HYDROLAB PROBE

The multiparameter probe is used to monitor the quality and physic-chemical parameters of both sweet and savory water. The probe, connected to the CAENet module, is able to detect several parameters, including temperature, conductivity, pH, redox potential, dissolved oxygen and turbidity, making sure the quality of the reservoir is fully assessed.

TECNOLOGY AND FUNCTIONING

The DataSonde5 probe is the invention of Hydrolab and it represents the best in the market for automatic analysis of key water quality parameters. The probe is submersible to a maximum depth of 200 meters. It has a single disc-shaped embodiment, at the ends of which are mounted the necessary electrodes at specified measurements, which may vary according to the needs of the customer. It is made up of plastic material, which are resistant to impact and corrosion. The Hydrolab multiparameter probes can be used in fresh water, such as rivers, lakes and groundwater, as well as in brackish and marine water for coastal monitoring.

The probe is connected to the CAE data logger by means of an interchangeable cable. It is unique for signal transmission and power supply, shielded and equipped with a kevlar axis, and is also submersible and self-supporting.

SPECIFICATIONS

The following table shows the specifications of the most commonly used parameters

TEMPERATURE

- Type, Thermistor
- Range -5 ... +50 ° C
- Accuracy ± 0.10 ° C
- Resolution 0.01 ° C





CONDUCTIVITY

- Cell Type, Four-electrode contrasted in graphite, suitable for freshwater and brackish and marine water
- Range 0...100 mS/cm
- Auto-range provides the automatic selection of the measuring range suitable for the highest accuracy
- Accuracy ± 0.5 % of reading + 0.001 mS/cm
- Resolution 0.0001 units
- Automatic compensation for temperature to 25 °C

DISSOLVED OXYGEN - HACH LDO

- Sensor Type, luminescent Hach LDO
- Range 0...60 mg/l
- This measure is available in mg/l and % saturation
- Accuracy
 - ± 0.1 mg/l in the range 0...8 mg/l
 - $\pm\,0.2$ mg/l in the range 8...20 mg/l
 - \pm 10 % of reading over 20 mg/l
- Resolution 0.01 mg/l
- Automatic compensation for temperature and salinity

ΡН

- Electrode Type, cylindrical glass membrane, with a reconstitutable separate reference electrode, non exhaustively
- Range 0...14
- Accuracy ± 0.2 units
- Resolution 0.01 units

REDOX POTENTIAL

- Range -999 ... +999 mV
- Accuracy ± 20 mV
- Resolution 1 mV

TURBIDITY

- Range 0-3000 NTU
- Accuracy
 - 1 % <100 NTU
 - 3 % from 100 to 400 NTU 5 % from 400 to 3000 NTU
- Resolution
 0.1 NTU from 0 to 400 NTU
 - 1 NTU over 400 NTU

