

STD/CTD - model SD204

with multi-parameter & auto range facilities

- *Salinity*
- *Temperature*
- *Sound velocity*
- *Turbidity (auto range)*
- *Conductivity*
- *Depth*
- *Oxygen*
- *Fluorescence (auto range)*



SD204



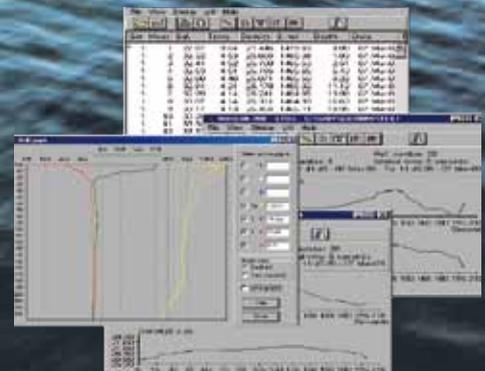
SD204 in transport/storage case



SD204 with optional sensors

Features:

- *Compact & robust design*
- *Long term stability sensors*
- *High memory capacity*
- *Sonar equipment compatibility*
- *Year-long battery capacity*
- *Depth to: 6000 meters*
- *Windows based software*
- *Output in physical units*
- *On-line plotting*
- *Auto range for turbidity & fluorescence*



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STD/CTD - model SD 204

The SD204 measures, calculates and records sea water conductivity, salinity, temperature, depth (pressure), sound velocity and water density. Three optional sensors can be added, f. example: dissolved oxygen, fluorescence and turbidity. For optional sensors with several sensitivity ranges, the SD204 has auto range capability. Data are recorded in physical units. The accompanying software, SD200W, contains versatile functions for programming, post- and online data processing and presentations: - multigraph, online plotting, density and depth calculations (weighed profile). The program is continuously extended according to customer's requests. The programmed settings and calibration coefficients are maintained in nonvolatile eeprom, and will not be changed/lost if power is disconnected. Robustness and complete protection from leakage is obtained by vacuum molding the electronic and all other components in solid polyurethane. On/Off-switching is by a magnetic key or from keyboard. A sealed battery compartment contains two replaceable C-cells. In practical operation the battery capacity is sufficient for continuous year-around operation with good margin. The instrument is equipped with a mooring bar with a shackle at each end. Data are recorded in physical units and simultaneously transmitted via an RS232 I/O watertight connector for on-line use.

For remote readout and monitoring, the manufacturer offers several options: Communication Unit CU901, for two-way communication via Iridium satellite, GPRS with embedded web server, GSM and UHF/VHF,



Specifications:

Conductivity: Inductive cell
Range: 0 to 70 mS/cm
Resolution: 0.01 mS/cm
Accuracy: +/- 0.02 mS/cm

Salinity: Calculated from C,T & D
Range: 0 to 40 ppt
Resolution: 0.01 ppt
Accuracy: +/- 0.02 ppt

Temperature:
Range: -2 to +40°C
Resolution: 0.001°C
Accuracy: +/- 0.01°C
Response time : 0.2 sec

Pressure: Specify desired depth range with order
Ranges: 500, 1000, 2000, -- 6000 m)
Resolution: 0.01 dbar (m)
Accuracy: +/- 0.01% FS (-2 to +40°C)
Response time: 0.1 sec

Sound velocity: Calculated from S,T & D
Range: 1300 to 1700 m/s
Resolution: 1 cm/s
Accuracy: +/- 5 cm/s

Dissolved oxygen: (optional)
Sensor type: SAIV205
Range: 0 to 20 mg/l
Resolution: 0.01 mg/l
Accuracy: +/- 0.2 mg/l

Fluorescence: (optional)
Sensor type: Fluorescein/ Chlorophyll/Rhodamine/CDOM
Ranges: 2.5, 7.5, 25, 75 ug/l
selectable/auto range
Resolution: 0.03 ug/l

Turbidity: (optional)
Sensor type: Backscatter
Ranges: 12.5, 62.5, 250, 750 FTU
selectable/auto range
Linearity: < 2%

Real time clock: +/- 2 sec/day
Modes: STD/CTD with/without sound velocity, oxygen and optional sensor.

Intervals: 1 sec to 180 min.

Memory: CMOS SRAM
Capacity: 56000 data sets of STD/CTD

Data output: RS232 ASCII code.1200-9600 baud
1 start, 7 data, 1 stop, even parity or
1 start, 8 data, 1 stop, no parity
selectable via menu

Power: 2 ea. 3.6V lithium C-cells.
Recommended type: SAFT LSH14
(Sufficient for 1.500.000 data sets)

External: 10 – 30VDC

Material: Vacuum molded polyurethane and titanium

Dimensions: Length 400 mm. Diameter 60 mm

Weight: In air: 2 kg. In water: 0,8 kg.

Packing: Suitcase (534x427x157 mm)
Grossweight 5,5 kg

Accessories: On/Off magnetic key,
(included) PC communication cable 2,5m,
MINISOFT SD200W program
Operating Manual

Warranty: Two years against faulty materials
and workmanship