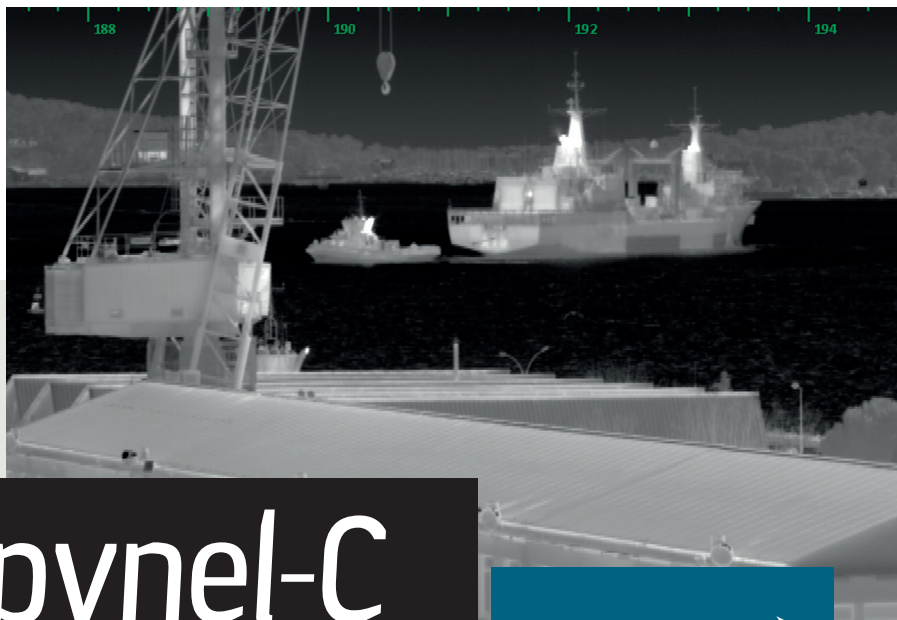




SPYNEL

→ Night&day maritime surveillance



Spynel-C



WIDE AREA

SURVEILLANCE SYSTEM

➤ 360° INTRUSION DETECTION, ANYWHERE, ANYTIME

Spynel is the impressive system for all-weather, 24/7 surveillance of ports, ships, platforms at sea, ideal for the surveillance of perimeters ranging over several kilometers. This unique infrared sensor displays a full 360-degree panorama, with a resolution up to 12 Mpix. With its real-time imagery, Spynel can detect and track an unlimited number of objects night and day.

➤ EARLY WARNING OF ASYMETRICAL THREATS

Compact and fully passive, Spynel is completely insensitive to jamming and deception. Unaffected by sea clutter, this surveillance device is highly effective when tracking small crafts, RIBs, wooden boats and even swimmers. It can be a reliable and cost-effective stand-alone perimeter security solution as well as an added layer of capability to systems already in place.

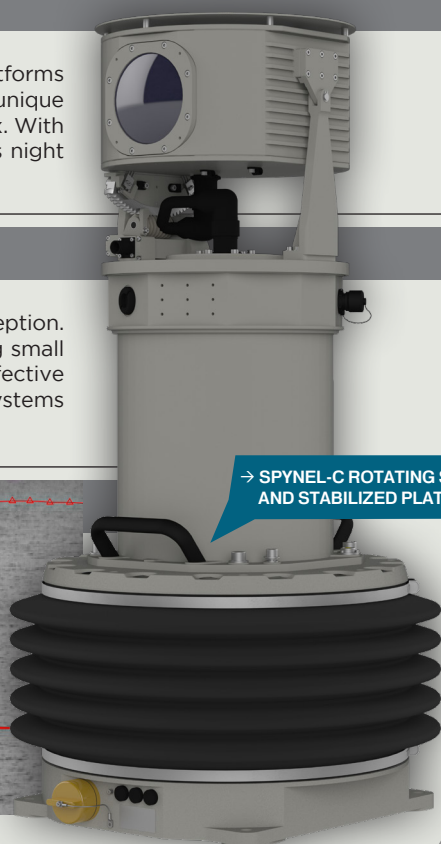
➤ APPLICATIONS

- Maritime wide area surveillance
- Asymmetrical threats detection
- Seaports and harbors protection
- Coastal and border passive surveillance
- Offshore platforms and oil rigs security
- UAV, USV, low air target tracking
- Self-protection of ships
- Fight against piracy
- Fight against smuggling and drug trafficking
- Night time navigation
- Search and rescue



→ Detection of asymmetric threats

→ SPYNEL-C ROTATING SENSOR AND STABILIZED PLATFORM

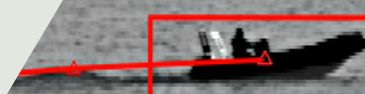


➤ BENEFITS

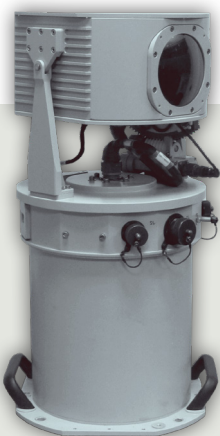
- Cost effective and reliable surveillance against asymmetric threats
- Full 360-degree panoramic coverage with a single sensor
- Long range surveillance up to the horizon
- Day and night panoramic awareness even in adverse weather conditions
- Automatic, simultaneous tracking of all threats with superior image quality
- Compact, robust, lightweight equipment, for a fast deployment
- Fully passive system, totally undetectable unlike radar
- Gyro-stabilization option for shipborne installations



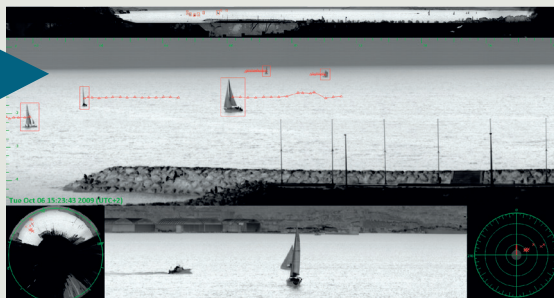
→ Navigation and situation awareness



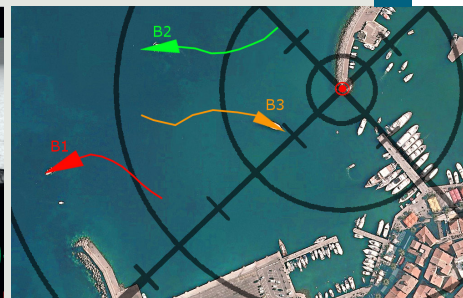
www.hgh-infrared.com



TECHNICAL



→ 360-degree site security



→ Tracks displayed on situation map

➤ **SENSOR**

Spynel-C 3000

Horizontal FOV	360°
Vertical FOV	5°
Vertical motorized tilt	-20°/+45°
IFOV	0.3 mrad (V) x 0.27 mrad (H)
Scanning speed	360°/2 sec (0.5 rps)
Detector type	LWIR 288 x 4 FPA
Cooling	Stirling microcooler
Image resolution	40 000 (H) x 288 (V)
Video output and control	IP
Dimensions (Dia x H)	300 mm x 615 mm
Weight	28 kg
Operating temperature	-40°C to +71°C
Protection standard	IP 66
Power supply	24V DC / 5 Amps
Detection range for	
human :	Up to 3 km
RIB :	Up to 6 km
ship :	Up to 20 km

► CONTROL AND DISPLAY SOFTWARE

Detection ranges according to Johnson criterium and STANAG standards

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