

Net Probe CTD with 2 Electronic Flow Meters

Classic conductivity, temperature and pressure measurement in combination with flow velocity and volume data acquisition



ABOUT

The Net Probe is unique! It is the only CTD probe which is equipped with 2 Electronic Flow Meters for accurate measurement of flow velocity and volume data during plankton net operations. Ideal both for single-ring and double-ring plankton nets. Either to be used in online mode with long-distance telemetry via electro-mechanical towing cables or in self-contained mode with data recording inside its internal data memory.

FEATURES

- ▶ Combined online/offline use
- ▶ Bi-directional communication
- ▶ Standard depth range 3000 m
- ▶ Long-distance FSK-telemetry (>10000 m)
- ▶ Low power consumption
- ▶ Battery operated Underwater Unit, max. voltage of 5 V at the conductor cable
- ▶ Electronics operate from -40°C up to +85°C
- ▶ EC-conformity (CE) EN 50081-1, EN 50082-1
- ▶ Expandable range of sensors

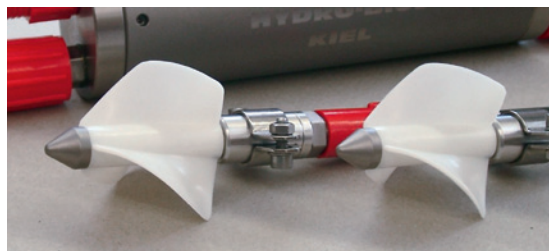
The system consists of a titanium pressure housing with integrated conductivity, temperature and pressure sensor, measuring electronics, 2 Electronic Flow Meters and a Deck Command Unit. This is the link between underwater unit and PC during online operations and displays the measuring data of the probe in clear text.

Power supply of the underwater unit is made by 3 long-time lithium batteries placed in an external removable battery pack. Batteries can easily be replaced without opening the main electronics housing which eliminates the risk of water ingress and corrosion of the electronics board.

The state-of-the-art electronics, optimised in power consumption, are designed for ambient temperatures from -40°C up to +85°C.

The system is rated to a maximum operational depth of 3000 meters.

The Net Probe is delivered with the data acquisition software OceanLab 3 – an easy-to-use package for pre-deployment system set-up, real-time data acquisition, data visualisation, storing and export.



OPTIONS

- ▶ Additional sensors of various parameters
- ▶ Operational depth down to 6000 meters

TECHNICAL DATA

Pressure sensor	0 ... 3000 dbar \pm 0.1% f.s.
Conductivity sensor	0 ... 65 \pm 0.01 mS/cm
Temperature sensor	-2 ... +32 \pm 0.005 °C
Measuring range velocity	0.1 ... 9.9 m/s
Accuracy velocity	\pm 1% (0.5 ... 9.9 m/s) \pm 5% (0.1 ... 0.5 m/s)
Measuring range volume	0.0 ... 6500.0 m ³ (net opening below 0.25 m ²) 0.0 ... 65000 m ³ (net opening above 0.25 m ²)
Data sampling rate	1 Hz (one data set per second)
Data memory	16 MByte
Telemetry connector	SUBCONN IL 2 M
Dimensions	approx. 10 x 16 x 48 cm
Weight	7 kg
Material	Titanium (pressure tube and battery pack), stainless steel (flow meters)
Deck Command Unit	Metal housing for use in 19"-rack or as table housing, indication of sensor data, battery status, LCD-display with LED backlight, interface for Personal Computer (RS 232), power supply: 85 - 260 V AC

ORDERING INFORMATION

Products	
450 100	Net Probe CTD with 2 Electronic Flow Meters incl. Deck Command Unit