

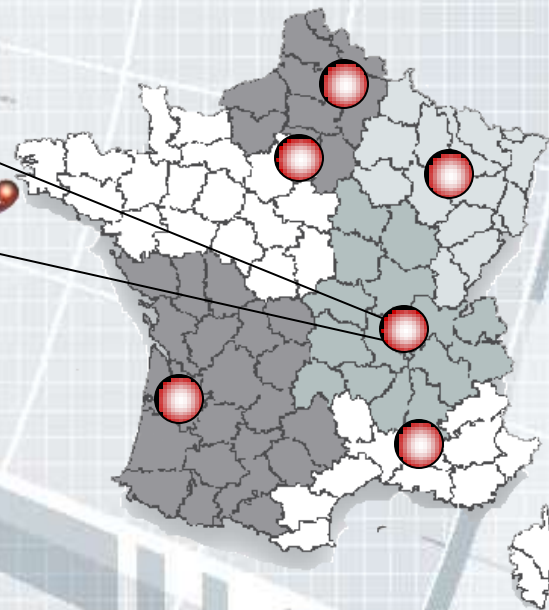


PERIMETER SURVEILLANCE OF SENSITIVE SITES



SORHEA - Identification card

- Company founded: 1987
- Headquarters and factory at Vaulx-en-Velin (FR)



- French sales teams in the North-East, East, South-East, South-West, North and West.
- Subsidiarie in Germany
- Sales through a network of installers
- Sales 2008: 9.8 M€, 25% in exports
- Field of activity:
 - Perimeter surveillance and intrusion detection solutions.
 - Support before and after sales
 - Technical training for implementation and after-sales services for products

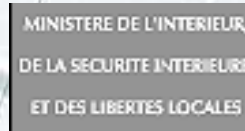


Types of protected sites

- Energy production
- Government facilities
- Military facilities
- Prisons
- Logistics sites
- Chemical industry
- Pharmaceutical industry
- Food and agricultural industries
- Automotive industry
- Airway and railway industries
- Administration facilities
- Industrial sites

