Water Level Sensor – model TD301R
with temperature sensor
Accuracy: 0.01%, Resolution: 0.0001dbar

Applications:
- Monitoring/recording of water level in the sea, lakes, reservoir, …
- Tidal measurements
- Monitoring of ground water
- Flood warning

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

Water Level Sensor – model TD301R

The TD301R is a high precision instrument for recording/ monitoring of water level in the sea, lakes, water reservoirs, groundwater and in rivers etc. Also measurement of temperature is included.

The sensing element is a unique pressure sensor with built-in temperature compensation. A feature that maintane the high accuracy (0.01%) over a broad temperature range (-2 to +40 deg C).

Atmospheric pressure is directly compensated for by an air pipe inside the cable. The air pipe is vented through a Goretex filter on the On-Land-Unit. Data are recorded and/or transmitted in physical units via an RS-232 I/O watertight connector. The sensor is Plug and Play compatible with PC's. All settings like measuring interval, integration time, chart datum etc, are accessed via menu. The TD301R has a built-in replaceable battery for self- contained recording applications.

The programmed settings and calibration coefficients are maintained in none volatile eeprom, and will not be changed/lost if power is interrupted. When the memory is full, the oldest data will be overwritten.

Robustness and complete protection from leakage is obtained by vacuum molding the electronic and all other components in solid polyurethane. The accompanying software, SD200W, contains versatile functions for programming, post- and online data processing and presentation.

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,

TD301R in it's case

Specifications:

Pressure: *Specify desired depth and type with order*

Ranges:	10,20,50,100m
Resolution:	0.0001 dbar (m)
Accuracy:	+/- 0.01% FS (-2 to +40'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

Interval:

Programmable:	1 sec to 180 min.

Integration time: (pressure measurement)

Programmable:	2 – 240 sec

Memory: CMOS SRAM

Capacity:	44000 data sets of TD (ring memory)

Data output: RS232 ASCII code.
1200-9600 baud,
1 start, 7 data, 1 stop, even parity
1 start, 8 data, 1 stop, non parity
Selectable via menu

Real time clock: +/- 2 sec/day

Power supply: 2 lithium AA-cells 3.6V
Recommended type:
SAFT LSH 14500
(Sufficient for 1.000.000 data sets)

External power: 10 – 30VDC (when used)

Current consumption:

Active:	< 10 mA
Quiescent:	60uA

Material: Vacuum molded polyurethane and Titanium

Dimensions: Length 200 mm. Diameter 45 mm

Weight: In air: 0.5 kg. In water: 0.3 kg.
On-Land unit: 0.5 kg

Accessories: MiniSoft SD200W program
Operating Manual
On/Off magnetic key,
PC communication cable (2,5m)
Cable, 15m, with air pipe and
On-Land-Unit.
Longer length to order.

Warranty: Two years against faulty materials and workmanship.