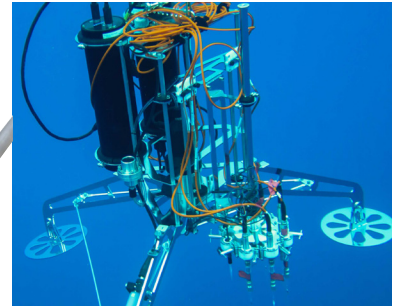
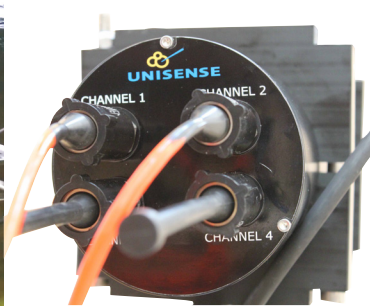
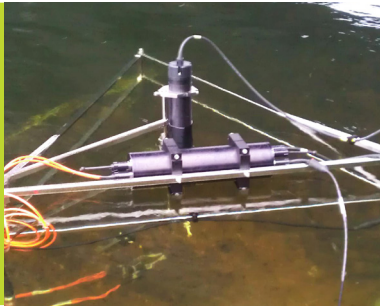


ENABLING
MICROSCALE
RESEARCH



Unisense Field DataLogger

One powerful solution for your field studies – exploit it!

- Powerful and customizable data logger
- Support for ADV's, CTD's, wave/tide and other RS-232 devices
- Motor control enabled
- Complete data telegram storage from external devices
- Network enabled logger with ultrafast data download
- Up to 8 galvanic sensor channels

The Unisense Field DataLogger is a powerful platform for the existing and coming Unisense portfolio of Field Systems. You will find it with dedicated firmware in the Eddy Covariance System², the MiniProfiler, the DeepSea Lander and future products.

The Field DataLogger platform allows for communication and synchronization of data from multiple external devices including optodes, water samplers and lights sensors, giving you a unique array of opportunities and possibilities in your field studies. It can be rated to 6000m depth and powered by external power and extra battery.

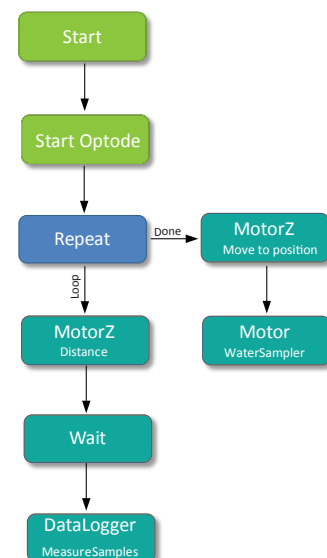
Controlling the Field DataLogger is simple. An intuitive user interface with a simple 'Drag and Drop' tool allows easy programming of advanced sequences while the remote user interface allows very simple programming and display of real time data. It also handles sensor calibration, system check and deployment settings. Operation and data collection can be completely autonomous or controlled by the user through the SensorTrace Profiling software via an up to 70 m cable connection. Adapting the system to your needs, combined with the wide selection of Unisense sensors and electrodes, gives you a powerful tool to meet your future research demands.

Remote User Interface			
Sensors		Motors	
Channel 1	0.07 mV	Channel 2	-0.25 mV
Std. dev.	0.02 mV	Std. dev.	0.03 mV
Field / Field	880.43	Field / Field	Not calibrated
Channel 3	-0.06 mV	Channel 4	0.12 mV
Std. dev.	0.03 mV	Std. dev.	0.03 mV
Field / Field	Not calibrated	Field / Field	Not calibrated
FOM 1.1 O2	9.30 °	FOM 1.1 Temperature	-
Std. dev.	0.40 °	Std. dev.	-
Oxygen	Not calibrated	Temperature	-
FOM 1.2 O2	10.15 °	FOM 1.2 Temperature	-
Std. dev.	0.15 °	Std. dev.	-
Oxygen	Not calibrated	Temperature	-

Galvanic channels / Channel 1 / Field

NAVIGATE USING KEYBOARD: MOVE = [ARROW KEYS], START = [r], STOP = [q], SELECT = [ENTER], SHUTDOWN = [s]

Intuitive web interface for system setup and check



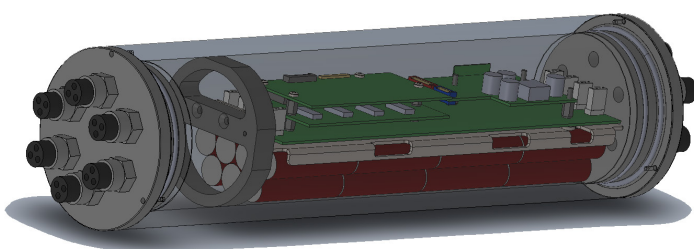
Simple 'Drag and Drop' programming tool

SPECIFICATIONS

Housing	12,4 cm OD x 43,2 cm
Volume	5,22 L
Weight - Air (Water)	9,5 (4,25) Kg
Operating temperature	-10 - 60°C
Depth range	0-300 or 0-6000* m
CPU (Memory)	600 MHz (8-32 GB)
BATTERY CAPACITY	13 Ah @ 7.4V
Deployment time	up to 20 h @ 25C
EXT. BATT. CAPACITY	2 x 13 Ah @ 7.4V
Deployment time	68 h @ 25C
DIRECT POWER SUPPLY	Yes
POWER SUPPLY FOR EXTERNAL EQUIPMENT	2 x 12V/1A or 2 x 24V/0.5A (one at a time)
ANALOG-TO-DIGITAL CONVERTER	
Resolution	16 bit (2-3 extra by oversampling)
Logging Speed	>1KHz
Channels	4/8**
Input Range	±5 V default (±1V, ±2V, ±10V optional)
UNISENSE MICROSENSOR AMPLIFIERS FOR pA AND mV SENSORS	
Response time $t_{90\%}$	< 40 ms
Integrated input noise current (peak - peak)	0.5 nA, 0.5µV
OTHER SUPPORT	
Nortek Vector	Fully implemented
Optodes - up to 3	AAI serial protocol implemented
UART Communication (3xRS-232/1x485)	4 configurable
EC sensors for salinity and temperature	Yes
CTD (conductivity, temperature and depth)	Yes
Light sensor	Yes
I/O channels	5 - 15
COMMUNICATION WITH USER	
Ethernet point-to-point	PC control software (real time)
Ethernet Webserver	Control via Web browser, Remote user interface
Ocean Network Hookup	External power and LAN enabled
MOTOR CONTROL	
Motor control for 1-2 motors with feedback	Speed/direction/position
Burn Wire	2 @ 500 mA/12V
WARRENTY	1 year

* 0-4000 m for EC due to vector

** 4/7 for EC



FOR MORE INFORMATION:

WWW.UNISENSE.COM

INFO@UNISENSE.COM