STD/CTD - model SD204

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.

Specifications

Product	HP690 Hydraulic intensifier panel
Country of origin	Norway
Manufacturer	SAIV A/S

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,

Features

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

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 ppt
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
Response time	+/- 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 for1.500.000 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, PC communication cable 2,5m, MINISOFT SD200W program Operating Manual
Warranty	Two years against faulty materials and workmanship