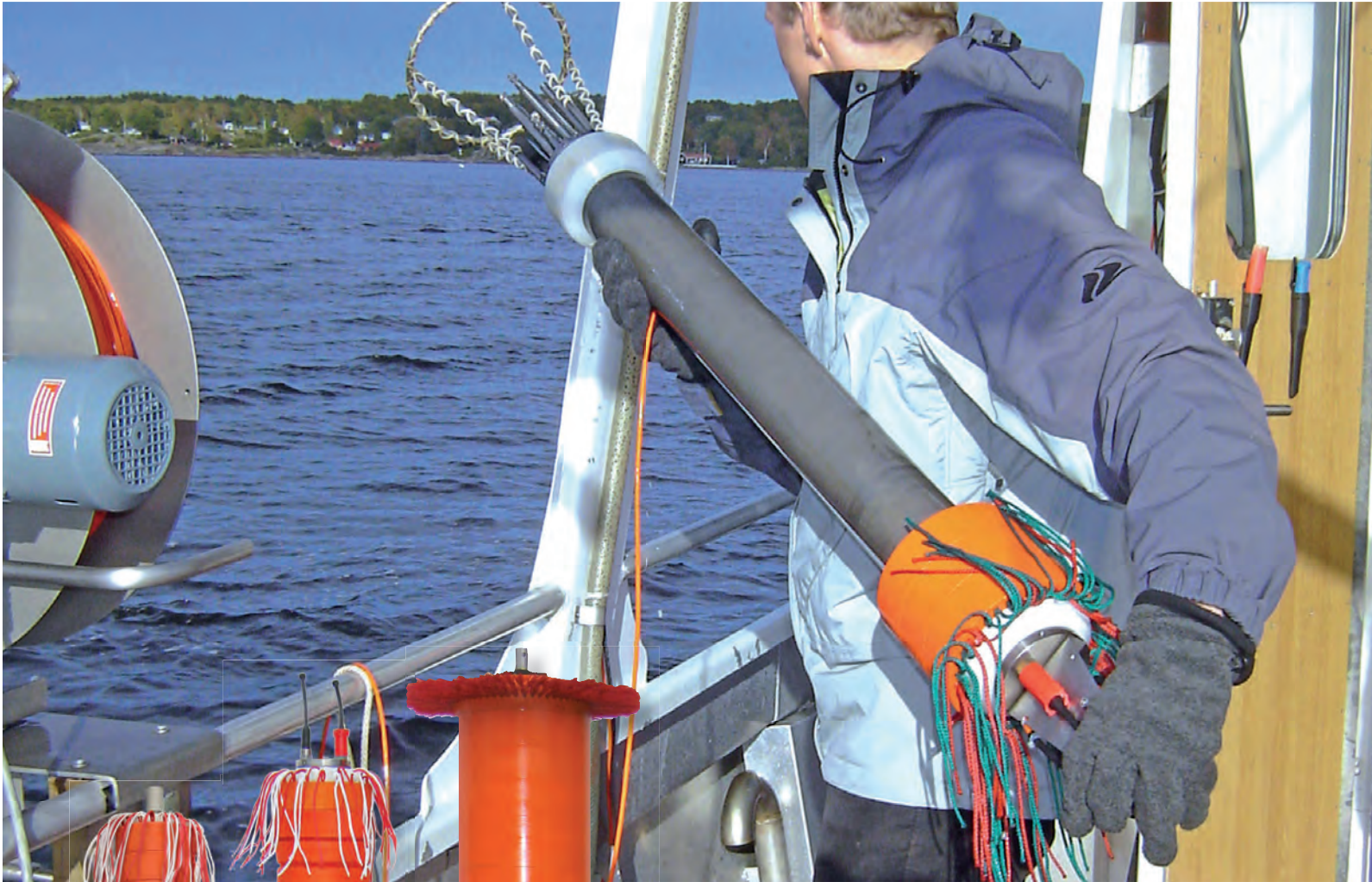


THE MSS-FAMILY

Microstructure Probes



Sea & Sun
Marine Tech



Microstructure measurements
in marine and limnic waters



Manufactured by



Sea & Sun
Technology and



THE MSS-FAMILY

Microstructure Probes

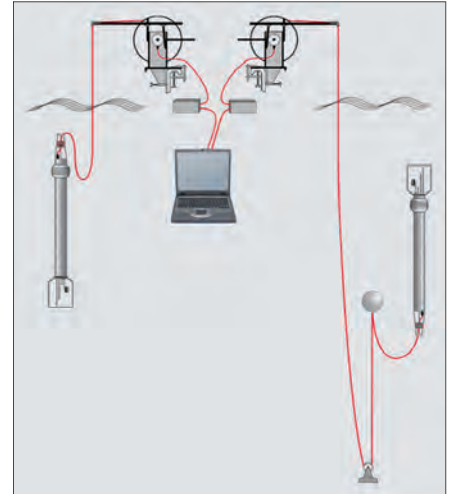
- **multiparameter measurements**
- **microstructure, turbulence and standard CTD sensors**
- **additional sensors possible**
- **depth ranges up to 2000 m**
- **16 channels**
- **easy-to-use data acquisition and processing software**
- **titanium housing**
- **custom-made winches and cables**

The Microstructure Probe family comprises the MSS60, MSS90 and MSS90-D. These probes are designed to measure microscale water stratification as well as the intensity of small scale turbulence in marine and limnic waters of up to 2000 (6000) m.

Different MSS profiler and SWM-winchs will be combined to satisfy different requests for turbulence measurements.

The microstructure measuring system consists of the MSS probe, a custom-made winch with special cable, a probe interface and a data acquisition computer. The probe interface is adapted to the PC (laptop or desktop) via USB port.

The MSS is equipped with high resolution microstructure and turbulence sensors (temperature, current shear) and standard CTD sensors (temperature, conductivity and pressure). Additional sensors, e.g. oxygen and light scattering can be attached.



