VERSATILE MULTI-HYDROPHONE

Compact - Multichannel - Broadband

Marine Biology | Ambient noise | Marine Renewable energies | Shipping / Construction

Description

RESEA is a compact embedded recorder able to acquire up to four broadband hydrophones simultaneously

The acoustic recorder accepts both passive and pre- amplified active hydrophones. Its broadband analog inputs allow over 500 kHz with a dynamic range greater than 100 dB guaranteeing efficient signal to noise ratio.

The embedded digital signal processor allows high speed acquisition, filtering and storage.

In autonomous mode, data is stored whether on SD Card or hard drive.

In towed mode, data is stored then transferred via Ethernet.

Its power consumption is between 600 mW to 2 W in active mode and less than 1 mW in sleep mode.

RESEA can be programmed with a mission schedule including date of beginning, sleep and record periods in order to improve battery life. The configuration and monitoring are facilitated through web browser interface.

Advantages

- **4 synchronized recording channels**

- **Broadband high data quality**

- **Towed and autonomous modes**

- **Easy to Use**

Characteristics

- **Multichannel: up to 4 hydrophones imputs**

- **Broadband: from 3 Hz to over 500 kHz**

- **Wide dynamic: 24 bits recording**

Payloads & Option

- **Interchangeable hydrophone**
- **Temperature, Pressure, Conductivity**
- **Up to 2 TB memory on HDD**
- **Rechargeable batteries**
- **Embedded processing**
- **Low power mode & Low frequency module**
- **GPS**

4 synchronized recording channel

Channels are electronically synchronized and calibrated at +/- 0.1 dB.

Gains are electronically configurable on each channel between - 10 dB and +24 dB. High pass filters are also configurable.

Hydrophones are easily plugged in and out from the **RESEA** recorder.

Broadband high data quality

Eight recording frequencies going from 39 kHz to 1000 kHz are selectable. The RESEA can thus monitor noises and a frequency bandwidth going from 3 Hz to more than 500 kHz guaranteeing great dynamic and Signal to Noise Ratio (> 100 dB).

This high SNR allows recording to strong and low level noise simultaneously.

Raw data are collected in 24 bits and stored in .wav standard format, directly compatible with processing software such as ©Matlab, ©LabVIEW and ©PAMguard.

RESEA recorders are equipped with DSP running Linux allowing integration of real- time data processing.

Towed and autonomous modes

Light and compact, **RESEA** can be easily deployed by a single person.

Easy to Use

The web browser interface gives intuitive access to configuration of the recorder and to the recorded files.

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Dimensions

- **Diameter: 120 mm**

- **Length: 320 mm**

- **Weight: 5 kg in air & 2 kg in water**

Supplied hardware

- **Power: 6 or 18 Alkaline or Li-SOCl2D Cells + optional extension packs**

- **Storage: 128 or 256 GB SD Card, 1 TB SSD, 2 TB HDD**

POWERED BY SDA®