MEM

# CTD - Model SD208

**Extended Accuracy and Wireless Communication** Multi-Parameter & Auto-Range Sensor Capabilities

- Salinity
- Temperature
- Sound Velocity
- Turbidity (Auto Range)
- Conductivity
- Depth
- Oxygen
- Fluorescence (Auto Range)

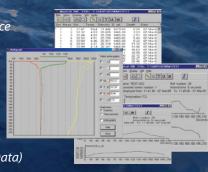




SD208 with Optional Sensors

#### **Features**

- Wireless Communication (Iphone, Ipad and PC) with extremely low power consumption
- Compact & Robust Design
- Auto-range for Turbidity & Fluorescence
- 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 (Calibrated Data)
- Online Plotting



SAIVA/S Environmental Sensors & Systems

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## CTD - Model SD208

## Multi-Parameter & Auto Range Sensor Capabilities

The SD208 measures, calculates and records sea water conductivity/salinity, temperature, depth/pressure, sound velocity and water density. Three optional sensors can be added, for example: dissolved oxygen, fluorescence and turbidity. For optional sensors with several sensitivity ranges, the SD208 has auto range capability to automatically obtain the best sensitivity. The programmed settings and calibration coefficients are maintained in nonvolatile eeprom, and will not be changed/lost if power is disconnected. Data is recorded in physical units (calibrated data) and simultaneously transmitted via an RS232 I/O watertight connector for on-line use or wireless serial communication by built-in radio.

The accompanying software, SD200W, contains versatile functions for programming, post- and online data processing and presentations: - multigraph, online plotting, density and real depth calculations (weighed profile). The program is continuously extended according to customer requests. 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 by cable or wireless communication. A sealed battery compartment contains two replaceable 3.6V 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. For use in fixed position or in APB5 (Automatic Profiling Buoy), the manufacturer offers worldwide remote read-out on Internet via GPRS/Satellite (IMARSAT)/Iridium by Communication Unit CU801.

### **Specifications**

Inductive Cell, Temp. & Press. Comp. Conductivity:

Range: 0 to 80 mS/cm Resolution: 0.00008 mS/cm Accuracy: ± 0.003 mS/cm

Salinity: Calculated from C,T & D

Range: 0 to 50 ppt Resolution: 0.00008 ppt Accuracy: ± 0.003 ppt

Temperature:

Range: -2 to +40°C Resolution: 0.0002°C ± 0.003 °C Accuracy: Response Time: 0.1 sec

Pressure: Specify desired depth range with order

500, 1000, 2000, -- 6000 m) Ranges:

Resolution: 0.01 dbar (m)

 $\pm 0.01\%$  FS (-2 to +40°C) Accuracy:

Response Time: 0.1 sec

Sound velocity: Calculated from S,T &D 1300 to 1700 m/s Ranae:

Resolution: 0.5 cm/s Accuracy:  $\pm 2 \, cm/s$ 

Dissolved oxygen: (optional)

SAIV205 AADI Optode Sensor Type: 0 to 20 ma/l 0 to 20 mg/l Range: Resolution: 0.01 mg/l 0.08 mg/l ± 0.2 mg/l ± 0.5 mg/l Accuracy:

Fluorescence: (optional)

Chlorophyll/Rhodamine/CDOM/Fluorescein Sensor Type: 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:

Real Time Clock: ± 2 sec/day

Modes: STD/CTD with/without sound velocity,

oxygen and optional sensor.

Intervals: 1 sec to 180 min.

CMOS SRAM Memory:

56000 data sets of STD/CTD Capacity:

Data Output: Cable: RS232 ASCII code1200-9600 baud

1 start, 7 data, 1 stop, even parity or 1 start, 8 data, 1 stop, no parity

selectable via menu

Wireless: 868 Mhz RS232 code 9600 baud

1 start, 8 data, 1 stop, no parity

Range: 50m

2 ea. 3.6V lithium C-cells. Power:

Recommended type: SAFT LSH14/LS26500

Capacity: >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. Suitcase (534x427x157 mm) Packing:

Grossweight 5,5 kg

Accessories: On/Off magnetic key,

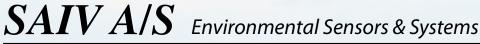
(included) PC communication cable 2,5m, MINISOFT SD200W program,

**Operating Manual** 

Optional: Wireless Receiver with USB Connector

Two years against faulty materials Warrantv:

and workmanship.



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