

DEWARS

Deep Water Acoustic Range System

DEWARS is a high-performance measurement system, which allows the measurement and analysis of the acoustic noise of a submerged submarine, maximising its survival capacity and maintaining its stealth.

Additionally, it allows for noise measurements of surface vessels.

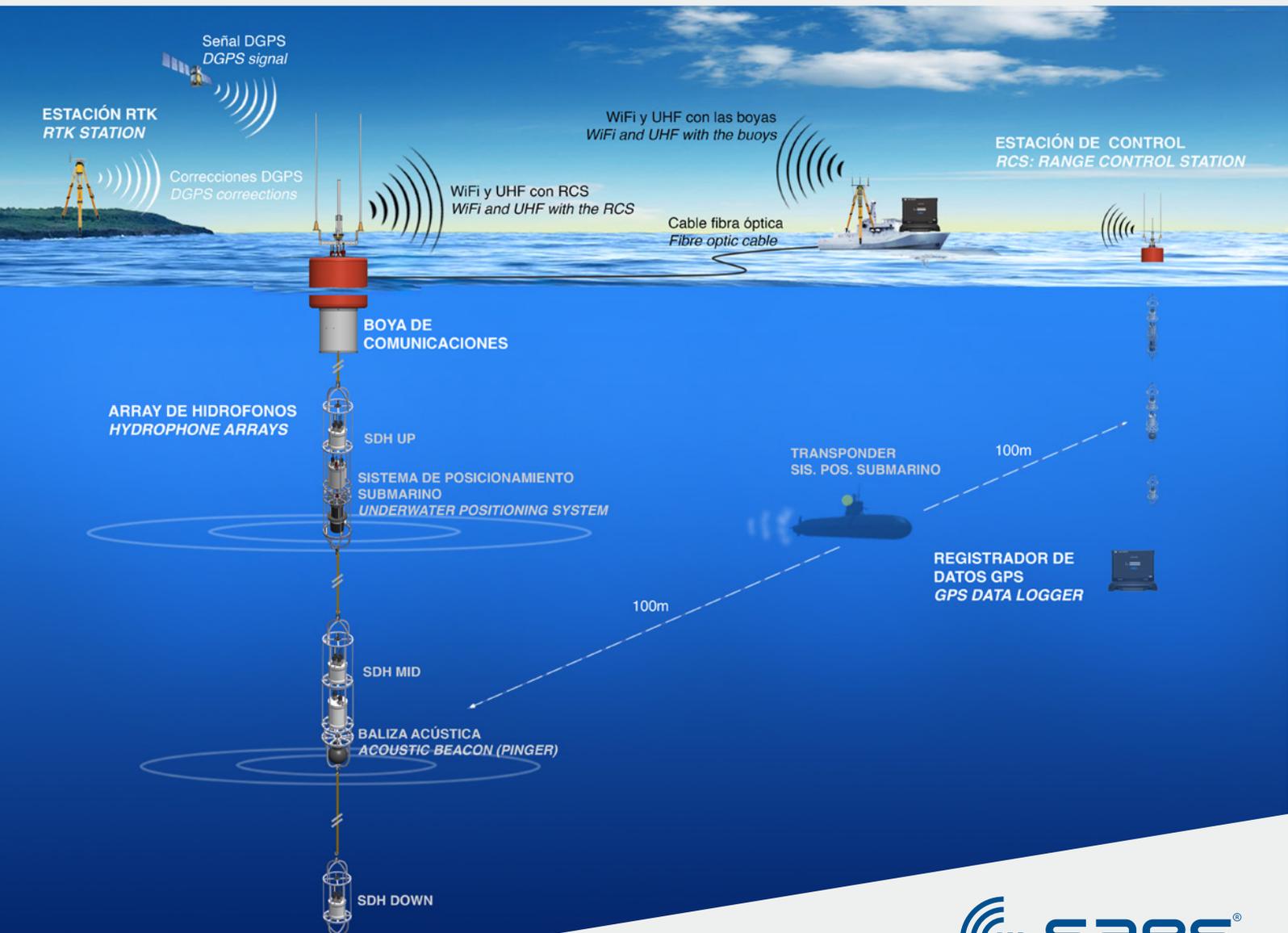
More than accuracy

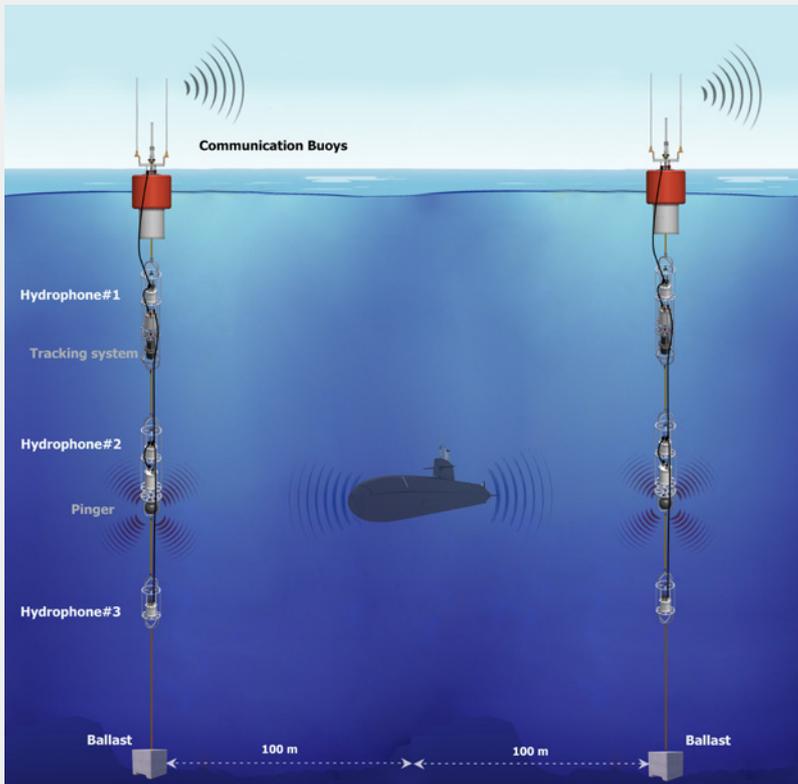
Precision and performance are the main characteristics that identify the DEWARS system. In addition, the acoustic analysis software allows the user to take full advantage of the acquired data, which makes DEWARS stand out among other similar systems.

Regularly measuring the submarine

The regular determination of the submarine's acoustic signature ensures its acoustic discretion before undertaking a mission.

The key to acoustic signature control is not only to obtain reliable measurements, but to make better use of the data, with the aim of increasing the submarine's discretion and meeting the mission's objectives.





Features:

- Acoustic signature acquisition at different depths.
- Measurement and analysis of Broadband and Narrowband signatures.
- Detection and analysis of cavitation and transients.
- Tools for comparing noise levels with historical data or between different vessels of the same class.
- Proprietary algorithms for noise analysis and control.
- Compliance with rigorous quality standards.
- Storage of raw data and creation of an acoustic signature database.
- Acquisition of the submarine's acoustic signature under different operational conditions and depths.