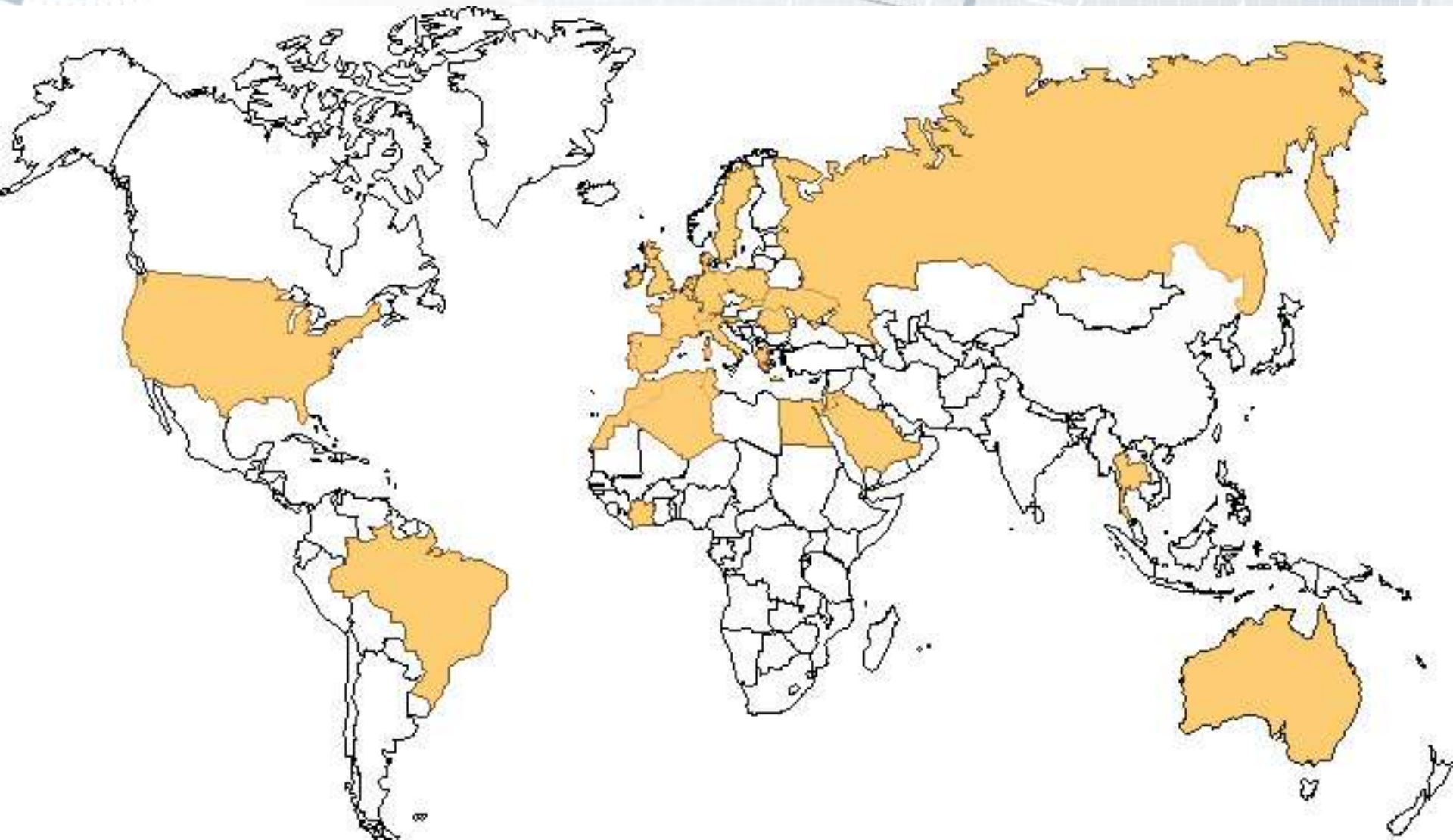


References





All over the world





SORHEA PRODUCT LINES



Special products

Services to customers

Mobile detection

Infrared

Buried cable detection system

Microwave

Dual technology

Impact detection

- Fences
- Sidings



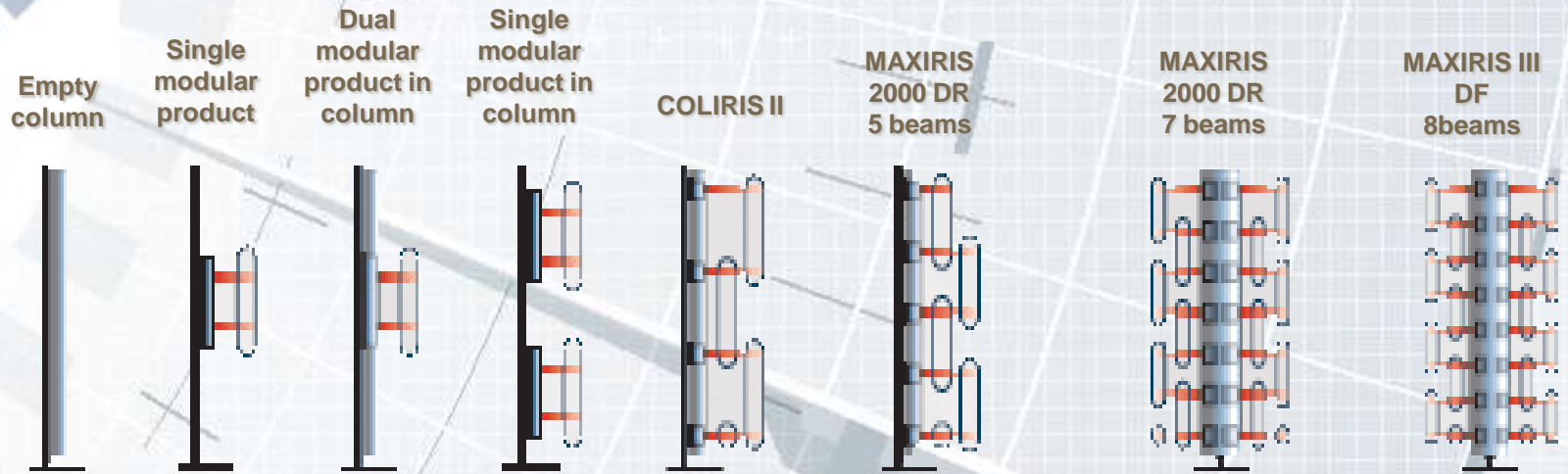
INFRARED



SELECTION CRITERIA FOR AN INFRARED COLUMN



Selection criteria for a product



	PRICE			DISSUASION		DETECTION & SECURITY		
Dissuasion	YES	NO	YES	YES	NO	YES	YES	YES
Detection	0%	22%	22%	44%	94%	94%	98%	98%
Applications	Private individuals Top of the wall Building facades			Private individuals Car repair shops/ dealers		High risk sites Logistics sites Automotive subsidiaries VIP residences (villas etc.)		



Comparison table

Solution	Small housing	Facade	Column	Intelligent column
SORHEA products	BIRIS II	MINIRIS II FINIRIS II	COLIRIS II	MAXIRIS 2000 network
Number of beams	2	2 to 6	4	2 to 16
Height (in m)	0.40	1 to 2.5	1 to 2	1 to 5
