**POLARIS®**

**Shipborne system for maritime surveillance and defence**

**COMPACT AND ROBUST SOLUTION**

**Missions**

POLARIS® is a naval system covering the full spectrum of maritime surveillance missions and protection of State interests at sea in the EEZ.

Thanks to its ability to integrate all involved maritime and ground units into a common network, POLARIS® strengthens intelligence gathering means and strongly increases reaction and engagement capabilities.

Based on an open architecture, POLARIS® processes a wide range of data, including from remote sensors. The correlation of all the retrieved data, analysed through an innovative tool for abnormal behaviours detection, helps the officer to take quickly the most relevant decision and react accordingly.

**EASY TO INSTALL, OPERATE AND MAINTAIN**

**ADAPTATED TO NEW AND EXISTING SHIPS FOR MODERNISATION**

**OPERATED BY THE FRENCH NAVY IN INTERNATIONAL OPERATIONS (E.G. ATALANTA)**

**QUALIFIED FOR UNMANNED SYSTEMS INTEGRATION**

**your naval power**
**Maritime surveillance and intervention challenges**

In their littoral waters, States face increasing threats. They have to fight criminal activities (piracy, drug trafficking), enforce law at sea (illegal fisheries, irregular immigration) and fulfil maritime security missions (pollution prevention, search and rescue).

**Force-multiplier system**

- POLARIS® is an integrated system designed to perform traditional littoral waters protection missions but also capable of fighting asymmetric and air-surface threats.
- POLARIS® controls and coordinates (C2) force-multiplier assets operated from the ship such as unmanned systems or a helicopter. Each payload is remotely controlled and the retrieved information is displayed on each operator’s console at the bridge or the CIC room.

**A wide array of systems already integrated**

Based on an open architecture, POLARIS® is capable of integrating sensors and effectors ensuring control of the maritime and aerial space, such as:

- 2D/3D surveillance radar,
- optronic equipment,
- communication systems,
- guns,
- antiship missiles,
- short range air defence (Shorad) missiles.

POLARIS® also integrates information systems dedicated to naval operations planning, and Search and Rescue (SAR) alerts management.

**Exceptional land-sea connectivity**

- POLARIS® can be deployed on different types of ships, ranging from patrol boats up to LHD-LPD, and be adapted to required configurations.
- POLARIS®’ modularity allows easy deployment in shore-based centres to coordinate surveillance and detection from land.
Quickly identify illicit activities
Polaris®:
- helps operators to spot suspicious ships thanks to the integrated LSO (Littoral Surveillance Officer) module,
- alerts operators in case of suspicious behaviours through advanced algorithms for automatic detection,
- coordinates actions with all involved naval units and shore-based centres.

Unmanned systems integration

UAS physical and functional integration
- UAS (Unmanned Aerial Systems) integration enables the ship to extend its detection and identification range over the horizon,
- data retrieved from the UAS sensors are integrated into POLARIS®, therefore providing the commanding officer with an efficient support in operations management,
- UAS have been successfully deployed since 2011 on-board OPV 90 L’Adroit, during antipiracy missions (Atalanta).

Increased interoperability

Polaris®, ready for multinational operations at sea
Polaris® fosters interoperability between multiple organisations involved in maritime surveillance:
- sea and air units,
- coastal surveillance systems,
- administrations (SAR agencies).

Polaris® increases interoperability through the integration of all NATO tactical data links – L11, L16, L22 –, as well as NIDL®.

NIDL®
NIDL® is a TDL module integrated into Polaris® which enables a NATO or non-NATO navy to exchange many types of data. Real-time exchanges of tactical information include:
- tracks,
- EW interceptions,
- geographical and environmental data,
- orders.

NIDL® contributes to intelligence gathering actions by supporting, simultaneously with the tactical situation:
- files transfers,
- chat messages between operators,
- video transfers (streaming).
Credentials

POLARIS® is a sea proven system matching the most demanding requirements as demonstrated on OPV 90 L’Adroit during international antipiracy operations (Atalanta) but also during routine missions aiming at protecting State interests at sea (red tuna fisheries surveillance in the Mediterranean, irregular immigration prevention).

POLARIS® has been deployed on F791 Commandant L’Herminier and F797 Commandant Bouan corvettes.

POLARIS® has also been deployed on P400 La Tapageuse.

A POLARIS® module will be deployed on French Navy LHDs (Mistral family) to bolster their self-defence capabilities.