably detecting discrete actions like crawling.

This technology also makes it possible to isolate background noise **without losing actual events**, while serving as a reliable sensor for variations in strain, vibration, or temperature.

SORHEA Quantitative DAS Technology

No signal from the wind

Fence cutting signal

Qualitative DAS Technology

Signal from the wind

Alarms

Fence cutting signal

LUMOR S	LUMOR L

PERIMETER INTRUSION DETECTION BY OPTICAL FIBER

REDUCED FALSE ALARMS:
- Quantitative DAS (Distributed Acoustic Sensing) technology

VERSATILITY OF APPLICATIONS:
- Up to 80 km on fences and 130 km when buried
- Redundant solution available.

PRECISE GEOLOCALISATION
- Real-time visualisation of signals and events via an interactive dashboard.

REDUCTION OF CIVIL ENGINEERING COSTS FOR LARGE PERIMETERS.
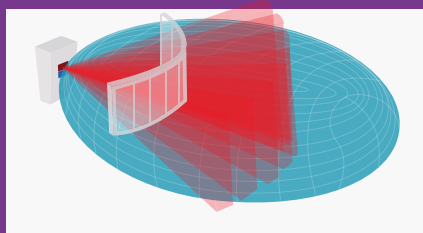- Optimized installation and maintenance

AIRPORT

BORDER

DUAL TECHNOLOGY
DETECTORS

SORHEA'S TECHNOLOGY

- **Combination of two technologies** a microwave Doppler sensor and a passive infrared sensor

- **Independant set-up and fine-tuning of** each technology

- **High-performance detector that synchronises two functions:** Doppler and radar

The combining of a microwave Doppler sensor and a radar function with a passive infrared sensor, delivers a very high detection powerwhile filtering out unwanted alarms.

MONOTECHNOLOGY DETETCTOR
FOR SPECIFIC APPLICATIONS

PIRAMID ATEX is a single-technology microwave detector specially designed for environments at risk of explosion.

Integrated into an ATEX-certified housing, it meets the requirements of ultra-sensitive sites. Thanks to its multiple settings, it guarantees reliable detection adapted to the constraints of specific industrial installations.

ATEX

THE ESSENTIALS

PIRAMID

VOLUMETRIC DETECTOR
DUAL TECHNOLOGY

RELIABLE DETECTION
- Combination of two technologies

RANGE CONTROL
- Irrespective of sensitivity settings

RESPONSE TO SPECIFIC APPLICATIONS

MULTIPLE COMMUNICATION MODES
- Radio, RS485 Bus cable, dry contacts

MAXIBUS COMPATIBLE
- Integration with VMS

FENCE ELECTRIFICATION SYSTEMS

SORHEA'S ELECTRIFICATION SYSTEMS

- **APAVE certified systems** (France and Belgium)
- **Electrification of existing fences** with electrified taut wires
- **Detection function as well as repulsion**

These systems are also equipped with an overhead 360° sensor (eg: on the overhang).

Our electrified system is spaced 12cm from the fence to ensure complete safety for anyone walking past an electrified site.

We also offer a Low-Voltage option which provides intruder detection only.

THE SPECIFICS

SI-TOP

BAVOLET ÉLECTRIFIÉ

HIGH RELIABILITY OF THE PRODUCT
- 4 guaranteed functions

HIGH-PERFORMANCE DETECTION
- Repulsion parameterisation

THE ESSENTIALS

SILUR FX	SILUR 360
1 OR 2 WIRE DETECTION AND ELECTRICAL REPULSION	DETECTION BY PRESSING ON 1 WIRE

GUARANTEED SITE INTEGRITY AND SECURITY
- Very high repulsion power
- Detects any type of intrusion attempt

RELIABLE DETECTION
- No false alarms

VERY HIGH SECURITY DETECTION
- Standard two-strand intrusion detection or very- high-security single strand detection

TIME AND MONEY SAVINGS
- No structural work required: simple installation on the existing fence of the site to be protected

DETECTOR FENCES AND OUTRIGGERS

SORHEA'S DETECTOR FENCE

- **Zero unwanted alarms**
- **Patented system and** registred design
- **Customisation of the fence panel** (panel size and pattern layout)
- **System sold with installation included**

Each fencing panel consists of two plates that are electrically isolated from the each other. One is connected to the earth,and the other to live.

If either plate is pierced or cut by an intruder, a short-circuit is created and an alarm is triggered.

