



SPYNEL



Spynel-U

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 situational awareness through 360 degree visualization of the surroundings. As a completely passive system, it is invisible to intruders, not vulnerable to jamming nor camouflage, and operates 24/7, whatever the weather. The Spynel-U is the uncooled IR version of the Spynel series.

EARLY TARGET DISCRIMINATION FOR FAST REACTION

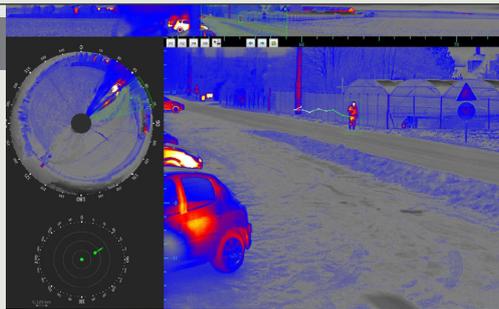
Robust and cost effective, the Spynel-U is the ideal surveillance solution for commercial applications such as airport, port or critical infrastructure perimeter monitoring. One single sensor can monitor large areas and perform multi-events automatic detection in total darkness, fog and smoke, thanks to the 360-degree thermal camera. An unlimited number of targets can be simultaneously tracked, recognized and identified, thanks to the integrated 360-degree visible camera. The Spynel-U does not require any cryogenic cooler, which ensures long-term reliability and maintenance-free operation.



→ SPYNEL-U ROTATING SENSOR

APPLICATIONS

- Persistent wide area surveillance
- 24/7 perimeter security
- 360° asymmetrical threats detection
- Airport / airfield surveillance
- Critical infrastructure protection
- Border and coastal passive surveillance
- Port monitoring



→ Infrared panoramic detection and visible identification with the same sensor

BENEFITS

- Cost effective and reliable surveillance against asymmetric threats
- Full 360-degree panoramic coverage with a single sensor
- 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 unlike radar
- Maintenance-free uncooled LWIR detector



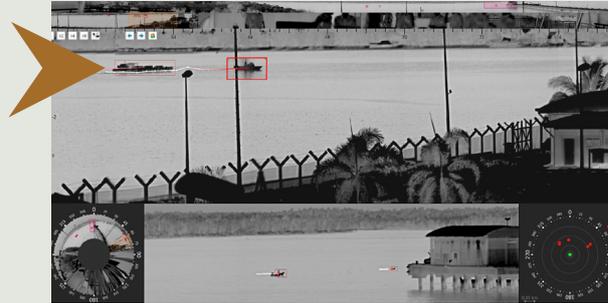
→ SPYNEL night&day intrusion detection

Spynel-U

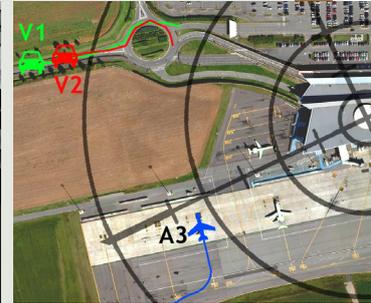
PANORAMIC INFRARED

VISION SYSTEM

SPYNEL
ref. SPU-Len-ail



→ 360-degree port surveillance



→ Tracks displayed on situation map

TECHNICAL

SENSOR

	Spynel-U 1000	Spynel-U 2500
Vertical Field Of View	18° (-15° to +3°)	9° (-6.5° to +2.5°)
Horizontal Field Of View	360°	360°
Scanning speed	0.5 rps (360° / 2sec)	0.25 rps (360° / 4sec)
Infrared detector type	Uncooled LWIR FPA (≥ 600 pixels horizontally)	
Infrared image resolution	5 Mpixels	10 Mpixels
Visible detector type	2048 x 1536	
Visible image resolution	50 Mpixels	100 Mpixels
Video output and control	TCP/IP	
Dimensions (Diameter x Height)	400 mm x 500 mm	
Weight	25 kg	
Protection standard	IP 66	
Power supply	24V DC / 10 Amps max at startup	
Detection range for:		
human : 	Up to 1 km	Up to 2 km
car : 	Up to 2 km	Up to 4 km
Ship : 	Up to 6 km	Up to 12 km

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), **3D detection** capabilities, **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...



www.hgh-infrared.com

Headquarters

HGH SYSTEMES INFRAROUGES
10 rue Maryse Bastié
91430 Igny, France
Phone: +33 1 69 35 47 70
Fax: +33 1 69 35 47 80
Email: sales@hgh.fr

US Office

ELECTRO OPTICAL INDUSTRIES
320 Storke Rd., Ste. 100
Goleta, CA 93117, USA
Phone: 805.964.6701
Fax: 805.967.8590
Email: sales@electro-optical.com

Asia Office

ASIA INFRARED SYSTEMS
541 Orchard Rd., #09-01 Liat Towers
Singapore 238881
Phone: +65 6933 1394
Email: sales@hgh-infrared.com