→ Night&day maritime surveillance

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, 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.

→ 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

→ 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
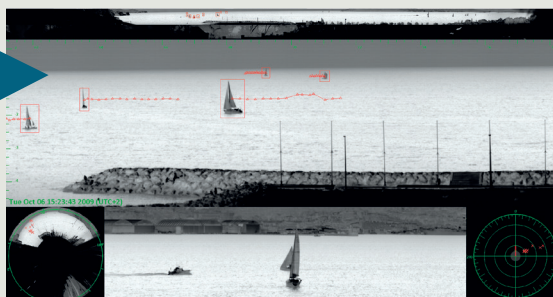
→ Navigation and situation awareness

Spynel-S

WIDE AREA | SURVEILLANCE SYSTEM

Spynel

ref: SPSnav-Len-ail

→ SPYNEL-S with V-LRF option

→ 360-degree site security

→ Tracks displayed on situation map

TECHNICAL ➤

➤ 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
RIB:	Up to 4.5 km	Up to 7 km	Up to 12 km
ship:	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