RAFOS

Sound Source (pretuned)

The developic sound sources are available with several frequency ranges suitable for RAFOS navigation and acoustic tomography.

The sound sources are factory tuned to customer specification. The frequency shift can be manually preset or automatically optimized to the configured transmission pattern.

RAFOS electronic unit and battery compartments are installed in our DW.TH titanium pressure housing.

Max. deployment duration of the standard configuration with one standard RAFOS sweep per day is 3 years.

The standard system time base is calibratable to better than 0.035 ppm. Also available is a precision version with Microsemi CSAC clock offering <0.0012 ppm.

As with all developic instrumentation, the sound sources also integrate seamlessly with our communication solutions, allowing full remote control and monitoring e.g. via our acoustic modems.

More details are available upon request.

Technical Specification

- Housing dimensions: D=330mm, L=2620mm
- Weight in air: 60-130kg (depending on configuration)
- Frequency range: 230-280Hz (according to customer's request)
- SPL: 180 dB re 1µPa at 1m
- Endurance: up to 4,000 transmissions, 1,200 transmissions (standard configuration)
- Max. operating depth: 6,000 m
- Deployment duration: 3 years (1 sweep per day)

Locations of RAFOS Sound Sources deployed in the Antarctic (Map courtesy O.Böbel, AWI, Bremerhaven)