



STAR-X

3D Surveillance & Threat Alert Radar
ELM - 2238X



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STAR-X (ELM-2238X) is a compact shipborne surveillance radar system specially designed for Offshore Patrol Vessels (OPVs). STAR-X is ideal for performing critical missions in the Exclusive Economic Zone (EEZ), such as counter terrorism, smuggling, and piracy, through to search and rescue and up to full open sea combat missions. The advanced radar enhances a combat ship's Situational Awareness Picture (SAP) with short to medium range coverage and high-resolution capability. STAR-X can also serve as the secondary search radar for larger naval vessels.



Operating in X-band and implementing AESA technology in elevation, the radar performs 3D simultaneous surface and air surveillance, offering superior detection, tracking and classification capabilities of surface vessels as well as aerial threats such as jet fighters, helicopters, and low RCS targets (i.e. drones and missiles). The system employs advanced algorithms to accurately discriminate threats operating in dense and cluttered electromagnetic environments. The radar employs solid-state transmit modules to achieve a compact lightweight design that adheres to Size, Weight and Power (SWaP). STAR-X can seamlessly integrate to the vessel's CMS and air defense system.

KEY FEATURES

- 3D simultaneous air and surface surveillance with fast target alert; Digital Beam Forming in elevation
- Configurable software-defined radar adaptable for emerging future threats
- Advanced ECCM
- Integrated IFF (includes interrogator and antenna)
- Supports surface gun fire control with splash detection
- Low Probability of Intercept (LPI) capabilities
- GaN (Gallium-Nitride) Solid-state transmitters
- High reliability with graceful performance degradation - Tx/Rx independent channels

SPECIFICATIONS

Description	Parameters
Maximum Instrumented Range	150 Km
Detection Range	Low flying attacking missiles: > 25 Km High flying attacking fighter aircraft: > 60 Km
Tracking Capacity	> 1,000 targets
Gun Fire Support	3 fire control windows
Elevation	Horizon - 70° (electronic stabilization)
Antenna Rotation	6, 15, 30, 60 (RPM)
Antenna Weight	< 350 Kg

