

MOSS DEPTH SYSTEM

The MOSS depth system is a portable unit to determine the exact depth during a marine, diving or civil underwater project. The system provides real-time depth values from the waterline and from a reference level (NAP).

All data is logged on the MOSS unit for inspection reports or dive-logs.



The basic set consist of:

- MOSS unit with atmospheric sensor
- 50m cable with depth sensor at diver
- 25m cable for reference sensor (NAP)
- Density floater sensor

Optional

- Angle sensor with extra cable
- Controlbox for special functions

The diver depth sensor is used with a separate cable or can be connected to the umbilical (video) line when available (4-core input).

When umbilical is used a special cable must be used on the surface to get the signals from the umbilical to the MOSS logger unit.

The Control-box is used to store additional information on specific locations as depth and location-number.

DEPTH MEASUREMENT

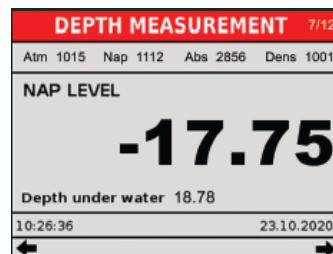
For the depth and NAP reference measurement the MOSS uses three absolute pressure sensors:

1. Sensor to measure the atmosphere.
2. Sensor just below waterline with fixed distance to reference level (NAP).
3. Sensor at depth (at diver or on object)

The atmospheric sensor is integrated inside the MOSS. The NAP reference sensor is placed just below the waterline with a fixed distance to the NAP reference level. The depth sensor is going down with the diver to determine the depth.

To calculate the correct depth also the density of the water is required. The density is measured with a separate density floater and is entered to the MOSS-logger software.

With clear screens the supervisor can operate the MOSS easily and no extra training is required. The setup time of the system is less than 15 minutes.



One of the multiple screens showing clear info.



Dive depth in relation to dive time

From the stored data a dive profile can be made by an additional software tool. (In development)

MOSS ADVANTAGES

- Digital measurement by means of a pressure sensor instead of visual observation or lead-line.
- Can be used in excavation pits and also underneath structures (tunneling).
- Depth check on submersion projects.
- Fast and easy to apply, direct from surface, dive-container or diving bus.
- Direct readings on MOSS logger.
- Readings are stored on USB stick for validation or dive-logs.
- Portable system with integrated battery supply.
- Angle measurement for check on walls or constructions.
- Pressure sensor can be connected to existing umbilical of diver.
- Control box for extra options
- Clear software screens

Save time and personnel by using the MOSS system for your depth surveys due to the pragmatic design and clear functionality.



Excavation-pit, with GEWI-anchors and LEKA-piles

All anchors and piles were measured by divers when excavation-pit was full of water. When water was pumped out a total station was used for a reference measurement. Result were spot on and exactly the same.

TRACK RECORD

- 2018:** In-house system for testing
- 2019:** First 2 systems sold, rental projects
- 2020:** Improved software
More robust sensor protection
Several rental projects
5 systems sold
- 2021:** Added angle sensor
Added dive-log
Added extra software functions
Several rental projects
18 systems sold

Most of the systems are used 24/7 on civil diving projects. None of the systems has returned due to any mal-function or defect.

Projects where system is used (examples):

- Blankenburgtunnel A24, Rotterdam (NL)
- Groene boog A16, Rotterdam (NL)
- Holland tunnel, Vlaardingen (NL)
- Singelgracht, Amsterdam (NL)
- Entree, Amsterdam (NL)
- Nieuwe Sluis, Terneuzen (NL)
- Herepoort, Groningen (NL)
- Hauptbahnhof, Berlin (DE)
- Levvel, Afsluitdijk (NL)

MOSS DEPTH DETAILS

More info: check QR code



Rugged case	: 305x270x194 mm
Weight	: Approx. 4.5 kg
Battery	: 90 Wh (approx. 20 hours)
Charge	: 1 x input 12 Vdc
Software	: Display and store data

DIGITAL DIVE SYSTEM

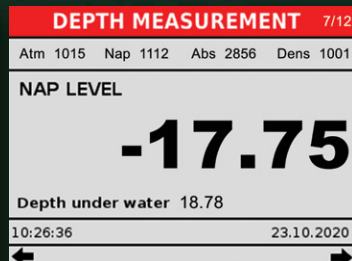
CONSTRUCTION **DEPTH** AND **ANGLE**



- Accuracy +/- 1 cm.
- Easy to install and operate.
- Data storage on MOSS unit.
- Works in tunneled situations.
- Only operator and diver are needed.
- Direct reading possible in NAP, NN or other national reference value.
- Depth- and Angle-sensor can be used together on existing umbilical.
- Changes in atmospheric pressure or water level are eliminated.



Compact system



Large display and logging



Easy and fast anchor info



Angle measurement