Scorpius-G

EW AESA Ground System

ELL-8256SB

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Scorpius-G (ELL-8256SB) is a powerful ground-based, state-of-the-art, long-distance RF Electronic Support Measures (ESM) and Electronic Countermeasures (ECM) system. Scorpius-G effectively intercepts, analyzes, locates, tracks and jams a wide variety of airborne and land-based systems including fire control radars, search radars, and SAR. The system is based on advanced and innovative technology featuring Active Electronically Scanned Array (AESA) with Gallium-Nitride (GaN) Solid State Amplifiers (SSA). The novel design provides exceptional receiver sensitivity and Effective Radiated Power (ERP) transmission, far exceeding those of legacy EW solutions. The enhanced sensitivity and ERP enable Scorpius-G to detect, distort and degrade enemy radars even through their side lobes, greatly increasing the system's jamming effectiveness.

The AESA technology allows for narrow, simultaneous multi-beam operation. Digital multi-beam forming provides unprecedented sensitivity and the ability to target multiple threats individually. The system can detect very low signals, simultaneously jam numerous emitters over its entire frequency range while covering a wide geographic sector and displays an Electronic Order of Battle (EOB). The system is driven by a pre-programmed Mission Data File (MDF) and can operate automatically.

The system can be mounted on a rugged vehicle atop a rotating pedestal. Multiple Scorpius-G systems can cover larger and more complex regions when deployed in network mode. Scorpius-G can play a key role in air defence against a variety of aerial threats

The system comprises:

- Set of transceivers covering a wide frequency range
- Control unit for processing and controlling all ESM & ECM operations
- Operator console for mission planning, maintenance, training, analysis, and debriefing

Key Features

- Spatial separation of threats through digital multi-beam reception and transmission
- Ultra-high sensitivity and high ERP
- Ability to track and intercept Low-Probability-of-Intercept (LPI) radars
- Multi-jamming techniques
- Real-time creation of EOB (Electronic Order of Battle)
- Sophisticated jamming techniques using Digital RF Memory (DRFM)
- Modular structure allowing for easy maintenance

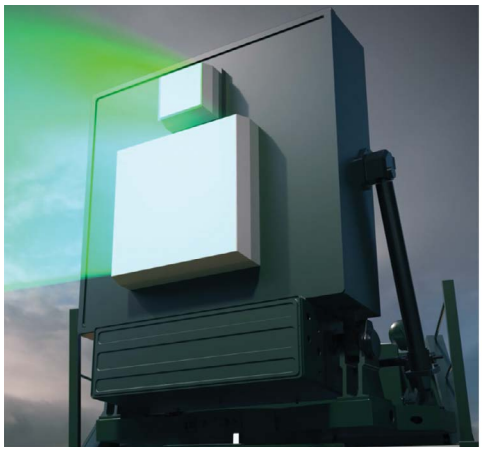

Illustration of Transceiver

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