



WATER QUALITY TOOL

Tool overview

This tool incorporates high quality sensors to measure three parameters of water quality- Dissolved Oxygen, Acidity and REDOX (Reduction Oxidation). This tool is useful for assessing water quality, groundwater properties, potential contamination, intrusion and zonal determination, geothermal gradient and groundwater flow.

Dissolved Oxygen (D.O)

This measures the amount of oxygen present in water and available for respiration. D.O is measured in parts per million (ppm) saturation. Oxygen is less soluble in warm and salty waters, so the instrument compensates the apparent percent saturation for changes in temperature and conductivity.

Acidity (pH)

The term pH is used to describe the hydrogen ion activity of a system: below pH 7 is acidic; pH 7 is alkaline (or basic). Acidity is a major factor affecting the availability of nutrients to plants and animals. The probe consists of an ion selective glass membrane, whose potential is measured with respect to a reference electrode.

Reduction Oxidation

REDOX/Oxidation Reduction Potential (ORP) - ORP is the voltage measured at an inert electrode, reflecting the extent of oxidation of the water sample. The more positive the ORP of the solution, the more oxidized are the chemical components of the water (less positive indicated less oxidized, or more reduced).



Logging

Conditions

-1 to +50 °c
0-150 BAR
pH 0 to 14pH
Redox -1 to +1V

Borehole

Conditions

Max. Temperature 80 °c
Max. pressure 150 BAR
Fluid filled
Open, cased, PVC

Specifications

Size	600mm x 43mm
Weight	2 kg
Combinability	Modular (can connect probes above only)
Max. temperature	80°C
Max.pressure	150 bar (200 bar optional)

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