Micro AUV – *NemoSens*

300 metres Depth - RT Tracking - > 10 Hours Endurance

NemoSens is a compact autonomous underwater vehicle (AUV) designed for scientific, industrial and defence applications. Lightweight and affordable, its open LINUX architecture allows users to develop their own navigation algorithm for greater flexibility and maximal use. Mission coverage can be extended thanks to swarm technology allowing deployment of multiple AUVs. **NemoSens** is also compatible with all RTSYS products range such as SonaDive diver-held systems or beacons.. Software functions and 3rd party sensors (< 2kg) can be added on demand, making it one of the most valuable and best performing micro AUV of its generation

Key Features

- Max. operational depth: 300 m
- Speed: 2 to 8 knots
- Endurance: more than 10 hours
- Operating T°: -5 °C / + 40 °C
- Sea conditions : Sea State 4

- Micro-AUV (Less than 90 cm long)
- Cost effective
- Open LINUX architecture (MOOS – ROS support)
- Accepts 3rd party sensors
- Easy to deploy, recover and maintain

Applications

- Side Scan Sonar
- CTD
- O_2, Temp, Hydrocarbon sensors
- Magnetometer
- Multi-parameters sensor
- Video Camera & DVL

Includes

- Geosys UHF remote control
- GPS
- INS

Designed for the user

NemoSens is a one-man portable AUV requiring no specific installation. It can easily be launched and recovered from a boat or from the shore. NemoSens can be tracked during its mission thanks to acoustic communication. On the surface, the remote control GeoSyS allows the operator to locate and retrieve the micro AUV, sending its position by UHF. Moreover, GeoSys can be used to send elementary commands such as mission- abort. It has open and flexible Linux architecture for user configuration, making it an ideal platform for a wide variety of development needs.

NemoSens embeds a native modem with RACAM sparse- LBL protocol. It provides high accuracy positioning based on data redundancy. RACAM is implemented into every RTSYS equipment, thus enabling full compatibility and communication between RTSYS equipment (COMET-MCM, SonaDive handheld sonar, Surface Communication Module and Positioning Relay Beacon). Up to 7 micro-AUVs can operate and communicate together in swarm mode.

Dimensions

Diameter: 124 mm **Length:** 895 mm **Weight:** <9kg

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