

BARRIER™

Autonomous Beacon for Recognition,
Identification, and Response Assessment

www.atermes.fr





Discover the purpose behind this innovative solution

BARIER™ is designed to be quickly deployed by a simple patrol and enables day and night surveillance missions with a reduced team in challenging and unpredictable terrain.

The system enables long-term, permanent, and automatic surveillance of areas with complex access.

The BARIER™ system effectively replaces costly, highly vulnerable observation towers that can be easily bypassed by intruders. Each BARIER™ system consists of eight autonomous sentinel beacons, two armored dispensing vehicles, and a command and control (C2) vehicle. The beacons are strategically positioned to create a buffer zone with a depth of 3 to 5 km.

Over the long term, the system enables permanent and automatic surveillance of complex access areas such as mountains, deserts, ravines, and creeks.

The system is fully automatically configured through the mission preparation software. The beacons are remotely controlled by a local command post via a dedicated communication line. Thanks to its stealthy design, the system operates in 'ambush' mode to identify intruders with maximum efficiency.



Sensitive Site Protection



Camp Protection



Temporary Bivouac



Route Surveillance

Product ZOOM



Optical Detection Beacon



Radar Detection Beacon



Command and Control Post

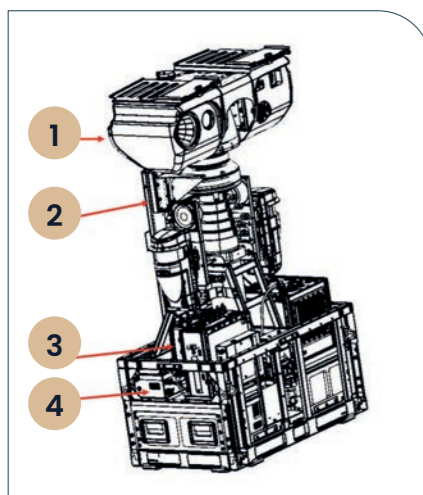
DISPENSE



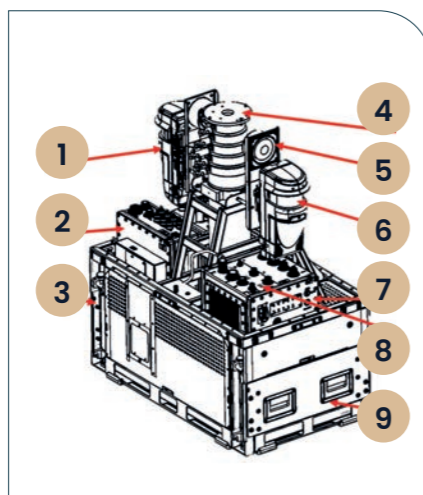
Panhard Type Dispenser



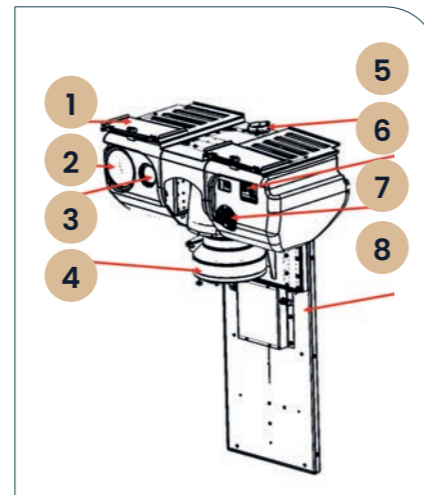
Unimog Type - Mercedes



- 1. Optonic head
- 2. UHF antenna
- 3. UHF transmitter
- 4. Bi-filter UHF



- 1. Proximity switch left
- 2. MPPT box
- 3. Adjustable foot
- 4. Mast
- 5. Speaker
- 6. Right proximity detector
- 7. Desk
- 8. Energy box
- 9. Batterie Rack



- 1. Marquise (thermal protection)
- 2. Flashlight
- 3. High Resolution Sensor
- 4. PATAR
- 5. GPS
- 6. BIVAN
- 7. Thermal camera
- 8. UHF antenna

