



PHEHT: PH, ORP & TEMPERATURE, DIGITAL technology for optimized measures

The PHEHT 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/ORP/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/ORP/T sensor can be connected to all devices commonly used (Datalogger, Controller, Automat, Remote System...).

Range : • pH : 0 to 14 units • ORP : - 1000 to + 1000 mV • T°C : 0°C to +50°C

Applications

Urban wastewater treatment (inlet/ outlet controls), Sanitation network, Industrial effluent treatment, Surface water monitoring, Fish farming, Drinking water



| Technical specifications Measures 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 |
| Technical specifications Measures ORP | |
| Measure principle | Combined electrode (ORP/reference) : Platinum tip, Ag/AgCl Ag/AgCl. Gelled reference (KCl) |
| Range | - 1000 to + 1000 mV |
| Resolution | 0,1 mV |
| Accuracy | ± 2 mV |
| Technical specifications Measures Temperature | |
| Technology | NTC |
| Range | 0,00 °C to + 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 |
| Power supply | 5 to 12 volts |
| Power consumption | Standby : 25µA Average RS485 (1 measure/second) : 3,9 mA Average SDI12 (1 measure/second) : 6,8 mA Current pulse : 500 mA |
| Technical specifications Sensor | |
| Dimensions | Diameter : 27 / 21 mm ; Length : 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 |

ADVANTAGES



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

References

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| pH/ORP/T Digital Adapter - 3 m cable without pH/ORP sensor | PF-CAP-C-00143 |
| pH/ORP/T Digital Adapter - 7 m cable without pH/ORP sensor | PF-CAP-C-00144 |
| pH/ORP/T Digital Adapter - 15 m cable without pH/ORP sensor | PF-CAP-C-00161 |
| pH/ORP/T Sensor (Cartridge) | PF-CAP-C-00155 |
| pH-ORP sensor, 3 meters cable, bare wire | PF-CAP-C-00171 |
| pH-ORP sensor, 7 meters cable, bare wire | PF-CAP-C-00172 |
| pH-ORP sensor, 15 meters cable, bare wire | PF-CAP-C-00162 |