

# Spynel-S 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 30 Mpix. With its real-time imagery, Spynel can detect and track an unlimited number of objects night and day. With a large MWIR focal plane array, Spynel-S exhibits high performance, including in warm and humid regions.

## > EARLY WARNING OF ASSYMETRICAL 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, RHIBs, 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.

SPYNEL-S ROTATING SENSOR

# **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

→ Navigation and situation awareness



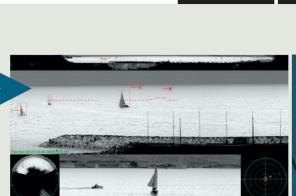
 $\rightarrow$  Detection of asymmetric threats

# **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

#### www.hgh-infrared.com





# $\rightarrow$ 360-degree site security

Spynel-S 6000

**WIDE AREA** 

Spynel-S

SURVEILLANCE SYSTEM

 $\rightarrow$  Tracks displayed on situation map

# SENSOR

# Spynel-S 2000

Horizontal FOV	360°	360°
Vertical FOV	20°	5°
Vertical motorized tilt	± 45°	± 45°
IFOV	0.6 x 0.6 mrad x mrad	0.15 x 0.15 mrad x mrad
Scanning speed	2 rps (360°/0.5sec)	0.5 rps (360°/2sec)
Detector type	MWIR 640x512 FPA	MWIR 640x512 FPA
Cooling	Stirling microcooler	Stirling microcooler
Image resolution	11 500 (H) x 640 (V)	46 000 (H) x 640 (V)
Video output and control	IP	IP
Dimensions (Dia x H)	385 mm x 580 mm	385 mm x 580 mm
Weight	< 40 kg	< 40 kg
Operating temperature	-40°C to +71°C	-40°C to +71°C
Protection standard	IP 66	IP 66
Power supply	24V DC / 10 Amps	24V DC / 10 Amps
Detection range for		
human: 🛉	Up to 1.5 km	Up to 6 km
RHIB:	Up to 3.5 km	Up to 10 km
ship:	Up to 18 km	Up to 24 km

## CONTROL AND DISPLAY SOFTWARE

Detection ranges according to Johnson criterium and STANAG standards

Get full advantage of Spynel sensor with Cyclope software appliance. Cyclope provides, at a glance, real time panoramic display (360° strip, Software functions: 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...



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