Technical Specifications

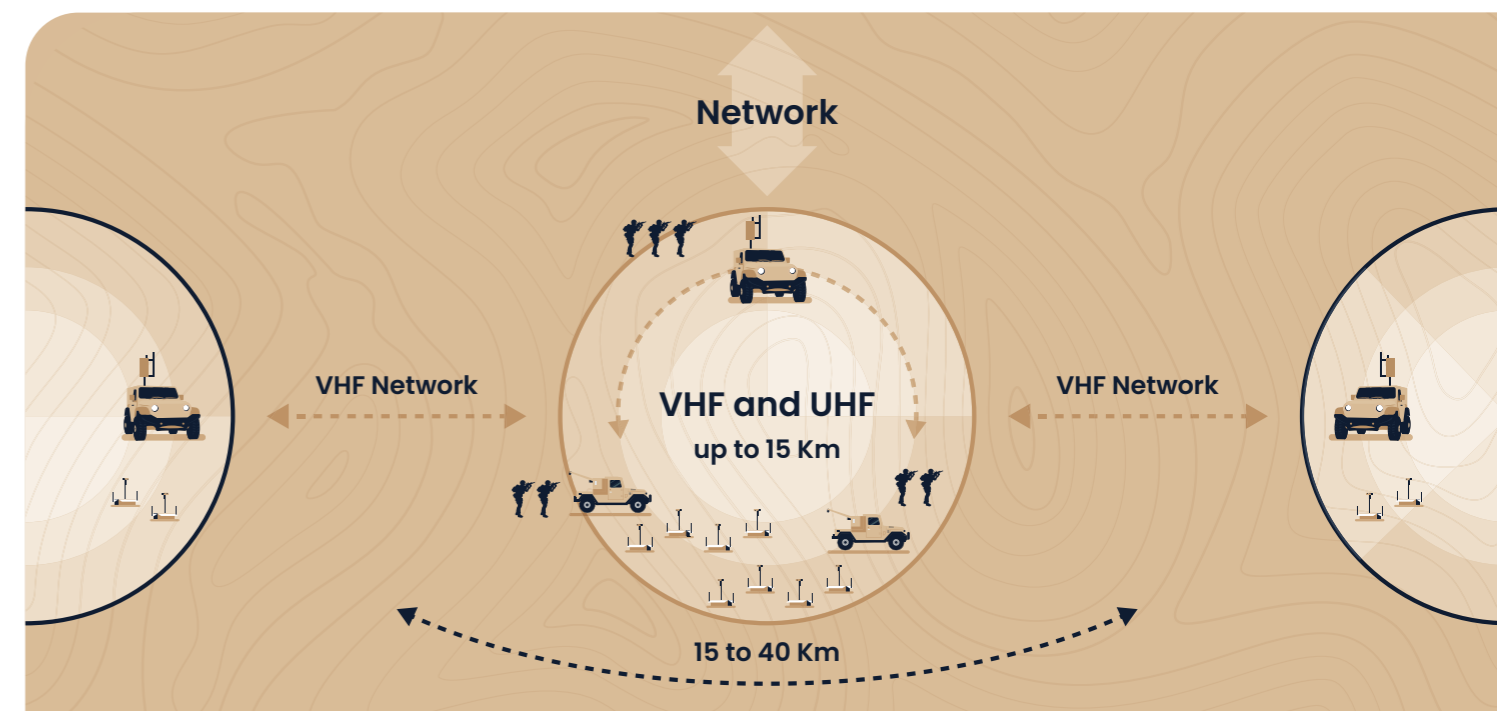
Characteristics of the BARRIER™ System:

- Continuous monitoring of up to 40 km of border with a single system.
- Designed for rugged terrain, long-term presence, and constant tracking.
- Network of robotic, autonomous, and intelligent beacons.
- Evidence collection and intelligence missions.
- Personnel safety located 20 km behind the frontlines.
- Discreet and stealthy, ready for ambush missions.
- Detection through data fusion from optronic, radar, and acoustic sensors.
- Precise identification and localization.
- Scalable response scale, from non-lethal to military intervention.



