



SCORPIUS - N

EW AESA Naval System

ELL-8256SB



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Scorpius-N (ELL-8256SB) is a powerful, long-distance Electronic Countermeasure (ECM) system, with Electronic Support Measure (ESM) capabilities, for naval vessels. Scorpius-N effectively intercepts, analyzes, tracks and jams a wide variety of airborne, shipborne and shore-based radar systems.

The system is based on innovative Staring Multibeam AESA (Active Electronically Scanned Array) technology with Gallium-Nitride solid state amplifiers. This technology provides exceptional receiver sensitivity and Effective Radiated Power (ERP), far exceeding those of legacy EW solutions. Scorpius-N's enhanced performance makes it possible to detect and jam enemy radars at greatly extended ranges, including the radar sidelobes – significantly increasing the system's operational effectiveness.

The Staring Multibeam capability enables the system to form and direct multiple, narrow beams for reception and jamming. This allows Scorpius-N to simultaneously observe the entire field of regard, and target multiple threats at different directions with different frequencies and jamming techniques. The system features an extended elevation range, allowing it to target airborne threats at high angles above the horizon.

Scorpius-N comprises four conformally mounted panels on the central mast. The system minimizes the contribution to the vessel's Radar Cross-Section (RCS) by benefiting from the small size of the AESA array, its conformal installation, and the use of a single aperture for all ESM and ECM functions.

The system operates independently or is controlled via a command center with other vessels. It is driven by a pre-programmed Mission Data File (MDF) and can operate automatically.

KEY FEATURES

- Real-time creation of EOB (Electronic Order of Battle)
- Multi-beam, multi-jamming techniques
- Ultra-high sensitivity and high ERP
- Sophisticated jamming techniques using Digital RF Memory (DRFM)
- Intercept, track, and jam Low-Probability-of-Intercept (LPI) Radars and their sidelobes
- Minimal effect on vessel Radar Cross Section (RCS)
- Modular structure allowing for easy maintenance
- Extended elevation angles

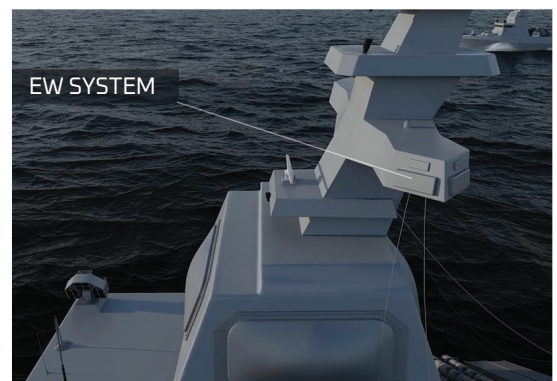


Illustration of conformally mounted EW System

