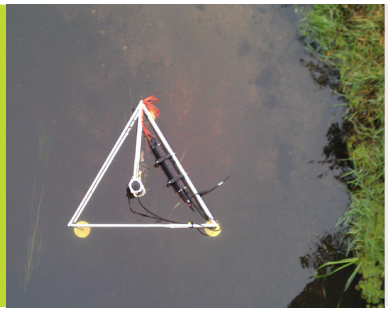
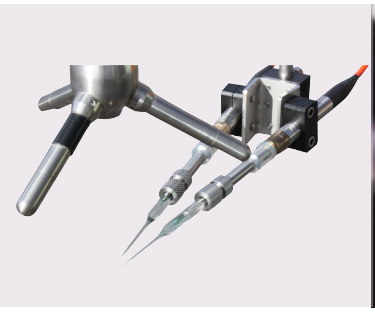
ENABLING

MICROSCALE

RESEARCH





Unisense Eddy Covariance System

Optical or Electrochemical microsensors? Now you get both for your benthic flux studies!

COMING SOON! Unisense Eddy Covariance System is a next generation system offering you hassle free instrument deployment with your choice of either ultra fast MicroOptodes or electrochemical microsensors - or even both at the same time.

Plug *'N* **Deploy**

- 1 core unit for MiniProfiler MP4/8 and Eddy Covariance Systems
- 2 channels for fast MicroOptodes with fast temp compensation
- 4 channels for fast microsensors
- Fast data download and easy data export
- Full Berg EddyFlux data analysis software
- Complete system

The Eddy Covariance technology is becoming a standard methodology for estimating benthic fluxes in aquatic systems. Compared to traditional methods, eddy covariance allows true in situ and non-invasive studies of e.g. permeable sediments, seagrass beds or coral reefs.

Bringing two oxygen sensing technologies together

Adding our Field MicroOptode Meter to the Eddy Covariance System gives you the option of choosing between two oxygen sensing technologies or use both at the same time. This gives you the better of two worlds and peace of mind for the future.

Our System

Based on many years of experience in building and constructing sensors and amplifiers, Unisense ensures the signal quality from the fast responding sensor all the way to your stored data.

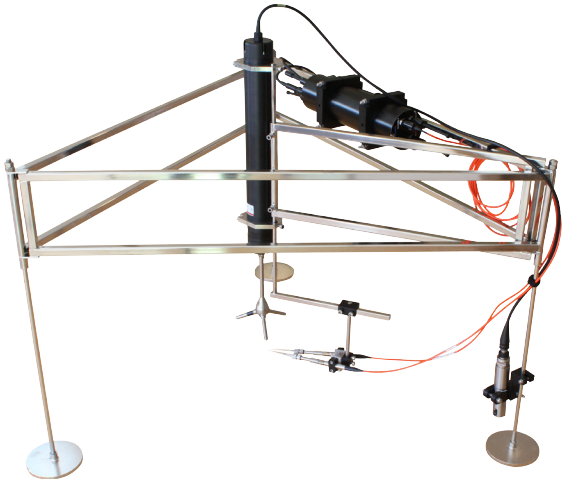
Your System

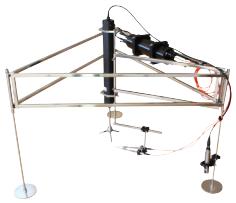
Depending on your application, you have a choice of a heavier ROV manageable frame or the lightweight Berg Frame. The Field DataLogger gives you 4 high speed channels, full system integration, and is customizable for serial devices. Adding the Field MicroOptode Meter gives 2 fast optode channels in addition, and utilizing our fast temperature sensors enables fast temperature compensation. LAN support allows you to study near real-time data and, via PC interface, to configure and adjust system settings.

One Solution

The Unisense Eddy Covariance System is providing a full, but customizable, solution for your eddy covariance flux studies. The data can be analyzed through the complementary and peer-reviewed Berg EddyFlux software or exported to CSV files for further analysis.

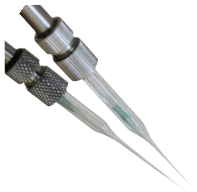
The Field DataLogger is the core electronics in all of our Field Systems, giving you one control unit for MiniProfiler MP4/8, Eddy Covariance System and more!





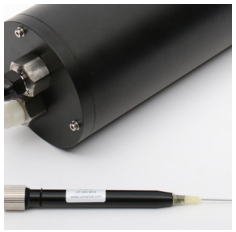
System:

- Proven technology from sensor to logged data
- Complete system and full data integration
- Choice of multiple frames
- 20 hour battery time extendable by extra battery packages
- Rated to 300 m – optional rating to 4000 m depth



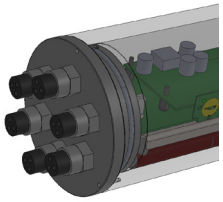
Electrochemical Microsensors:

- Optimized fast responding oxygen sensors for eddy covariance
- Reponse times <0.4 seconds for optimal flux data capture
- Oxygen, Sulfide, Temperature and Conductivity sensors available
- Reference optode for signal normalizing over time
- High-end EC amplifiers
- True and unfiltered signal path
- Exceptionally low noise floor below 50 fA



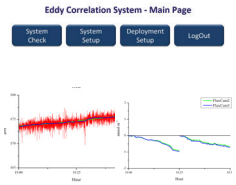
MicroOptodes:

- Latest optical fiber technology utilizing near infrared dyes
- Response times down to 0.3 seconds
- 2-channel Field MicroOptode Meter
- 10 Hz default sampling rate
- Fast temperature compensation by temperature microsensor
- Individual channel setup and configuration



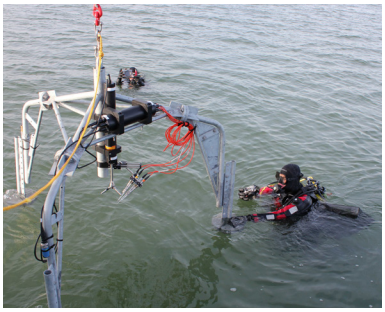
Datalogger:

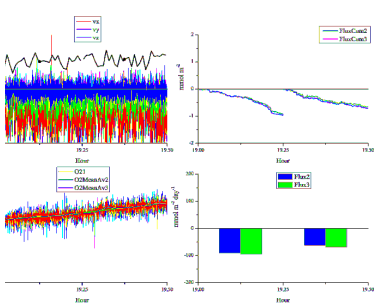
- Core unit for both MiniProfiler MP4/8 and Eddy Covariance Systems
- Full ADV support incl. burst settings and bottom echo
- Customizable for serial devices
- Complete data telegram storage from external devices
- Network enabled logger with ultrafast data download of only minutes
- 4 high speed 16-bit EC channels with internal sampling of 10 kHz



Software:

- Easy and intuitive configuration via PC
- Near real-time data view and on-the-run analysis
- Easy data export
- Berg EddyFlux data analysis software included





FOR MORE INFORMATION:

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