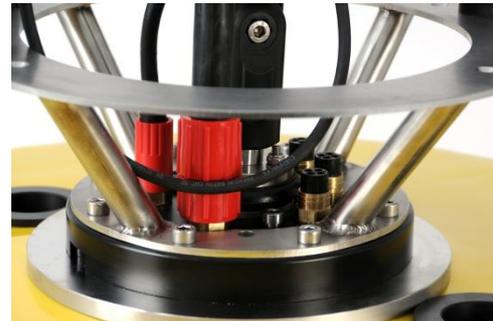


Wi-Fi REMOTE HYDROPHONE BUOY

Broadband – GPS – Multi-sensor



Description

BA-SDA14 is a Wi-Fi remote buoy equipped with passive acoustic recorder and giving access to the acoustic data and programming interface in real-time.

The BA-SDA14 possesses 4 broadband synchronized hydrophones inputs, GPS antenna and allows addition of other sensors that are perfectly synchronized with acoustic data.

The Wi-Fi antenna provides access to web embedded interface via any computer device. The user can stream data, launch and stop recordings up to 1.5 km distance from the BA-SDA14 buoy.

Embedded DSP allows implementing real-time data processing such as sound levels and thresholds detection, alarm or FFT graphs that can be displayed in real-time.

Equipped with rechargeable battery pack and high storage capacity, the buoy is able to run continuously. The BA-SDA14 is therefore programmable as an autonomous recorder with mission schedule and internal data storage.

Applications

- Real-time noise measurements
- Offshore piling & constructions
- Radiated ship noise
- Environmental assessment
- Detection / Tracking / Beamforming

Options

- Interchangeable hydrophones
- Up to 2 TB memory extension on hard drive
- RS232 serial port for external sensors
- **Live Monitor software (alarm threshold / detection) - NEW**
- **VHF - Long range remote connectivity - NEW**

Key Characteristics

- **Versatile:** Wi-Fi remote real-time access & autonomous mission modes
- **Multichannel:** 4 hydrophones inputs
- **Broadband:** 3 Hz up to over 500 kHz acquisition
- **Wide dynamic:** 24 bits recording
- **Easy to use:** intuitive embedded web interface

Float dim.: 60 cm diameter
Tube dim.: 16 cm diameter
Total height: 157 cm
Weight: 51 kg
Power: 900 Wh. rechargeable battery pack
Storage: 128 or 256 GB SD Card, 1 TB SSD, 2 TB HDD



- **Wi-Fi real-time remote access & GPS**

Wi-Fi proposes downloading speed up to 300 Mbps at 1.5 km distance. The GPS antenna allows real-time positioning of the buoy from the monitoring platform, ship or on-shore location. Thanks to high Wi-Fi downloading speed, user can access the monitoring functions of the buoy as stream acoustic and non-acoustic files in real-time to its computer.

- **Autonomous mode & rechargeable battery pack**

The BA-SDA14 can also be programmed as an autonomous recording system. Mission schedule such as start / end dates, sampling frequency, sensors and hydrophone recording channels can be programmed via Wi-Fi or Ethernet cable. BA-SDA14 can last over 12 days long in continuous recording with Wi-Fi ON. Wi-Fi and recording duty cycles can double (or even more) the deployment autonomy. Then the BA-SDA14 is easily opened and battery pack can be exchanged or recharged in several hours.

- **4 hydrophones inputs & broadband acquisition**

4 hydrophones can be connected simultaneously to the buoy system. The hydrophones can be either passive or pre-amplified and adapted with regards to the type of noise to record. Eight sampling frequencies are selectable from 39 kHz to 2.5 MHz. Sound data are collected in 24 bits and stored or streamed in .wav standard format, directly compatible with processing software such as ©Matlab, ©LabVIEW and ©PAMguard.

The BA-SDA14 can thus monitor noises on a frequency bandwidth going from 3 Hz to more than 500 kHz guaranteeing over 100 dB dynamic and Signal to Noise Ratio. Moreover acquisition channels are electronically calibrated at +/- 0.1 dB.

- **Easy to use - Easy to deploy - Easy to recover**

Thanks to small dimensions the BA-SDA14 buoy can be deployed and recovered quickly by a single person. The web embedded software interface is very easy to use and accessible with any computer using a web browser such as Google Chrome and Firefox. It is also very easy to connect and disconnect the hydrophone sensors.

Contact

- www.rtsys.eu
- info@rtsys.eu
- +33 (0)297 898 580



25 rue Michel Marion 58650 Caudan – France

RTsys activities

- Marine acoustics
- Embedded electronics
- Marine robotics
- Systems integration
- Customized R&D