Detection principle	Bi-detection (2 beams cut = 1 alarm)		Mono-detection Bi-detection	Mono-detection Bi-detection Mixed detection
Applications	Private individuals Top of the wall Building facades	Private individuals Windows and doors	Private individuals Car repair shops/dealers Small factories Up to 8 protection segments	High risk sites Automotive subsidiaries Logistics sites Widely recommended from 8 protection segments



SORHEA products

SECURITY	weak	average	average	good	good	good	good	very good	excellent	maximum
BUDGET € /lin. m.										
150										
120										Special products
70									Maxiris 2000 + CCTV	
60								Maxiris 2000		
50										
35							Coliris II			
25						Finiris II				
20					Miniris II					
15										
10			Biris II column	Coliris I						
5	Uniris II	Biris II								
2.5										
0										
	Price		Dissuasion		Detection & Security					

Security level

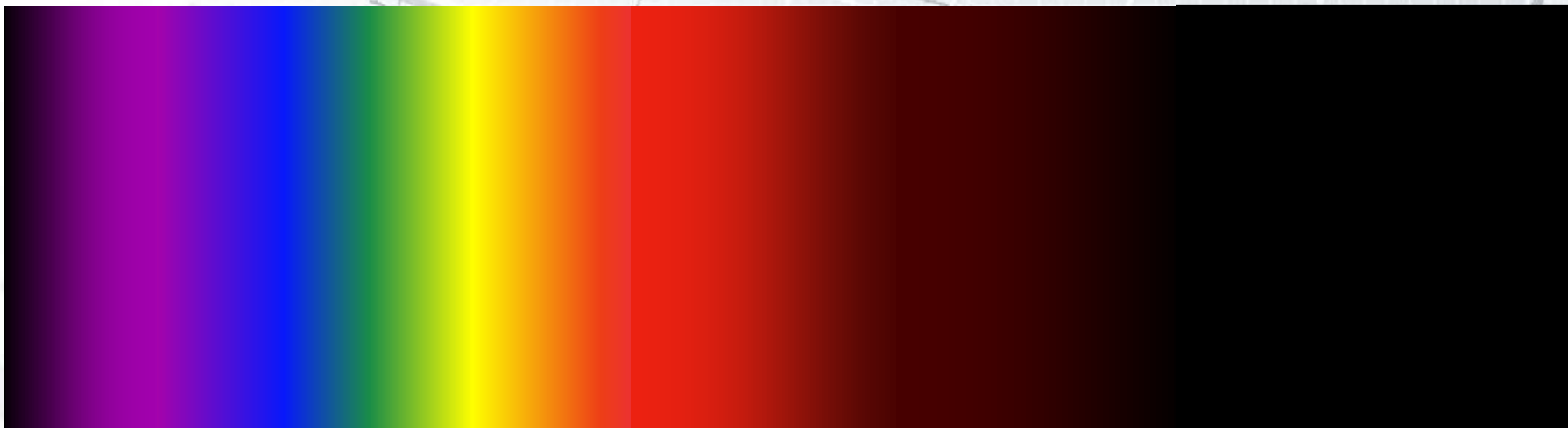


QUESTIONS ABOUT INFRARED TECHNOLOGY



Are the beams visible?

