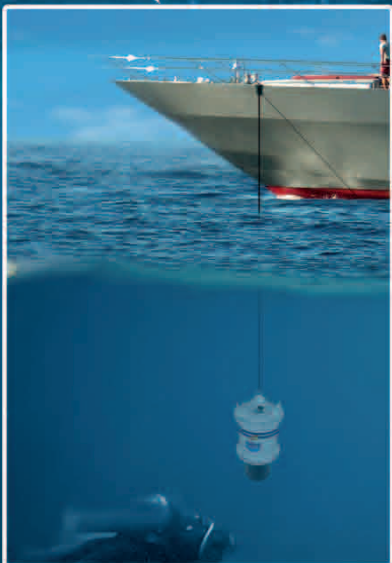
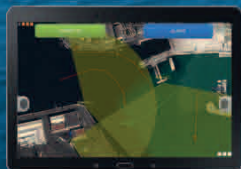


DDS 03

Intruder Detection System for Surveillance and UNDERWATER Protection of Critical Infrastructures and Ships



DDSS 03

INTRUDER DETECTION SONAR



Can be integrated into
Surveillance Networks



Easy manual 'over-the-side' deployment or davit-crane deployment.



INTRUDER DETECTION
For Maritime Security



SCENARIOS

DDS-03 is a modular and upgradable system capable of protecting any area, infrastructure or ship.



DDS-03
Intruder Detection Sonar

DDS-03 is a high-frequency active sonar specifically designed to protect harbours, anchored vessels and critical infrastructures against underwater threats. DDS-03 can be integrated with any surveillance system.



The System can be installed either in a ship, harbour piers or on the seabed.

Three Operation Modes



BENEFITS

OPERATION. Reduced Operator Workload.

When DDS-03 tracks a threat, it automatically generates an alert indicating the threat's position, distance, trajectory and type of contact, allowing the operator to cast a deterrent message to the diver or send a patrol to the area. The automatic detection, classification and tracking functions provide reliable alerts of multiple underwater targets with minimal false alarms.

COMPACT SYSTEM. Long range detection in a system which is easy to handle, deploy and use.

The DDS-03 system is composed of a sonar which detects threats and a surface unit responsible for the graphic display and system control. Each sonar unit provides a full 360 degrees of coverage, and is capable of detecting and tracking underwater threats. Multiple underwater units can be integrated into a common control unit increasing the detection range. Mobile device with supervision & interception functions is available to complement the system.

Easy integration and minimal maintenance.

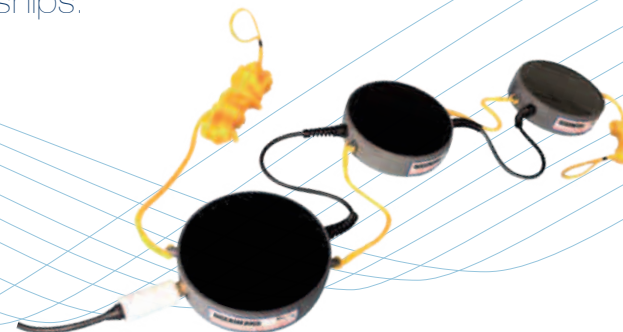
DDS-03 can be operated stand-alone or integrated into any Security Control Centre.

This technology, which we originally designed for military purposes, is currently being used for surveillance and protection of critical infrastructures and high-value ships.



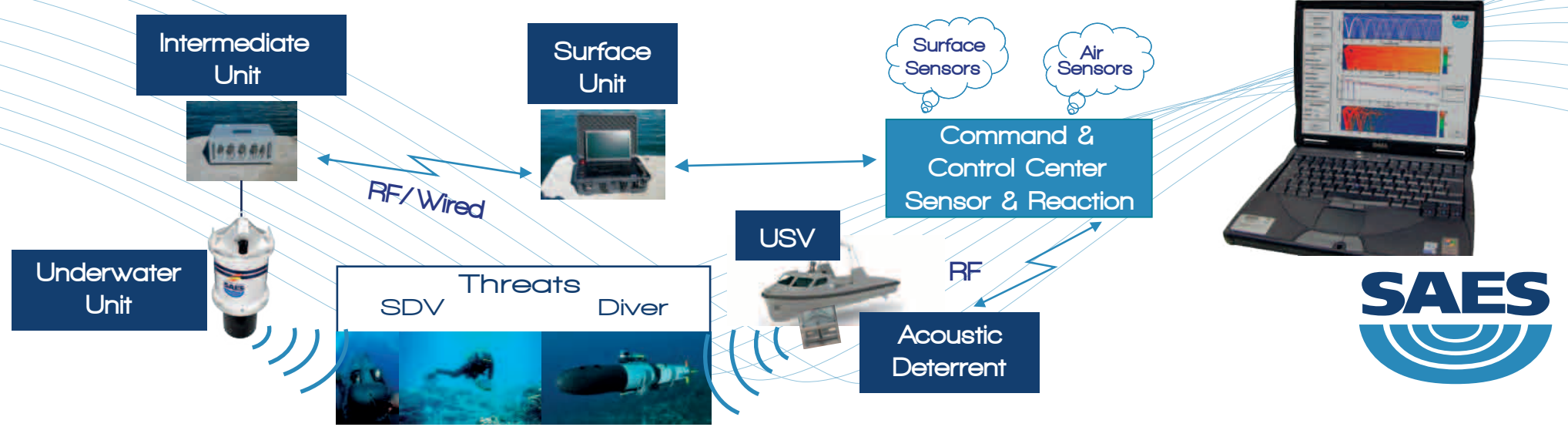
DES Underwater Deterrent System

The objective of the Underwater Deterrent System is to 'warn off' unauthorized divers that they are in a protected area and, if needed, to emit dissuasive acoustic signals.



KEY FEATURES

- Coverage** | DDS-03 covers 360° surveillance. To extend protection coverage extra sonar units can be added. Beam steering transmissions ensure detections at any deployed depth.
- Alarms, Tracking & Classification** | DDS-03 works 24 hours a day providing automatic alarms, tracking and classification. Reduced false alarm algorithms are based on Weight Of Evidence (WOE) levels.
- HMI & Displays** | DDS-03 HMI provides sonar displays and nautical charts. Simple and intuitive software. No specialist operator required.
- Dimensions & Design** | Lightweight units with compact dimensions and WIFI communication for easy installation on-board ships. DDS-03 complies with EMI, Environmental, Chocks and Vibration standards.
- Installation** | Different forms of deployment depending on the operational use and zones to be protected.
- Deterrent System** | A soft-kill reaction against any underwater intrusion. DES allows the operator to send underwater warnings. The deterrent system can be installed in a patrol boat.
- Mobile devices** | App for easy guiding the security forces to the threat position.
- Cost-Effective** | COTS-based architecture and modularity offer a cost-effective solution for underwater surveillance and the protection of large areas.
- Performance Analysis** | Software to calculate the probability of detection related to range, and the best depth to deploy the sonar.



Expert engineers
In-house technical knowledge
Specialists in Acoustics and Underwater Electronics



Ctra. de la Algameca S/N, 30205 Cartagena (Murcia) SPAIN
Tel: +34 968 508 214 - Fax: +34 968 507 713
saes@electronica-submarina.com
electronica-submarina.com