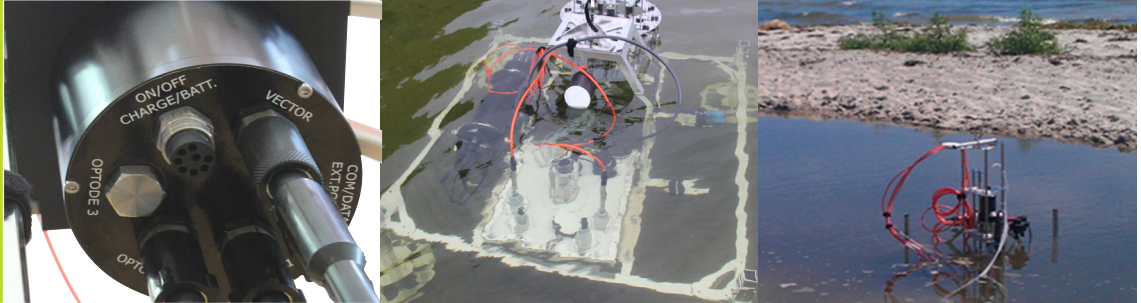


ENABLING
SCIENTIFIC
RESEARCH



Field MicroOptode Meter

Take MicroOptode technology under water!

The new Field MicroOptode Meter with fully submersible housing and fiber connector for shallow water. Get the benefits of temperature compensation and salinity compensation using oxygen microoptode technology.

- Waterproof to 30 m
- 2 optode channels
- Sample optode data with up to 10 Hz
- Individual temperature compensation of each channel
- Latest optical fiber technology
- Simple two-point calibration
- Operated via Field Microsensor Multimeter or Field DataLogger

Unisense Field MicroOptode Meter offers you to add optode technology to a range of our field systems including the **MiniProfiler MP4/8 System** and the **Field MicroProfiling Systems**.

Exploiting the latest near infrared optical technology for improved performance, better signal to noise ratio, and faster response times, the Field MicroOptode Meter allows you to add profiling or bulk measurements with MicroOptodes to your field system.

Connection to our field systems is via direct serial communication. The user interface is designed for easy two-point calibration of the sensors.



FIELD MICROOPTODE METER		
GENERAL SPECIFICATIONS		
Channels	2 optode channels, 2 temperature channels	
Sensor power supply	Powered by Field DataLogger or Field Microsensor Multimeter serial port	
Comm. interface	RS-232, 115200 baud	
Depth Range	30 m	
Temperature, operation	0 °C to 50 °C	
Temperature, storage	-20 °C to 70 °C	
Default sampling rate	1 Hz	
Max. sampling rate	10 Hz	
MECHANICAL SPECIFICATIONS		
Dimensions	210x140x60 mm	
Material, housing	POM + Aluminum 6083-T6	
Weight	App. 1.4 kg	
CALIBRATION		
2-point calibration	Via Web interface on Field DataLogger or Field Microsensor Multimeter Salinity and fixed temperature calibration stored on the Field MicroOptode Meter	
OUTPUT SPECIFICATIONS		
Output values	O ₂ concentrations	µM Temperature compensated
	$\Delta\phi$	°
	Temperature	°C
MICROOPTODE PROPERTIES		
MicroOptodes	50 µm, 230 µm, 430 µm	
Plastic shaft protection diameter	11 mm	
Connector	Underwater connector	
Waterproof	Yes	
Pressure tolerant sensing tip	Yes	
Guaranteed lifetime	1 million datapoints	
Expected lifetime	+ 3 years in darkness at room temperature	
Response	Linear when calibrated	
Sensor oxygen consumption	No consumption	
Response time	t_{90} : 50 µm < 2 sec, 230/430 µm < 10 sec	
Measuring range	0-100% O ₂ (0-45 mg/L), optimal 0-50% O ₂ (0-23 mg/L)	
Detection limit	0.02% (0.01 mg/L)	



FOR MORE INFORMATION:
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