AQUALABO
CONTRÔLE

PHEHT/ PH, REDOX & TEMPERATURE

DIGITAL TECHNOLOGY
FOR OPTIMIZED MEASURES

RANGE DIGISENS / DATASHEET



The PHEH sensor has been designed to perform under hard conditions from pure mountains water with conductivity as low as 20 µS/cm, lakes and rivers (100 – 2000 µS/cm), seawater with conductivities of 50 mS/cm and to wastewater with conductivity higher than 200 mS/cm.

This sensor features a "long life" reference. The Plastogel® PONSEL technology increase the lifetime of the probe the need to refill.

This sensor has been designed also for handheld and in situ applications which have been the most difficult situations for a pH/ORP sensor in term of sensor resistance, quick time response, minimal flow dependence and low power consumption.

DIGITAL TECHNOLOGY

The "smart" pH/Redox/Temp sensor stores calibration and history data within the sensor. This allows you a "plug and play" system without re-calibration.

Thanks to the Universal Modbus RS485 protocol, the PONSEL pH/Redox/T sensor can be connected to all devices commonly used (Datalogger, Controller, Automat, Remote System…).

RANGE

- pH : 0 to 14 units
- Redox : - 1000 to + 1000 mV ;
- T°C : -10°C to +50°C

ADVANTAGES

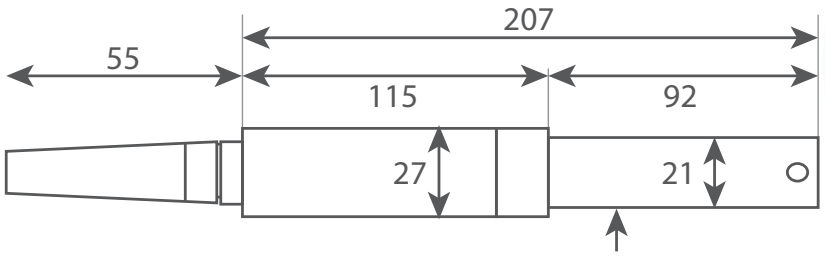
- Combination pH/Redox/Temp sensor
- Digital Sensor : Modbus RS 485 / SDI-12
- Calibration data inside
- pH/ORP Cartridge

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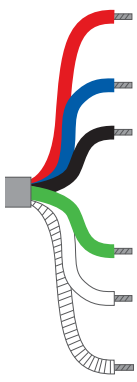
TECHNICAL FEATURES

pH	
Measure principle	Combined electrode (pH/ref) : special glass, Ag/AgCl ref. Gelled electrolyte (KCl)
Range	0 – 14 pH
Resolution	0,01 pH
Accuracy	± 0,1 pH
Redox	
Measure principle	Combined electrode (Redox/reference) : Platinum tip, Ag/AgCl AgAgCl. Gelled reference (KCl)
Range	- 1000 to + 1000 mV
Resolution	0,1 mV
Accuracy	± 2 mV
Temperature	
Technology	NTC
Range	0,00 °C à + 50,00°C
Resolution	0,01 °C
Accuracy	± 0,5 °C
Response time	< 5 s
Storage temperature	0°C to + 60°C
Protection	IP 68
Interface	Modbus RS-485 / SDI-12 (option)
Power supply	5 to 12 volts
Power consumption	Standby : 25µA Average RS485 (1 measure/seconde) : 3,9 mA Average SDI12 (1 measure/seconde) : 6,8 mA Current pulse : 500 mA
Sensor	
Dimensions	Diameter : 27 / 21 mm ; Lenght : 207 mm
Weight	350 g (sensor + 3 m cable)
Material	PVC, DELRIN, special pH glass, platinum, polyamide
Pressure	5 bars
Cable	Coaxial armoured, Polyurethane, bare wire or Fisher connector
Protection	IP68

DIMENSIONS



WIRING DIAGRAM



Cable length ***up to 15m***

1. RED : POWER SUPPLY V+
2. BLUE : SDI-12
3. BLACK : POWER SUPPLY V-
4. GREEN : B " RS-485 "
5. WHITE : A " RS-485 "
6. GREEN / YELLOW : CABLE SHIELD

Cable lenght ***15 to 100 meters***

1. RED, PURPLE, YELLOW, ORANGE, PINK : POWER SUPPLY V+
2. BLUE : SDI-12
3. BLACK : POWER SUPPLY V-
4. GREEN : B " RS-485 "
5. WHITE : A " RS-485 "
6. GREEN / YELLOW : CABLE SHIELD

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