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)*

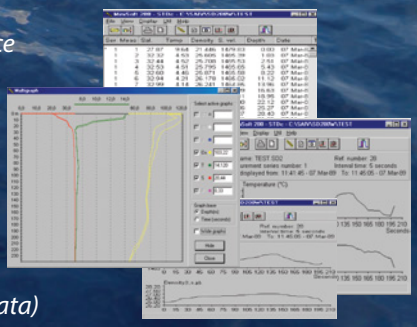
SD208

SD208 in Transport/Storage Case

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*



SAIV A/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 (INMARSAT)/Iridium by Communication Unit CU801.

Specifications

Conductivity:	*Inductive Cell, Temp. & Press. Comp.*	
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*	
Accuracy:	*± 0.003˚C*	
Response Time :	*0.1 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:	*0.5 cm/s*	
Accuracy:	*± 2 cm/s*	
Dissolved oxygen:	*(optional)*	
Sensor Type:	*SAIV205*	*AADI Optode*
Range:	*0 to 20 mg/l*	*0 to 20 mg/l*
Resolution:	*0.01 mg/l*	*0.08 mg/l*
Accuracy:	*± 0.2 mg/l*	*± 0.5 mg/l*
Fluorescence:	*(optional)*	
Sensor Type:	*Chlorophyll/Rhodamine/CDOM/Fluorescein*	
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: *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*	
Power:	*2 ea. 3.6V lithium C-cells. 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.*	
Packing:	*Suitcase (534x427x157 mm) Grossweight 5,5 kg*	
Accessories: *(included)*	*On/Off magnetic key, PC communication cable 2,5m, MINISOFT SD200W program, Operating Manual*	
Optional:	*Wireless Receiver with USB Connector*	
Warranty:	*Two years against faulty materials and workmanship.*	

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