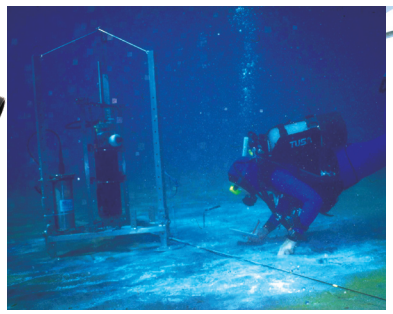
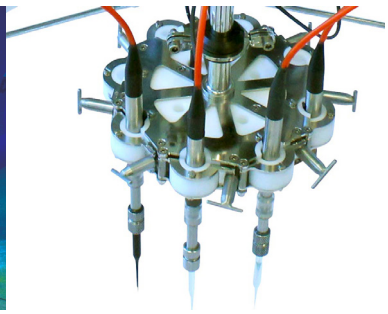
UNISENSE

ENABLING

MICROSCALE

RESEARCH

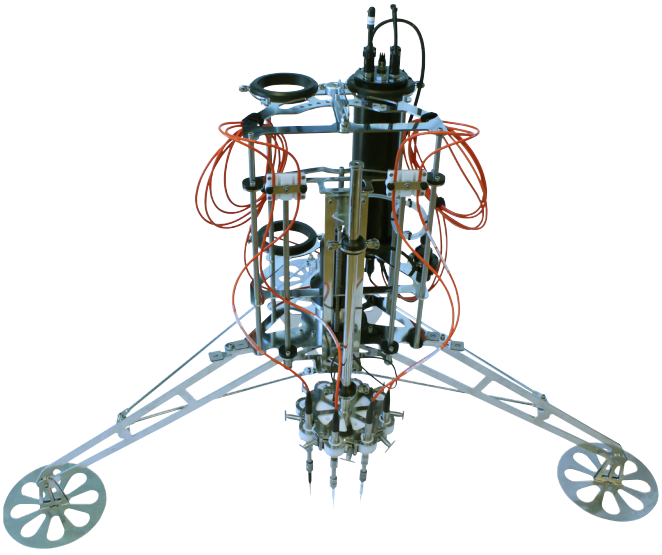


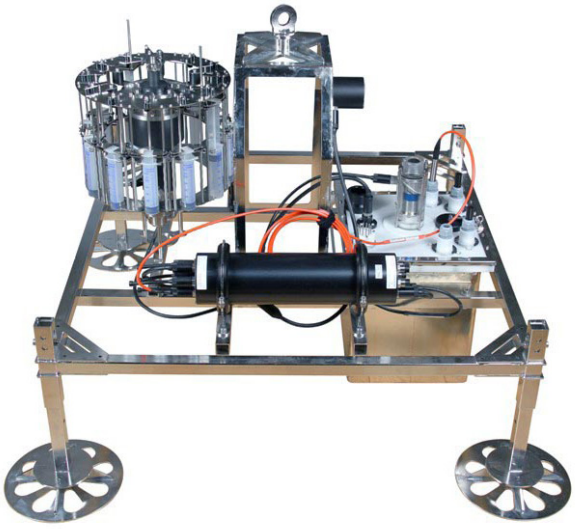


Unisense shallow water instruments

For microsensor sediment profile measurements and benthic chamber incubations

In situ instruments are excellent tools for long-term studies with continuous and automated measurements in the field.
The Unisense shallow water instruments can be deployed to up to 300 meters depth and can stay deployed for up to a month, depending on the temporal resolution of measurements. The instruments are easily programmed via intuitive PC software and runs completely autonomously. The powerful Field DataLogger platform allows for communication and synchronization of data from multiple external devices including optodes, CTD's, light sensor and more.
The MiniProfiler is designed for 1D or 2D profiling with a spatial resolution down to 50 µm. The MiniChamber Lander is for chamber incubations, as well as water sampling or chamber injections. Many of our in situ instruments are customized to fit specific customer requirements depending on the scope of research.





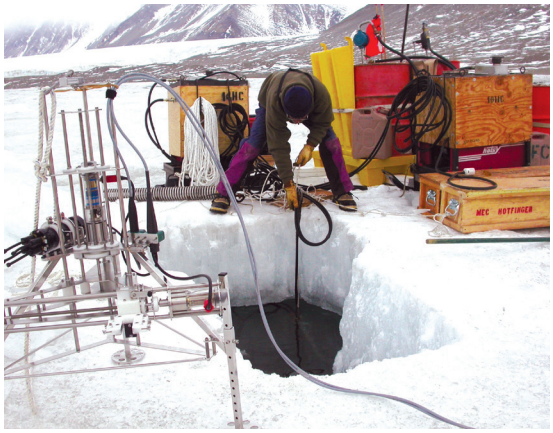
MiniProfiler MP4/8 System

- Portable unit for shallow water sediment profiling studies
- High spatial resolution (50 µm)
- Four microsensors - optional 8
- Autonomous operation
- Profiles in 1D or 2D
- Sensors available: O_2, H_2, N_2O, NO, pH, H_2S, Rd, Resistivity

MiniChamber Lander System

- Portable unit for shallow water benthic chamber incubations
- Syringe sampling optional
- Four sensors
- Autonomous operation
- Sensors available: O_2, H_2, N_2O, NO, pH, H_2S

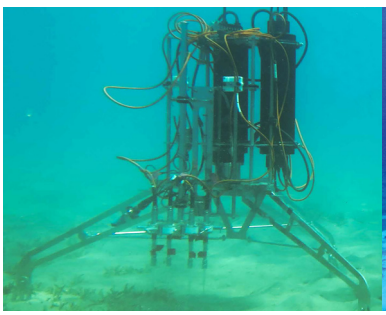
The electrodes of shallow water instruments are all equipped with in situ amplifiers which amplify the minute electrode signal already at the electrode base making the signals less sensitive to electrical noise. The amplifiers thus function as miniaturized pA- or mV-meters.
In situ amplifiers are also used on the scuba diver-operated Unisense UnderWater Meter System, and sensors are thus easily interchangable between the two instruments. The new and significantly improved in situ connector system facilitates easy dismantling and assembly and is also compatible with the Unisense UnderWater Meter .

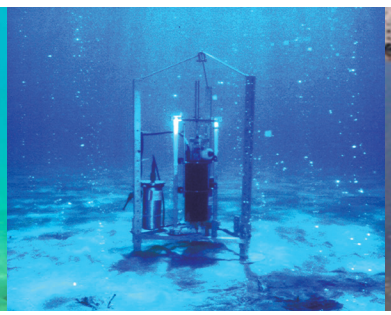


MiniProfiler at work in perennially ice-covered lakes of Antarctica (Photo by K. Vopel).

Shallow water instrument specifications. For sensor specifications please see our website

	Mini Profiler	Mini Chamber Instrument
Waterproof depth	300 m	
Frame material	Stainless steel	
No of channels (electrodes)	4 - optional 8	4
In-Situ Amplifiers	Yes	
Cable connections	SubConn	
Supply voltage	12 V	
Logger, Memory	8-32 GB, 200 million sampling points	
Logger, Sampling Rate	10 Hz	
Spatial resolution	Absolute 250 µm - stepping down to 50 µm	-
2D profiling	Optional	-
Chamber area	-	Approx. 900 cm^2
Syringe sampler		Optional
number		12 (options available)
volume		100 ml (options available)





FOR MORE INFORMATION:

WWW.UNISENSE.COM

INFO@UNISENSE.COM