NEW PRODUCT
Multiparameter Probe CTD48C

Sea & Sun Technology

CTD48C / CM + DO-Sensor

Standard Probe CTD48C / CM

_____
Sea & Sun Technology GmbH, Arndtstrasse 9-13, 24610 Trappenkamp
www.sea-sun-tech.com sales@sea-sun.tech.com

NEW PRODUCT
Multiparameter Probe CTD48C

The NEW CTD48c / CTD48Mc probes are very small and handy microprocessor controlled Multiparameter Probes for precise online measurements as well as for self-contained operation in deep and shallow water. The difference between the new CTD48c / CTD48Mc and the previous version are:

- new powerful controller
- larger memory for storing data
- calibration coefficients stored inside the probe
- output of calculated / physical data
- more and powerful interfaces
- with rechargeable batteries available (probe must not be opened)

Due to its small size and low weight of 1.2 kg, it is particularly suited for the mounting on ROVs and bottom landers. The probe is completely made of titanium (except the screws). The housing is inert against nearly all chemical compounds and absolutely corrosion free.

Due to the small housing diameter of 48 mm (including sensor protection tube) the probe can also be used for profiling in 2" boreholes.

The standard CTD48Mc allows operation in different modes:

- Time mode
- Increment mode
- Continuous mode
- RS232, FSK or Ethernet in online mode
- fast readout of stored data via USB

Time mode is the most important mode for long term measurements, where the operator selects start and stop time and the measuring time interval. Increment mode is mainly used during profiling and enables the user to carry out a great number of profiles with data reduction and without the need to upload stored data file after each measured profile.
The user selects start and end depth and increment size. The probe then stores automatically a complete data set at each increment depth.

The CTD48Mc is equipped with an 8 channel data acquisition system with 20 bit resolution. A high long-term stability and automatic self-calibration of the analogue digital converter guarantees stable and precise CTD measurements for many years.

NEW PRODUCT
Multiparameter Probe CTD48C

Sea & Sun Technology

Interface

1. RS232 – max. Baud rate: from 1200 bps up to 230Kbps
2. USB 1.1 / 2.0:   12 Mbps (64Kb)
3. Ethernet (optional):   10 / 100 Mbps
4. FSK   from 1200 bps up to 9600 bps

Protocol

Control and read of data from the probes is carried out in accordance with NMEA 0183 (National Marine Electronics Association) protocol.

Data acquisition

Memory size: 128Mbyte (256 MByte possible)

By using a SD-Card: up to 32Gbyte

Resolution AD-Converter: 20bit (can be limited to 16bit)

Max. number of recorded data sets: 32 Byte per data set for CTD +additional sensor + RTC (about 4 million data sets with a memory size of 128MByte)

Number of measuring channel :   4 external + 3 internal (option)

Max. sampling time: 20ms per channel (memory probe: +20ms for measuring the battery voltage)

Calculated data

All channels can be displayed in physical or raw values. Coefficients are stored inside the probe but can be read out for external calculations.

In addition, with appropriate equipment for the sensory (CTD) following values can be calculated and displayed by the probe:

- salinity
- density
- depth
- depth density
- depth fresh water
- sound velocity
- Kappa 25
- arcsin (acceleration)

NEW PRODUCT
Multiparameter Probe CTD48C

Sea & Sun
Technology

If the probe is also equipped with the SST oxygen sensor, the following calculated values can be read directly out of the probe:

- O_2 % sat.
- O_2 mg/l
- O_2 ml/l
- O_2 μmol/l

Electrical specifications
Power:

Online:	9 – 30VDC
Battery:	Alkaline (4 x 1,5V AA (LR6)) – operation time up to 100 hours Lithium (4 x 3,6V AA (FR6)) – operation time up to 250 hours rechargeable LiFePo4 batteries – operating time up to 90 hours or powered by an external battery or power supply
Current consumption:	15 – 30mA (depends on configuration)

Mechanic
Dimensions:

Ø (housing):	48mm
Length (housing):	approx. 240mm
Length (overall):	approx. 450mm
Material:	titanium
Weight (in air):	approx. 1,2 kg
Depth range:	up to 6000m

Additional features
- eCompass module (optional), 3D accelerometer and 3D magnetometer
- internal temperature sensor
- digital in- and outputs - up to 4 digital in- or outputs (3,3V) optional available
- RTC with backup battery

Please contact Sea & Sun sales team (Sales@sea-sun-tech.com)
or your local distributor for an offer and further information today!