



# SIMOAC



## Acoustic Monitoring System

In the last years has emerged worldwide an increasing awareness on the necessity of protecting the marine environment, giving rise to the development of a variety of standards focused on its preservation.

Since the energy level, including the underwater noise is one of the elements could affect negatively the marine environment, the effective accomplishment of these standards entails both the noise ambient measurement as the detection of the presence of marine fauna for its protection.

**SIMOAC is an advanced system to measure and record the marine ambient noise and to the detection and localization of cetaceans.**



SIMOAC

Specialists in Underwater Acoustics and Electronics  
[electronica-submarina.com](http://electronica-submarina.com)



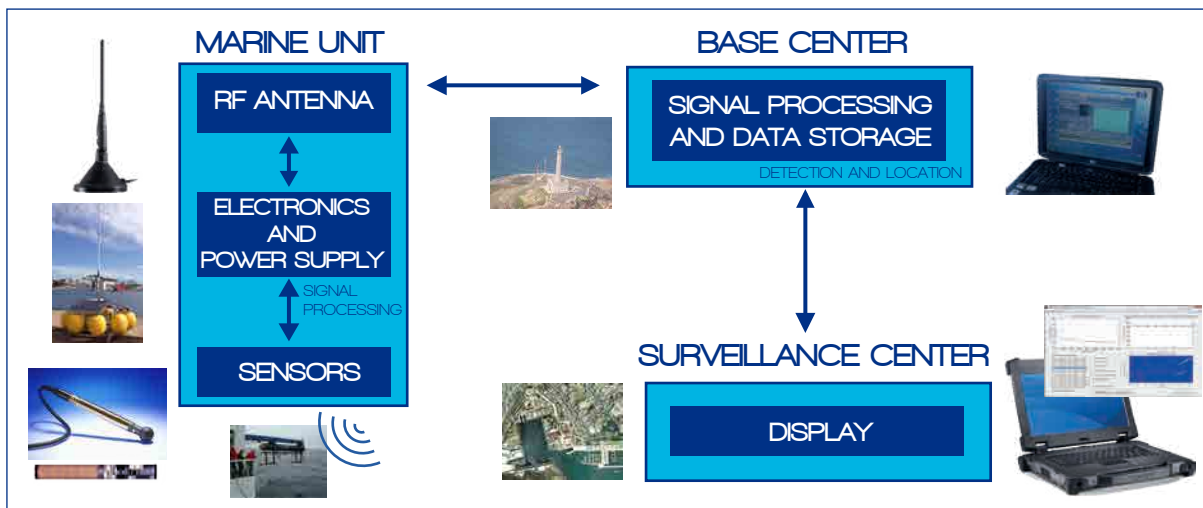
**SIMOAC** is aimed to the configuration of a net of sensors lodged in buoys to permit the coverage of large sea areas.

**SIMOAC** design facilitates the incorporation of new sensors apart from the acoustic ones and enables an easy deployment of the system.

**SIMOAC** embodies RF communications with a Base Centre, automatic processing and recording of the signals, and sending via internet of selected information to a Surveillance Centre.

### Applications

- Underwater ambient noise monitoring.
- Elaboration of underwater noise studies and maps.
- Surveillance of ship wrecks and underwater archaeological remains.
- Surveillance of marine reserves.
- Detection and localization of marine mammals.



### Main Characteristics

- Operationally tested at sea.
- Individual acoustic sensors or making part of arrays.
- Omni hydrophones calibrated up to 20 kHz.
- Capability of directional processing up to 3 kHz.
- Capability of new sensors integration.
- Automatic ANM processing (third octave and MSFD recommended frequencies).
- Automatic data recording.
- Automatic transient processing.
- RF communication with Base Centre.
- Internet communication with Surveillance Centre.
- Powered by renewable energy.
- Long-Term operational system.

