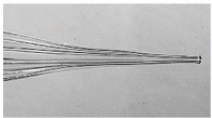


SCAMP

The Self Contained Autonomous MicroProfiler (SCAMP) is a portable, lightweight microstructure profiler designed to measure extremely small scale (order 1 mm) fluctuations of electrical conductivity, temperature, and oxygen concentration in lakes, reservoirs, estuaries and oceans. These data can be used to infer the levels of dissipation of turbulent kinetic energy; in-situ fluxes of heat, salt, and oxygen; and the microstructure behavior of these parameters.

Applications

- Turbulence mixing in surface layers
- Collecting profile temperature-gradient
- Vertical turbulent diffusivity
- PAR and Chlorophyll Fluorometer
- Mixing in the upper layer from wind and cooling



Fast Conductivity Sensor

Makes very rapid, high resolution measurements of electrical conductivity of water.



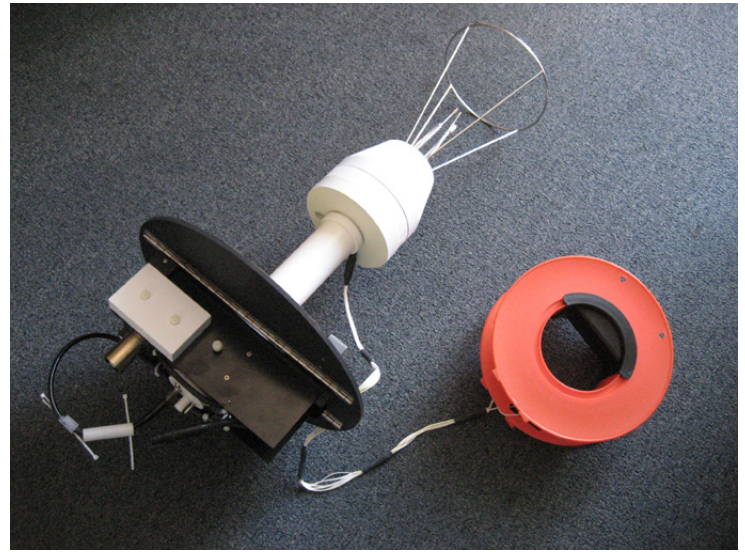
Fast Temperature Sensor

The Fast Temperature sensor is capable of measuring rapid temperature fluctuations to accuracies



Accurate Conductivity & Temperature

The Accurate Conductivity Temperature sensor consists of a conductivity sensor, a thermistor encased in an Inconel 625 tube, and a compensating resistor potted into a stainless steel tube.



Specifications

Travel Rate	10 cm/sec
Overall Length	76 cm
Weight	6 kilos (13 lbs.)
Maximum Depth	100 meters
Sample Rate	100 scans/sec, adjustable
Batteries Required	6 alkaline AA, 9V
Battery Life	4 hours

Software

SCAMP is supplied with MS Windows software that enables control of the SCAMP and analysis of SCAMP's measurement. This software runs on P.C. platform under Windows 2000 or Windows XP.

The Matlab software determines SCAMP velocity, applies numerical filters for frequency compensation and filtering to all C&T sensors, allows the customer to save the measurements for later viewing and has the ability to set parameters such as depth or the number of samples. Graphical displays are also available after uploading the SCAMP data in almost real-time.