RAFAEL
ADVANCED DEFENSE SYSTEMS LTD.

SeaCom™

Naval Communication Suite

Integrated Communication System for All Your Onboard Requirements

The SeaCom system is a state-of-the-art, IP-based ships and submarine communication suite.

SeaCom fully integrates internal communication (voice & data) and external communication systems (VLF, HF, VHF, UHF and SatCom).

SeaCom provides naval forces with a flexible, customized and secure system to facilitate real-time strategic decisions. Using cutting-edge VoIP and RoIP (Radio over IP) communication standards, the system is cost-effective and easily upgraded for future customer needs.

Designed for modularity and flexibility, SeaCom is a proven turn-key system that accommodates switching, distribution, and management.
The modular design is scalable for any naval platform: surface ships, submarines or patrol boats.

A redundant IP network and automatic reconfiguration management system ensures continuity of operations. SeaCom is able to sustain battle damage and withstand harsh environments.

Benefits

- Integrated internal and external communication supporting voice & data
- Uses leading industry standards such as VoIP and RoIP
- High availability - no single point of failure
- Efficient communication planning, management and control
- Management of multiple, secured voice sessions
- Full compatibility with RAFAEL's BNET Broadband IP Software Defined Radio
- Integration with IP telephony, sound-powered phone and Public Address systems
- Small footprint: Installation space, cabling, PoE
- Low power consumption
- Modular design with high scalability
- Simple and intuitive operation

Advanced Voice Terminals

SeaCom has several options for user Voice Terminals:

Voice Terminal (VT)
PoE IP65 touch screen terminal for under-deck users

Small Voice Terminal (SVT)
PoE IP67 terminal for above-deck & outdoor users

Android Voice Terminal
App for Cellphones

The VT software contains a user-friendly HMI that allows simple operation of the internal conferences, telephony calls, Public Address and external communication resources.

Each Voice Terminal user receives the required communication plan with access to the relevant communication devices and networks.

Key Features

VoIP/RoIP-Based Voice Communication

SeaCom handles all naval voice communications, external and internal, using a state-of-the-art VoIP/RoIP solution. The system converges different types of communication devices into a single system and operator terminal. It includes a powerful, built-in conference bridge that supports multiple simultaneous voice sessions for each operator and an unlimited number of internal and external radio conferences.

Naval Communication Manager

The Communication Manager allows (per user's security level) system setup and configuration of communication elements as well as remote upgrade of system software. The application monitors proper operation and identifies faults.

The managed communication elements include IP and non-IP radios, LAN switches and routers, operator terminals, Radio Control Gateways (RCGW) and others.

Naval Recording System

SeaCom's recording system records any type of onboard voice sessions. An easy-to-use debriefing application allows a synchronized play-back of any stage in the ship's communication history.

Cyber-Secured, Military Standard Voice Communication

RAFAEL, a leading provider of cybersecurity solutions, includes cyber protection mechanisms in all its products.

SeaCom includes integrated security measures to protect the system at all levels: network, OS, user authentication, application and voice session security.

Operational Benefits

- Improves communication efficiency by removing the need for multiple single-purpose systems.
- The use of industry standards increases the system's flexibility and reduces cycle time for future operational modifications and system growth.
- High-performance voice processing – noise reduction, echo cancellation and AGC algorithms.
- Ensures secure and protected network compatible with military requirements.
- Digital voice recording and debriefing application for any type of call.
- Mission planning including resource allocation