THE SPECIFICS

ACTI-TOP

DETECTION OUTRIGGER

ACTI-GRID

FOR PROTECTION OF CANALS

THE ESSENTIALS

ACTI-FENCE®

DETECTION FENCE

COMBINES DETECTION AND PHYSICAL ENCLOSURE
- Anti-intrusion fencing with alarm triggerred by cutting, ripping or climbing

SYSTEM RELIABILITY
- System patent No.14 62148

VERY HIGH SECURITY DETECTION
- No false alarms
- Instant response time
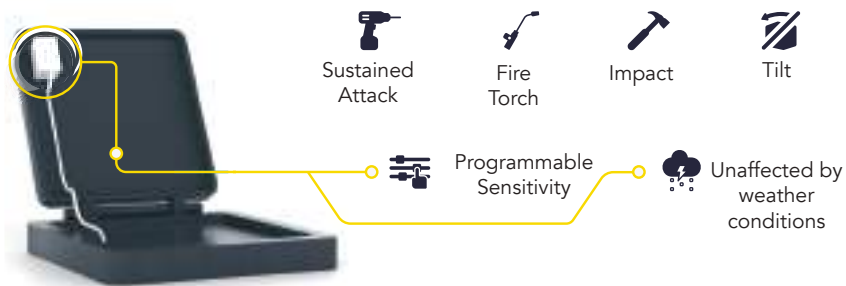- Detection accuracy for each panel

SPECIFICS

HATCH-SECURE SOLUTION

- **Multi-sensors detect openings:** hammer impacts, torch cutting, drilling: gyroscope sensor and light sensor

- **Adaptable protection for one or more hatches:** with a dedicated controller managing up to 16 hatches

- **NPSA certified product:** high-security qualification by the British government

National Protective Security Authority

Sustained Attack

Fire Torch

Impact

Tilt

Programmable Sensitivity

Unaffected by weather conditions

EXAMPLES OF APPLICATIONS

GROUND HATCHES

ARMORED KIOSKS & DOORS

CABLE TRAYS (DATACENTER)

STEEL GRATING AND DUCKBOARDS

ESSENTIALS

HATCH-SECURE

HATCH INTRUSION DETECTION SYSTEM

UNAFFECTED BY HARSH WEATHER CONDITIONS

MULTI-SENSORS DETECT ALL TYPES OF SABOTAGE
- cutting, drilling, forced opening, etc.

PROGRAMMABLE SENSITIVITY

EASY CONNECTION TO ANY EXISTING STANDARD ALARM PANEL

MODULAR SOLUTION
- For protecting a single or multiple hatches.

BORE HOLES

SKY LIGHTS

VIDEO ANALYSIS

SORHEA'S VIDEO ANALYSIS

- **Reliable and powerful solution:** Omission-free reliable Detection: Systematic detection whatever the environment with almost no false alarms.

- **Immediate alarm qualification:** by alarm receiving centers or central control stations.

- **End-to-End assistance support:** recommendations and expert adivces, implementation assistance and training.

The objective is to capture any intruder in the monitored location regardless of environmental conditions while filtering false alarms.

Thanks to our integration with VMS, CMS, PSIM... the video of the alarm is sent instantly to alarm receiving centers or monitoring stations enabling the right decision to arrest the intruder immediately.

POWERFUL ALGORITHMS
INCORPORATING THE LATEST INNOVATIONS

Backed by over 20 years of expertise, our cutting-edge video analysis solution incorporates **the latest innovations in AI,** driven by continuous investment in R&D. Highly efficient and powerful algorithms detect intrusions regardless of the intruder's position or environmental conditions, while **effectively eliminating false alarms.**

Our technology, thanks to its **optimised filters that enable efficient video qualification,** delivers robust and effective solutions for any site requiring a high level of security.

THE ESSENTIALS

INTRUSION DETECTION SOLUTION WITH IMAGE ANALYSIS

OUTDOOR DETECTION ALGORITHMS

INTEGRATED EVENT MANAGER

OPTIMISED HMI FOR QUICK CONFIGURATION AND MAINTENANCE

SORHEA BY HIRSCH - MANUFACTURER OF PERIMETER INTRUSION DETECTION SYSTEMS FOR SENSITIVE SITES

SORHEA
by ⋈ HIRSCH

**HIRSCH
COMMITS**
AND USES
RENEWABLE
ENERGY

PART OF THE Vitaprotech GROUP