→ SPYNEL perimeter security

Spynel-S

WIDE AREA | SURVEILLANCE SYSTEM

360° INTRUSION DETECTION, ANYWHERE, ANYTIME

Spynel is a unique wide-area surveillance system, acquiring real-time full panoramic images with automatic intrusion detection and tracking capabilities. It provides powerful situation awareness through 360 degree visualization of the surroundings. As a completely passive thermal sensor, it is invisible to intruders, not vulnerable to camouflage nor jamming, and operates 24/7, whatever the weather. With a large MWIR focal plane array, Spynel-S exhibits high performance, including in warm and humid regions.

EARLY TARGET DISCRIMINATION FOR FAST REACTION

Compact and robust, Spynel can be quickly deployed to perform multi-events detection over extremely large areas in total darkness, fog, smoke. An unlimited number of tracks are immediately recognized in highly resolved images, including hardly detectable threats, such as small, slow or tangentially moving targets. It can be used as a reliable and cost-effective standalone perimeter security solution as well as an added layer of capability to systems already in place.

→ SPYNEL-S ROTATING SENSOR

APPLICATIONS

- Persistent wide area surveillance
- 24/7 perimeter security
- 360° asymmetrical threats detection
- Airport / airfield surveillance
- Critical infrastructure protection
- Surveillance of forward operating bases
- UAV, low air target tracking
- Border and coastal passive surveillance
- Self-protection of ships
- Fight against piracy and smuggling

→ Simultaneous multi-target tracking

BENEFITS

- Cost effective and reliable surveillance against asymmetric threats
- Full 360-degree panoramic coverage with a single sensor
- Long range surveillance up to the horizon
- Day and night panoramic scrutiny even in adverse weather conditions

- Automatic, simultaneous tracking of all threats with superior image quality
- Compact, robust, lightweight equipment, for a fast deployment
- Fully passive system, totally undetectable
- Increased performance in humid and warm climatic environment

→ SPYNEL night&day intrusion detection

www.hgh-infrared.com

Spynel-S

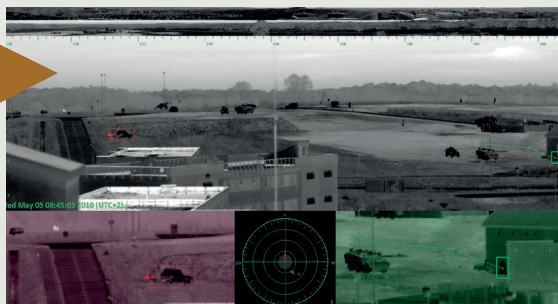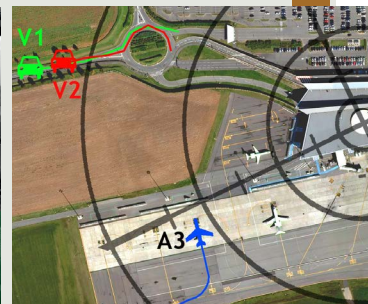## PANORAMIC INFRARED | VISION SYSTEM

→ SPYNEL-S with V-LRF option

TECHNICAL ➤

→ SPYNEL persistent situational awareness

→ Tracks displayed on situation map

➤ SENSOR

	Spynel-S 2000	Spynel-S 3500	Spynel-S 6000
Horizontal FOV	360°	360°	360°
Vertical FOV	20°	10°	5°
Vertical adjustable tilt (motorized)	± 45° (motorized)	± 45° (motorized)	± 45° (motorized)
IFOV	0.6 x 0.6 mrad x mrad	0.3 x 0.3 mrad x mrad	0.15 x 0.15 mrad x mrad
Scanning speed	2 rps (360°/0.5sec)	1 rps (360°/sec)	0.5 rps (360°/2sec)
Detector type	MWIR 640x512 FPA	MWIR 640x512 FPA	MWIR 640x512 FPA
Cooling	Stirling microcooler	Stirling microcooler	Stirling microcooler
Image resolution	11 500 (H) x 640 (V)	23 000 (H) x 640 (V)	46 000 (H) x 640 (V)
Video output and control	IP	IP	IP
Dimensions(Dia x H)	385 mm x 580 mm	385 mm x 580 mm	385 mm x 580 mm
Weight	< 40 kg	< 40 kg	< 40 kg
Operating temperature	-40°C to +71°C	-40°C to +71°C	-40°C to +71°C
Protection standard	IP 66	IP 66	IP 66
Power supply	24V DC / 10 Amps	24V DC / 10 Amps	24V DC / 10 Amps
Detection range for			
human :	Up to 2 km	Up to 3.5 km	Up to 6 km
car :	Up to 4.5 km	Up to 7 km	Up to 12 km
tank :	Up to 18 km	Up to 21 km	Up to 25 km
V-LRF OPTION	Visible full HD camera with continuous optical zoom and/or Laser Range Finder		

Detection ranges according to Johnson criterium and STANAG standards

➤ CONTROL AND DISPLAY SOFTWARE

Operating system: PC Windows – multiple screen and touch screen capabilities

Software functions: Get full advantage of Spynel sensor with Cyclope software. Cyclope provides, at a glance, **real time panoramic display** (360° strip, annular, radar & zoom views), **unlimited targets designation and tracking**, immediate **threat location** (azimuth, elevation, distance), GPS, AIS and radar **data integration**, automatic **control of PTZ** systems for target identification, **forensic capabilities** (timeline, sequence storage and playback), spatial and temporal bookmarks, multiple **threats displayed on situation map**, fine **image stabilization** and more...

Above information is subject to changes without notice