CTD 60 | CTD 60 M

Multi Parameter Probe

Sea & Sun Marine Tech

Figure:
50 % of
original size

Highly accurate system for oceanographic and limnological applications

- titanium housing Ø 60 mm
- up to 16 channels
- depth range up to 6000 m
- control and operation of water-samplers
- 20 bit AD converter
- FSK / RS 232/485 output
- calculation according to UNESCO formulas
- easy handling
- low weight

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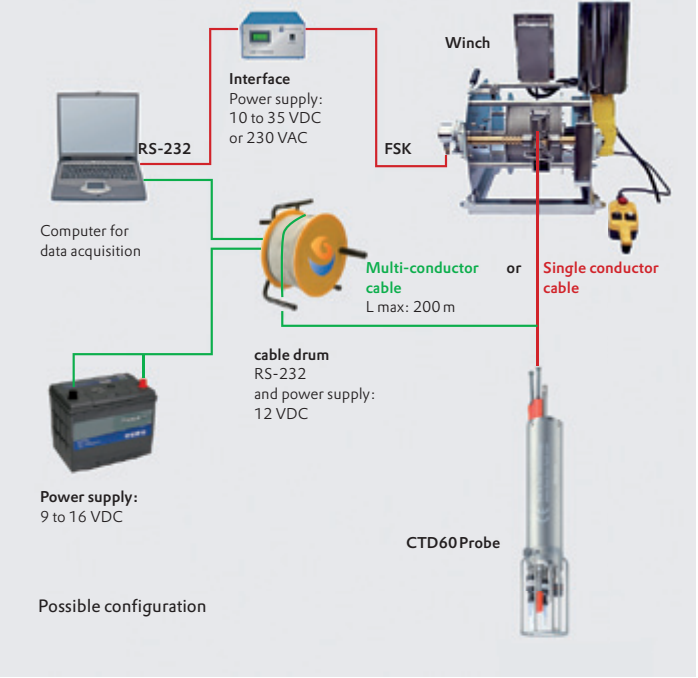

The CTD 60 is a high quality, high accuracy multiparameter probe for oceanographic and limnological measurements of physical, chemical and optical parameters up to a depth of 6000 m.

The probe can be equipped with four sensors plus pressure sensor mounted on the bottom cap. The numbers of sensors can be extended by connecting external units like fluorometers, currentmeters or other devices via underwater cable connection to the top cap of the CTD 60 (not possible für the memory version). The system is able to control and operate motor driven water-sampler rosettes (Hydro-Bios).The CTD 60 is mainly designed for portable applications where low weight and easy handling are important features of the employment. The CTD 60 probe is equipped with a precision microprocessor controlled 20 bit (reduced to 16 bit) analog to digital converter and has 16 channels. Data is available as RS-232 signal (multi-conductor cable) and as digital FSK signal modulated on constant current (single conductor cable). The probe can be powered by battery or DC-power supply (10 to 35 Volt) when using RS-232 output or by constant current with FSK output (coaxial connection) for longer distances. An interface for constant current supply is available.
A data acquisition program running under Windows 7/XP/Vista and Mac for display and calculation of the physical values is part of the system. All calculations correspond to the current UNESCO formulas.

Sensors	max. depth	Principle	Range	Accuracy	Resolution	Response time (63%)
Pressure temperature compensated material: Hastelloy	6,000 m	piezo-resistive	0-2.5, 10, 20, 50, 100, 200, 400, 600 bar	± 0.1 % full scale	0.002 % full scale	150 ms
Temperature	6,000 m	PT 100 4 pol	- 2 – + 36 °C	± 0.002 °C	0.001 °C	150 ms
Conductivity	6,000 m	7-pole platinum cell	0–70 mS/cm	± 0.003 mS/cm	0.001 mS/cm	150 ms
Conductivity	6,000 m	7-pole platinum cell	0–7 mS/cm	± 0.003 mS/cm	0.0001 mS/cm	150 ms
Fast AMT Oxygen	100 m	Calvanic microsensor	0–200 % sat	± 2 %	0.01 % sat	> 200 ms
			0–20 mg/l	± 2 %	0.01 % sat	
DO Oxyguard	2,000 m	Clark electrode	0–250 % sat	± 3 %	0.1 %	3 s (63%) 10 s (98%)
pH various depths	6,000 m	single rod electr.	2–10 pH	± 0.02 pH	0.0002 pH	1 s
Redox various depths	6,000 m	single rod electr.	± 2 V	± 20 mV	1.0 mV	1 s
Turbidity	6,000 m	90°	0–1000 FTU		0.1 NTU	100 ms
Currentmeter	1,000 m	inductiv	± 2.00 m/s			
H_2S	100 m	Amperometric micro-sensor	10 µg/l – 3 mg/l 50 µg/l – 10 mg/l 500 µg/l – 50 mg/l	2 % of	< 0.1 %	< 1s

The CTD 60 will be delivered in a robust, and water resistant plastic case including cables, connection plugs, instruction manual, and a software CD.

Sea & Sun Marine Tech is member of Sea & Sun Technology

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