



# NAVAL R-ESM AND ELINT SYSTEM

ELL-8385



## Naval R-ESM and ELINT System

The ELL-8385 R-ESM/ELINT system equips naval vessels and critical maritime infrastructure with powerful Electronic Support Measures (ESM) and Electronic Intelligence (ELINT) capabilities. Employing the latest technologies and processing techniques, this advanced system intercepts, classifies, geo-locates and analyzes electromagnetic signals, including radar and other transmissions, over a wide frequency range.

With high sensitivity and Direction Finding (DF) accuracy, ELL-8385 is able to detect Low Probability of Intercept (LPI) emitters and continuously track targets with high reliability, forming a comprehensive passive Situational Awareness Picture (SAP).

ELL-8385 features a fully digital design with direct sampling over a wide instantaneous bandwidth. This enables quick detection of emitters, improves the ability to separate and distinguish between close and similar emitters – even in dense environments, and greatly reduces signal saturation effects.

The system is based on Software Defined Radio (SDR) technology, facilitating easy detection algorithm updates as new threats appear in the arena. AI capabilities assist in signal correlation, classification, and creation of the emitter library and Electronic Order of Battle (EOB). Signals are recorded for in-depth ELINT analysis.

With a modular, low Size Weight and Power (SWaP) design, the system allows for flexible installation on a wide variety of naval vessels, including compact and unmanned platforms.

### KEY FEATURES:

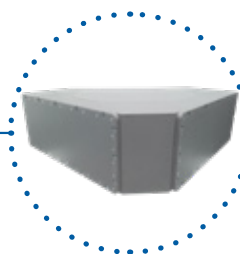
- 0.1 - 40GHz spectral coverage
- 360° instantaneous coverage
- Very high probability of intercept; no degradation in dense electromagnetic environments
- High DF & geolocation accuracy; DF both in azimuth and in elevation
- Integrated ADS-B and AIS data processing
- Real-time situational awareness and threat alerts
- Automatic, real-time generation of EOB and Situational Awareness Picture
- Seamless integration into the vessel's Combat Management System (CMS); alternatively - simple operation from a dedicated console with an intuitive Human-Machine Interface (HMI)
- Integrated training, playback and simulation within the operational system



Conformal 4-wall  
Installation 0.5-18GHz



Conformal 4-wall  
Installation 18-40GHz



Yardarms installation  
0.5-40GHz



Top of The Mast  
Installation 2-18GHz