The infrared light used by these columns is invisible to the human eye



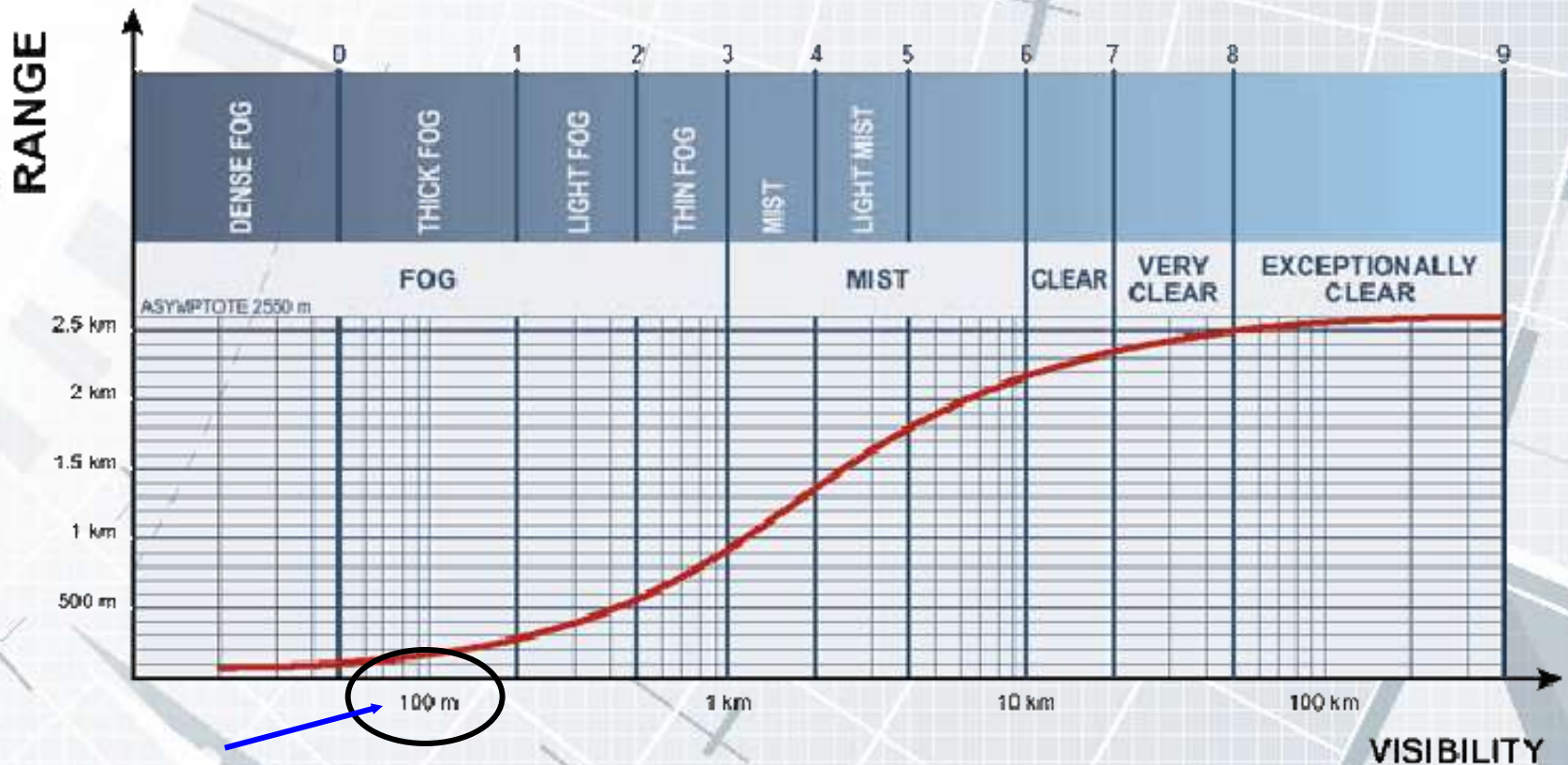
400 nm 500 nm 600 nm 700 nm 950 nm 5µm
Ultraviolet **Visible light** **Near infrared** **Far infrared**





My competitor suggests a range of 200 m? What should I answer?