- Modular and scalable.

DEWARS Units

Communication Buoys

- Power supply for the hydrophone array
- WiFi or fibre optic cable link with the control station
- Large data storage capacity
- Data encryption (transmission and storage)
- CBIT and status information to the RCS
- RTK/D-GPS positioning
- High autonomy batteries
- Optimised design based on COTS elements

Hydrophone Arrays

- Composed of intelligent digital hydrophones (SDH, Smart Digital Hydrophone)
- High sensitivity and precision
- Bandwidth 10 Hz - 100 kHz
- Omnidirectional directivity
- Low electrical noise and high dynamic range
- Operating depth up to 200 meters
- Pressure sensor
- Tilt sensor
- Acoustic beacon (pinger)
- USBL underwater positioning system
- Optimised design based on COTS elements

RCS Control Station (Range Control Station)

- Control station based on COTS elements
- Easy installation on board or on land
- Intuitive user interface
- Configurable to use 1 or 2 buoy-arrays
- Access security

Used by Navies and Shipyards to:

- Acquire the submarine's acoustic signature under different operational conditions and depths.
- Analyse and store the acquired data.
- Detect unwanted noise sources, providing data to the Combat System for own noise cancellation.
- Compare the acquired data with historical data from the same vessel or with data from other vessels of the same class.
- Export acoustic signatures and provide measurement reports
- Provide a signature database for acoustic intelligence (ACINT) tasks.
- Provide data for acoustic signature reduction and for the design of future platforms.