Up to 16 sensors can be handled by the profiler. Housekeeping sensors control disturbing vibrations and tilt of the profiler itself.

The MSS90 can be used to carry out free sinking or rising up measurements. Its sinking or rising velocity can be adjusted by a combination of weights and buoyancy elements.

Technical Data/Dimensions	MSS60	MSS90	MSS90L	MSS90-D1	MSS90-D2
Depth range	400 m	500 m	500 m	1000 m	2000 m
Weight in air	6 kg	9 kg	15 kg	20 kg	27kg
Length of housing	0.8 m	1.0 m	1.25 m	1.2 m	1.4 m
Standard sensor equipment	P, TC 2 x Shear NTC/NTCHP ACC intern	P, TC 2 x Shear NTC/NTCHP ACC	P, TC 2 x Shear NTC/NTCHP ACC	P, TC 2 x Shear NTC/NTCHP ACC	P, TC 2 x Shear NTC/NTCHP ACC
max. additional Sensor fits	0	2	2	2	2
Optional sensors*		Turbidity Fluorescence Tilt (2axis) Tilt (2axis) Oxygen pH	Turbidity Fluorescence Tilt (2axis) Tilt (2axis) Oxygen pH	Turbidity Fluorescence Tilt (2axis) Tilt (2axis) Oxygen pH	Turbidity Fluorescence Tilt (2axis) Tilt (2axis) Oxygen pH
Data channels	16	16	16	16	16
Sampling rate	1024 per sec	1024 per sec	1024 per sec	1024 per sec	1024 per sec
Resolution	16Bit	16Bit	16Bit	16Bit	16Bit

NTC Temperature microstructure sensor FP07, **NTCH** Temperature microstructure sensor with pre-emphasised amplification,
ACC Acceleration sensor for measuring the profiler vibration
 * optional sensors may have limited depth ranges

Distributor:

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