Maximum range recommended for an infrared cell



- Theoretical maximum range: 2550 m
- When visibility is 150 m, the range reaches 200 m
- With visibility of 60 m (thick fog), the range reaches 100 m



DUAL TECHNOLOGY



SORHEA products

Dual technology detector



Applications

- Video surveillance camera
- Tracking motion inside a protected site

Triple technology barrier



Applications

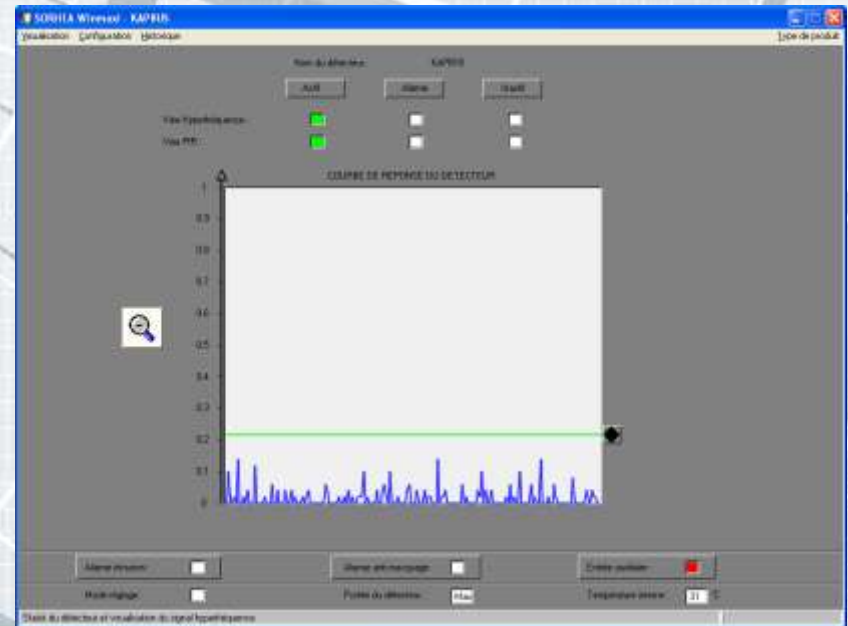
- High risk sites
- Prisons, military facilities, etc.



KAPIRIS design



- Dual technology detector
 - Microwave with Doppler effect (24GHz)
 - Passive infrared
- Compatible with MAXIBUS network
- Remote configuration (WINMAXI)
- Precise range control
- Maximum range = 50 m





Detection principle

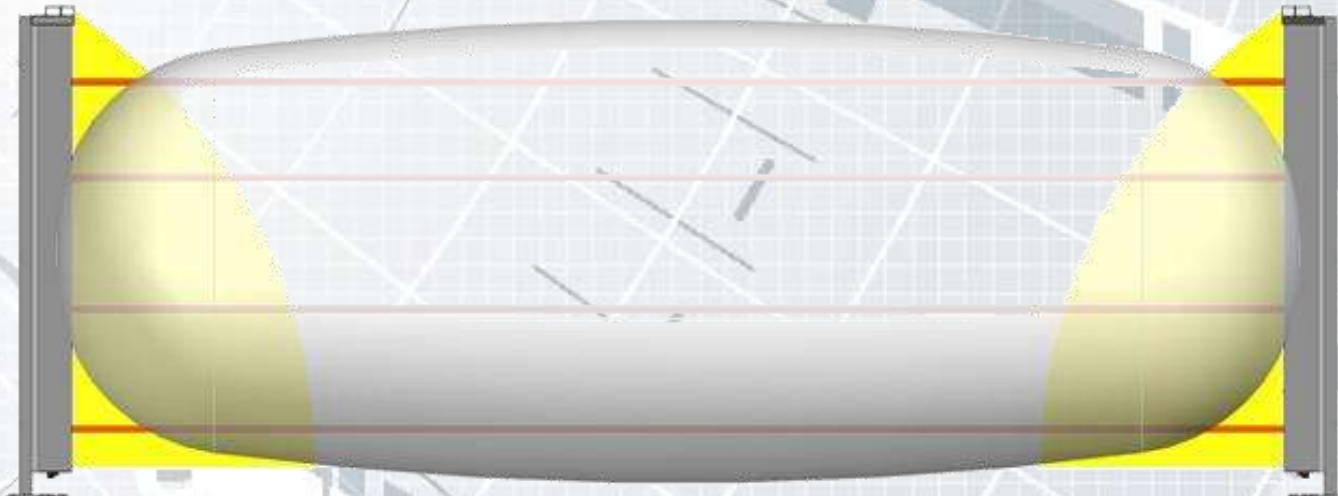
- The detector reacts to any moving object
- An immobile person in the detection zone will not trigger an alarm
- Intrusion alarm is triggered by detection by two sensors





