

Pressure/depth sensors/recorders with integrated temperature sensor TD301 – TD303

Pressure/depth: accuracy: 0.01%, resolution: 0.0001 dbar



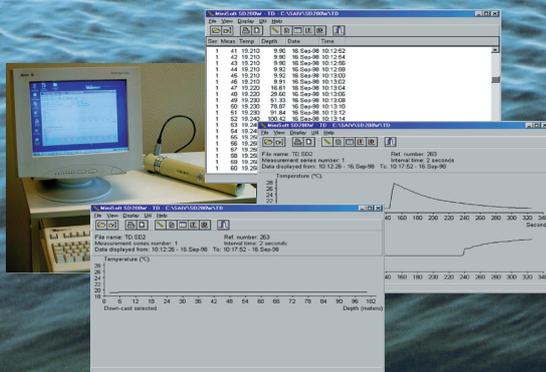
TD301/3

Applications:

- R.O.V.
- Temp & depth profiles
- Autonomous recording
- Bathymetry
- Towed systems

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
- Burst mode: 5Hz
- SAIV/Digi format output



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Pressure/depth sensors/recorders

The TD301/TD303 are precision instruments measuring temperature and depth (pressure) in the sea, lakes, water reservoirs, groundwater, rivers and on R.O.V. etc. All settings like measuring interval, real time clock etc, are accessed via menu. The programmed settings and calibration coefficients are maintained in nonvolatile eeprom, and will not be changed/lost if power is disconnected. The model TD301 has a built-in replaceable battery for self-contained recording applications. On/Off-switching is by a magnetic key or from keyboard. The model TD303 is for on-line applications with external power supply and has an extra feature of 5Hz sampling with programable output formats to suit the host unit. Both units have a built-in data memory "ring memory" where the oldest data will be overwritten when memory is full. Data are recorded in physical units and simultaneously transmitted via an RS232 I/O watertight connector for on-line use. Robustness and complete protection from leakage has been obtained by vacuum molding the electronic and all other components in solid polyurethane. A comprehensive PC-program is supplied with the units for easy communication, programming and presentation/processing of data. 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: Absolute types: TD301A/TD303A, Reference type: TD301R
Differential types: TD301D/TD303D



Specifications:

Pressure:

Ranges:
Absolute: 20, 50, 100, 200, 500 .. 6000 dbar
Reference: 10, 20, 50, 100 dbar
Differential: 10, 20, 50, 100, 200 dbar. Line max 2000 dbar
Resolution: 0.0001 dbar (m)
Accuracy: +/- 0.01% FS
Response time: 0.1 sec

Temperature:

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

Memory: CMOS SRAM
TD301/303 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, no parity
selectable via menu

Interval:
Programmable: 1 sec to 180 min
Burst mode: 5 Hz w/programmable data formats

Real time clock: +/- 2 sec/day

Material: Vacuum molded polyurethane and Titanium)

Power:

TD301: 2 ea 3.6V lithium AA-cells.
Recommended type: SAFT LSH 14500
(Sufficient for 1.000.000 data sets)
TD303: External power supply 10 -30 VDC

Current consumption:

Active: < 10 mA
Quiescent: < 50uA

Dimensions:

TD301/303: Length 170 mm. Diameter 45 mm

Weight:

TD301/303: In air: 0.5 kg. In water: 0.3 kg.

Accessories:

Common: MiniSoft SD200W program
Operating Manual
TD301: On/Off magnetic key,
PC communication cable (2,5m)
TD303: Connector and 1.5m pigtail

Warranty: Two years against faulty materials and workmanship.