- Quick and simple deployment.
- Computer-assisted mission preparation.
- Operational 24/7, without interruption.

Home Land Defender / Army MG



Services, maintenance, options

The Sentinel Beacon: A Highly Sophisticated Robot



Base Sentinel

1. Proximity detection. Weather station.
2. Self-protection and deterrence system controlled by the PCC operator.
3. Stealthy and retractable design.
4. 24/7 energy autonomy thanks to solar panels.

Optronic Head

1. Ultra-high-definition identification sensor and xenon flash.
2. Laser rangefinder.
3. Embedded processing for autonomous decision-making.
4. Thermal camera.
5. High-speed radio transmission.

Radar Head

1. High-definition radar detection, up to 180° coverage.
2. X-band Doppler radar.
3. Embedded processing for autonomous decision-making.
4. Radar.

BARRIER™: Performances

		Day	Night
Large Vehicle (Truck, etc.) 	IR Detection ⁽²⁾	13.5 km	13.5 km
	IR Recognition ⁽¹⁾	8.2 km	8.2 km
	IR Identification ⁽¹⁾	5.0 km	5.0 km
	Visible Identification	8.5 km (2.0 km for recognition)	2.0 km ⁽³⁾
Vehicle (Car) 	IR Detection ⁽²⁾	8.0 km	8.0 km
	IR Recognition ⁽¹⁾	6.2 km	6.2 km
	IR Identification ⁽¹⁾	3.2 km	3.2 km
	Visible Identification	6.0 km (2.0 km for recognition)	2.0 km ⁽³⁾
Pedestrian 	IR Detection ⁽²⁾	4.5 km	4.5 km
	IR Recognition ⁽¹⁾	2.7 km	2.7 km
	IR Identification ⁽¹⁾	1.4 km	1.4 km
	Visible Identification	3.0 km (2.0 km for recognition)	2.0 km ⁽³⁾

The IR (Infrared) field of view is specified to be between 1.4 degrees to 22 degrees. It's important to note that the system's performance can be influenced or affected by atmospheric conditions. (1) Within an IR field of view of 1.4 degrees. (2) Within an IR field of view of 2.5 degrees. (3) Performance may vary depending on atmospheric conditions and lighting.

Atermes, It is also...

... other products
at the cutting edge of technology!



Suricate
Multispectral
Optronic Radar



A-TOM550
Automatic Laser Bird Deterrent
System for Airports



ASOS
Atermes Operational
Surveillance Solution

Our services include



Mechanics
Mechanical
Design Office



Electronic
Electronic Engineering



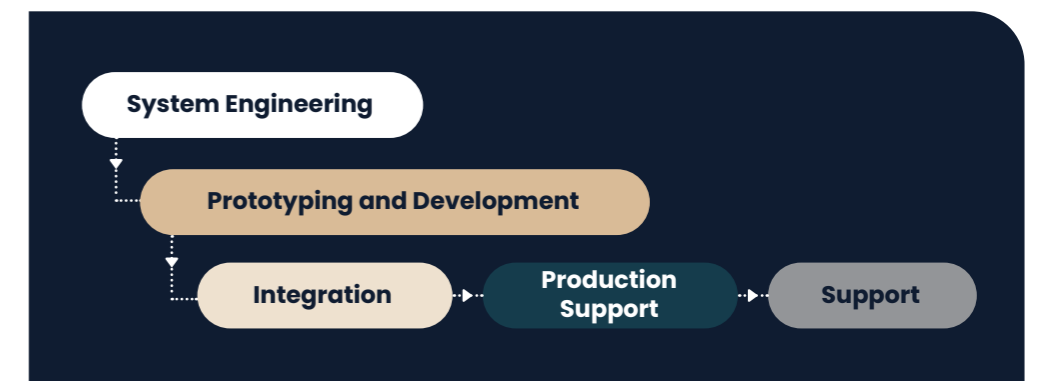
**Optronic
Engineering**



**Software
Development**
Software Engineering



**Operational
Maintenance**



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