APIRIS barrier

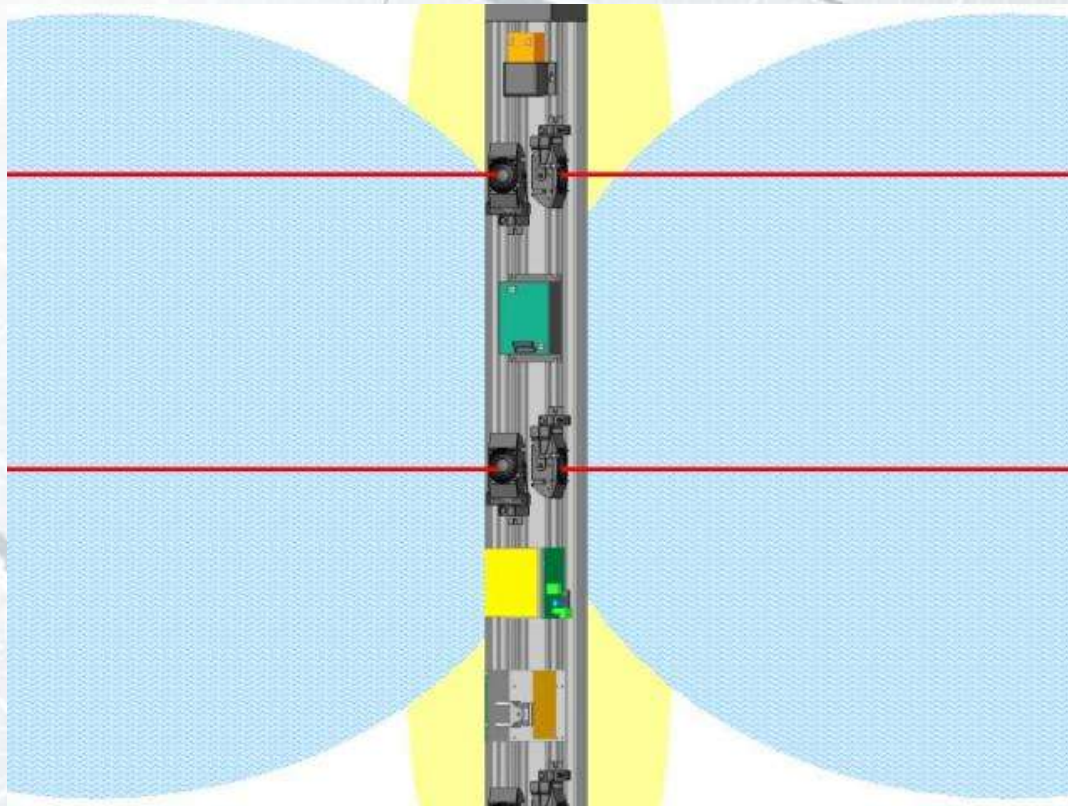
- New barrier with triple technology:
 - Active infrared barrier
 - Microwave barrier
 - Microwave doppler
- Designed for particularly sensitive sites (prisons, military facilities, etc.)





