## **Search & Rescue diving**

- Real-time tracking of a diver or ROV, enabling precise control and immediate feedback.
- **Dive recording**; a complete dive log assists in post-mission analysis and documentation.
- Underwater navigation; providing divers with the capability to navigate independently underwater adds safety and efficiency.



## **Scientific diving**

- **Utilization of dive data**; dive data recorded with timestamps enables its use in photogrammetry and illustrative videos, among other applications.
- Navigation and communication; underwater navigation and communication capabilities increase safety and efficiency during the
- **Replication of research**; dive recordings and outputs are available for use in new research projects later.



## **SECURE YOUR FREEDOM**

**Please Contact** UWIS Oy, Kaarinantie 700, 20660 Littoinen, Finland info@uwis.fi +358 40 514 0565 www.uwis.fi







**SCIENTIFIC DIVING RECREATIONAL DIVING TECHNICAL DIVING COMMERCIAL AND MILITARY DIVING** 





# **UNIQUE UNDERWATER** LOCATION SYSTEM

UWIS is an underwater tracking, navigation, communication and data collection system.

The system utilises GPS location data, ultrasound communications and triangulation principle to pinpoint the divers' location and depth. The accuracy of the system is up to a few meters and with special arrangements it can be narrowed down to tens of centimetres.

Rugged and reliable UWIS is especially suited for rescue, military and other professional divers, who need to know their exact position and route.

It also enables efficient and safe control for diving groups. A set of buoys covers an area of 1000 meters across and the software is able to track up to 100 divers simultaneously.

### Systematic, supervised and traceable underwater operations

UWIS let's you know exactly where you are and where you are going – and takes you there.

Divers using UWIS are at all times aware of their location and bearings despite of currents or poor visibility - critical in SAR missions when there is no time to lose.

The real time navigation allows divers to move quickly close to surface and descent only near the operation area. No need to follow the bottom.

The system can be used independently or with the help of distance line for guide or communications. For example in training the lines are useful for double-checking the divers'

#### **Real time reaction**

The dive leader on the surface can react to changing situations by adjusting and adding waypoints in real time. The twoway communications link also enables messaging between divers and surface.

Location data helps to cover the search area efficiently as the divers can always carry on from the last point visited.

### Analyse, learn, improve

The data collected by the UWIS system makes debriefing and mission analysis straightforward and easy, as all the divers' actions can be traced and analysed for further learning.

In addition to SAR missions UWIS is well suited for charting, cable laying and repairs and vessel inspections. It is also very good for under ice operations.

## **UWIS PRO Case is a ready**to-go set for tracking your dive group

The PRO Case can be used out of the box with little installation needed. The UWIS Tracker software is preloaded on the laptop or can be downloaded from the shared user material.

#### Diver unit

The diver unit is attached on the diver's tank, above the ROV or near the display unit wirelessly. The communication between the diver unit and the buoys is carried out via

Connectivity: Bluetooth, Wi-Fi or inductive data transfer **Dimensions:** 105 x 115 x 94 mm.

#### Buoys

The buoys are equipped with GNSS sensors and connect via Wi-Fi. The diver locations are tracked with ultrasound using triangulation principle.

Height: 1,9 m applied, 1,0 m stored

#### Software

The UWIS Tracker program runs on the Windows 64 bit operating system, and does not require a special computer.



## **UWIS system functionalities**

- Tracking, number of divers simultaneously: 100
- Pre-set waypoints or POIs: 100
- · Dive data recording: Location in coordinates, time, depth, temperature etc.
- Location accuracy: Absolute: ±2,5 m, relative: ±0,5 m

- Max distance of the computer from the main buoy: 200 m
- Battery life, 14 h (li-ion)
- Wireless firmware update
- · UWIS is compatible with the underwater tablet, Alltab. In that, the UWIS navigation program enables the full utilization of the UWIS features.

- Depth accuracy: ±0,1 m
- · Maximum depth: 150 m
- · Diameter of monitored area: 1000 m

- Wireless charging 4/7 h
- 24/7 product support

# **GET IT NOW!**

The UWIS PRO Case is available directly from the manufacturer. Please contact: sales@uwis.fi or by phone +358 40 514 0565

Read more www.uwis.fi

### **UWIS's benefits for**

## **Commercial and Military diving**

Fast methods to find, mark and record the targets

Independence

Independence; the system can be integrated into other systems.

Robust

UWIS System works in difficult ultrasonic environments like quarries and ports.

## **Recrational diving**

- Getting the most out of the experience; the system allows groups to navigate more independently and share information afterwards.
- Increased safety; this applies to, for example, night and current dives
- Easy underwater navigation

Clear and easy navigation to points of interest and constant knowledge of the location and direction of other group members and the dive

## **Technical diving**

- New possibilities for diving; navigation and teamwork, for example, when diving with a scooter.
- Communication and awareness of others; especially helpful during long and deep dives in adverse conditions.
- **Recording of dives;** collected experience and material can be presented illustratively to others.

