UNISENSE

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Field Opto UniAmp for Eddy Covariance

New cost-effective stand-alone solution

- Direct Nortek ADV integration
- Signal synchronization with ADV
- Superior Optode technology
  - Ambient Light Filtering
  - Bleach protection
- Optional robust background oxygen measurement
- Temperature compensation
- Ultra-fast sensor response time
- Easy setup and calibration
- Cost-effective Eddy Covariance solution

The 2 channel Field Opto UniAmp integrates directly with the Nortek Vector (Vector configured with analog input and Sync out harness). The vector provides full datalogging of all velocity data and the 0-5V scaled (0-500 µM O_2) from the two optical oxygen sensor channels.

The Sync signal controls the oxygen measurements. This ensures correct time stamp of data and is essential for data analysis. The Field Opto UniAmp optoelectronics is tuned to provide 16Hz continuously reading including real-time background referencing and full temperature compensation. Extended sensor life is ensured by lower light intensity reducing bleaching of the sensor dye while optimizing signal-to-noise readings.

The Field Opto UniAmp is powered by the Nortek ADV, or by our full ocean rechargeable battery that can power both the Field Opto UniAmp and the Nortek Vector.

Setup and calibration is done via a PC software tool. The Field Opto UniAmp is powered by the Nortek ADV or our separate battery pack, and deployment with high frequency reading is initiated by the sync signal from the vector.

The Field Opto UniAmp can be deployed as stand-alone with a Nortek ADV, as a part of our full Eddy Covariance System, with our Field DataLogger Mini our other profilers and landers, as well as connected to other third party CTD's, Loggers or platform.