Operation principle

- Adding a microwave doppler eliminates the dead angle created by a microwave barrier at the bottom of the column
- No longer necessary to cross the beams for a 100% effectiveness. APIRIS works in two directions making it more cost effective





IMPACT DETECTION



Presentation of the system

- **AQUILA** is an impact detection system for protection of buildings
- The system uses optical fiber technology that is not subject to electromagnetic interference
- Protects:
 - Warehouses
 - Logistics sites
 - Vaults
 - Industrial buildings
 - Supermarket sector
 - etc.
- Effective on various surfaces:
 - Sheet metal
 - Bricks
 - Cinderblocks
 - etc.





Operating principle

1. The fiber optical cable transmits a light signal.
2. Upon an intrusion attempt the signal is distorted.
3. This distortion is then analyzed by the PU.
4. The intrusion is detected.



MOBILE SYSTEMS



SORHEA products

Mobile solution



Applications

SEVERAL HOURS
SEVERAL DAYS

- Temporary military facilities
- Construction site equipment
- Aircraft

Semi-mobile solution



Applications

SEVERAL DAYS
SEVERAL WEEKS

- Exhibition Tents
- Temporary storage sites
- Car parks



SPECIAL PRODUCTS



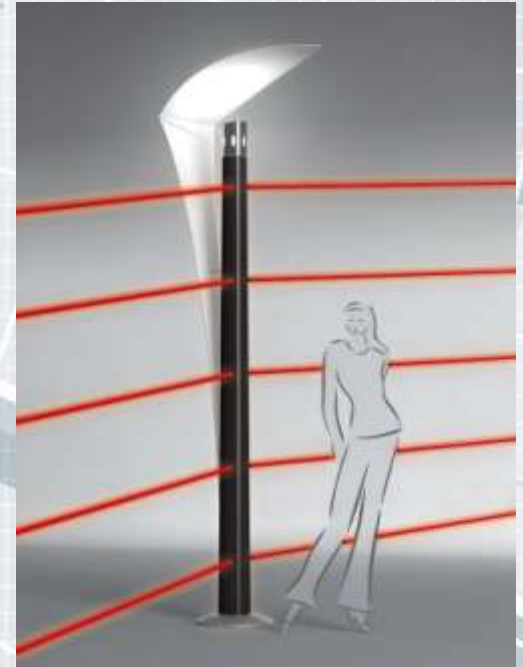
SORHEA products



IP67 housings



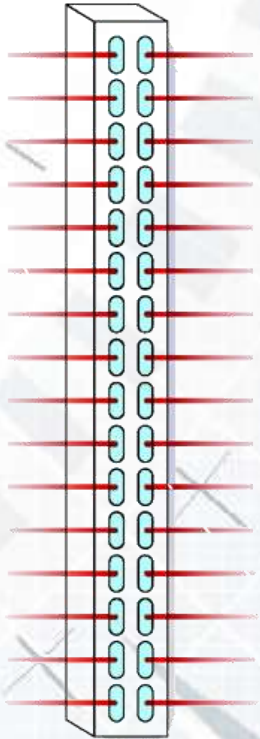
ATEX products



Product Design



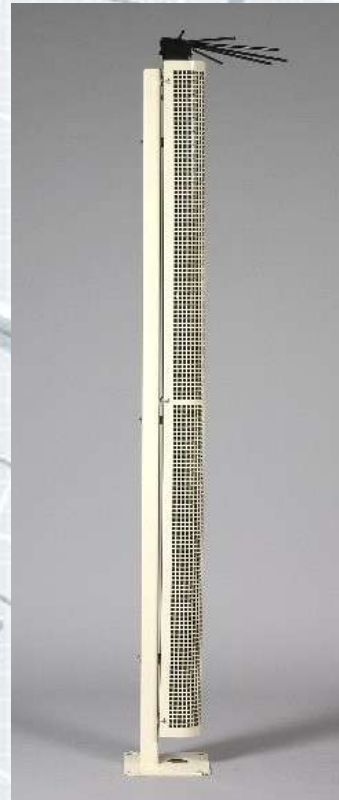
SORHEA products



MAXIRIS 2000
double stack



MAXIRIS 2000
extremely cold
weather



MAXIRIS 2000
tropicalized

MAXIRIS 2000
seaside



SORHEA also offers a wide range of services

- Before and after sales support
- Technical training
- Sales training
- Hotline
- After-Sales Service
- On-site support

