

Tide recorder - model TD304

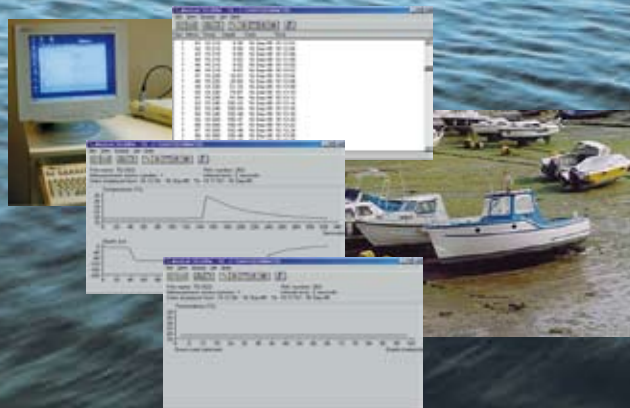
with integrated temperature sensor

Pressure/Depth: accuracy: 0.001%, resolution: 0.001 dbar



Features:

- *Compact & robust design*
- *Long term stability sensors*
- *High memory capacity*
- *Year-long battery capacity*
- *Windows based software*
- *Output in physical units*
- *On-line plotting*
- *Extra sensor available:*
 - Oxygen*
 - Turbidity (autorange)*
 - Fluorescence (autorange)*



SAIV A/S *Environmental Sensors & Systems* *Post Office Box 3513
5845 Bergen, Norway*

Tel: +47 56 11 30 66, Fax: +47 56 11 30 69, e mail: info@saivas.com, web: www.saivas.no
Street address: Nygårdsviken 1, 5164 Laksevåg

Tide Recorder – model TD304

The TD304 is a high precision instrument for recording/monitoring of tide or water level and also temperature. Optional sensors can be added: dissolved oxygen, turbidity and fluorescence. For optional sensors with several sensitivity ranges, the TD304 has autorange capability. The accompanying software, SD200W, contains versatile functions for programming, post- and on-line data processing and presentations: - multigraph, on-line plotting, density and depth calculations. 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 has been 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. The instrument is equipped with brackets for attachment to mooring fixture. The TD304 is available as absolute or reference types. The reference type is vented through the connector and a cable with internal air pipe. 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,

Designations:

TD304A: absolute type (Tide). **TD304R:** reference (gauge) type (Water level).



TD304 in it's case

Specifications:

Pressure: Specify desired depth range with order
Ranges: (absolute) 20, 50, 100, 200, 500 m
Ranges: (reference) 10, 20, 50, 100m
Resolution: 0.0001 dbar (m)
Accuracy: +/- 0.01% FS (0 - 35°C)
Response time: 0.1 sec

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

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/Rhodamine/Chlorophyll/CDOM
Range: 2.5, 7.5, 25, 75 ug/l
Resolution: 0.03 ug/l
Linearity: < 2%

Turbidity (optional):
Sensor type: Backscatter
Range: 12.5, 62.5, 250, 750 FTU
Linearity: < 2%

Real time clock: +/- 2 sec/day

Interval:
Programmable: 1 sec to 180 min.

Integration time: Programmable: 2 - 240sec
(pressure measurements)

Memory: CMOS SRAM
Capacity: 77000 data sets of TD

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 supply if used 10 - 30VDC

Material: Vacuum molded polyurethane and
Titanium

Dimensions: Length 400 mm. Diameter 60 mm

Weight: In air: 2.5 kg. In water: 1.3 kg.

Packing: Suitcase (534x4270x157 mm)
Grossweight 5.5 kg

Accessories: On/Off magnetic key,
(included) PC communication cable 2,5m,
MINISOFT SD200W program
Operating Manual
TD304R: Cable (15m) with air pipe and on-land
connector unit.

Warranty: Two years against faulty materials
and workmanship