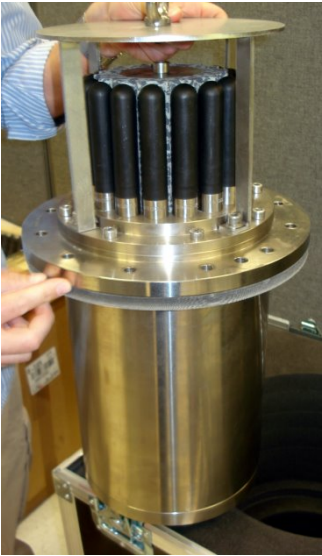


ISL1000-70 Intercept Sonar System



ISL1000-70, ISL-ISS, is a passive acoustic intercept SONAR system providing long-range detection, tracking, and real-time data analysis capabilities, employing COTS equipment in a compact and low-cost footprint. The intercept portion provides submarine crews with the capability to detect, track, and classify the full range of active sonar signals from ASW ships, weapons, and other submarines in order to make rapid tactical decisions. A full 360 degrees of bearing coverage is provided using a 16-element cylindrical hydrophone array, and frequency response up to 100kHz allows detection of ASW sonars, ASW weapons, side scan sonars, underwater communications, and fish finding sonars. Optional ranging hydrophones can be added to enable the range estimation of a target from a single intercepted pulse. The frequency analysis portion of the system supports detailed passive hydro-acoustic analysis and recording of signals from the intercept array and other sensors on the submarine. The frequency analysis system features a flexible and intuitive graphical user interface with extensive analysis and display tools.



Features Include:

- 16 Element Cylindrical Array (with proprietary baffling)
- 1 to 100 kHz
- High Resolution Maximum Likelihood Beamformer
- Hybrid Copper-Fiber Cabling
- Environmentally Qualified
 - Shock, Vibration, Noise, Temperature, EMC, Materials
- Embedded Multi-Core Signal Processing
- User Displays, including:
 - Waterfall
 - Bearing
 - Intercepted Signal Detection and Characterization
- Currently Operational
- Independent Operation with Command and Control
 - Interface Option Available to Facilitate Customization with Customer Command & Control System
- Extensively Tested in Simulation, Tank, Lake, Harbor & Sea
- Options include:
 - Ranging Hydrophones
 - Frequency Analysis System (FAS)

