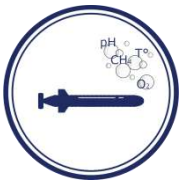
Versatile Micro-AUV

RTSYS Range Inter-compatibility

Acoustic Imagery



Water Quality Monitoring

Description

NemoSens is a compact autonomous underwater vehicle (AUV) designed for applications in the fields of Science and Industry.

Lightweight and affordable, its open LINUX architecture allow users develop their own navigation algorithm for greater flexibility and maximal use.

Mission coverage can be extended thanks to swarm technology and possibility to deploy multiples AUV. NemoSens is also compatible with all RTSYS products range such as diverheld systems or beacons.

Software functions and measurement sensors (within a 2-kg limit) can be added on demand, so get ready to extend your range.

Advantages

- **Micro-AUV (Less than 90 cm long)**
- **Cost effective**
- **Open LINUX architecture (MOOS – ROS support**
- **Several measurement sensors available**
- **Easy to deploy, recover and maintain**

Payloads & Options

- **Side Scan Sonar**
- **CTD**
- **O2, T°c, hydrocarbon sensors**
- **Magnetometer**
- **Multi-parameters sensor**
- **Camera**

Supplied Hardware

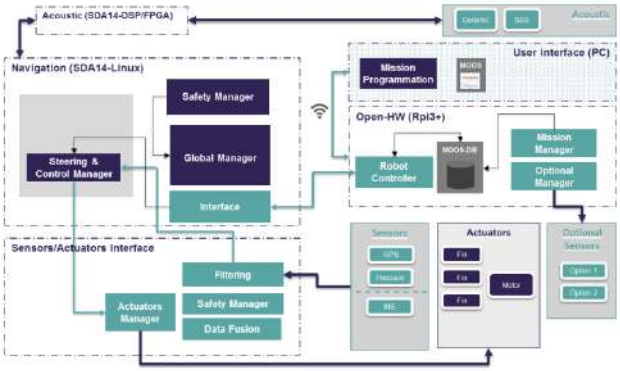
- **GEOsys**
- **GPS**
- **INS**

V.009

RTSYS – 25 rue Michel Marion 56850 Caudan – FRANCE – **T** +33 297 898 580 – **F** +33 297 898 872 – sales@rtsys.fr – **rtsys.eu**

NemoSens

GEOsys recovery system



Nemosens system architecture

NemoSens geared with RTSYS side-scan sonars

Side Scan Sonar

- 900 kHz nominal
- 0.3° horizontal beam width (Beam angles @- 3 dB)
- 50° vertical beam width (Beam angles @- 3 dB)
- Sonar Swath: 1 m to 50 m (3 ft to 160 ft) per side

Water parameter sensors

NemoSens has been designed to be easily deployed and recovered from a small boat by only one person.

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GEOsys

UHF Modem for recovery.

Integrated sensors

Integrated sensors depending on applications range from SSS to magnetometer.
Pinger, Long Rang UHF modem and strobe light for emergency recovery.

Open and flexible plateform

Nemosens is an open and flexible system, with a Linux operating system for user software implementation, it is an ideal plateform for a wide variety of development needs.

Focus swarm mode

Up to 7 micro-AUVs can operate and communicate together in swarm mode.

Navigation capacities

- **Depth: down to 300 m**
- **Speed: 2 to 8 knots**
- **Autonomy: > 10 hours**

Dimensions

- **Length: 900 mm**
- **Diameter: 124 mm**
- **Weight: < 9 kg**

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