

## Digisens

### DIGITAL SENSOR EHAN: ORP POTENTIAL AND TEMPERATURE

- **Combination sensor:**  
orp & temperature
- **Range of measure**  
ORP: -1000 to + 1000mV  
T°C: 0,00 to + 50,00°C
- **Interchangeable cartridge**  
with plastogel
- **Digital communication**  
RS-485 Modbus

**DIGITAL  
TECHNOLOGY**  
FOR RELIABLE  
MEASUREMENTS



#### APPLICATION:

- Urban waste treatment (inlet, aeration bassin, outlet)
- Treatment of Industrial effluent (optimization process of nitrifying/denitrifying)
- Deodorization channels



## PHYSICAL ANCHEMICAL TECHNOLOGY:

The electrolyte "PLASTOGEL®" of DIGISENS Ponsel sensor communicates directly with the external environment without interposition of capillary or porous. There is therefore no risk of clogging or reference defusing.

**Temperature: Measures via CTN**

## DIGITAL COMMUNICATION / INTEGRATED TRANSMITTER:

The PONSEL sensor connects to any type of recorder, transmitter, remote management system or PLC with a **Modbus RS485** input. Thanks to indexing the sensor, over 200 sensors can be connected to a recorder.

Resistant to interferences: preamplification into the sensor and digital signal processing. All data regarding the calibration, the historic and users are saved directly in the digital EHAN sensor.

## MECHANICS:

A handle in Delrin material ensures the mechanical strength of the sensor and the sealing of the cable. **Compact, robust and lightweight**, the sensor can be used in portative or online version.

### TECHNICAL DATA :

ORP Measure	
<b>Principle of ORP measure</b>	Combination Electrode (ORP/reference) platinum ring, Reference Ag/AgCl. Gelled electrolyte (KCl)
<b>Range of measures</b>	- 1000,0 to + 1000,0 mV
<b>Resolution</b>	+/- 0.1 mV
<b>Precision</b>	+/- 10 mV
<b>Answer time</b>	90 s
Temperature measurement	
<b>Principle of measure T°C</b>	CTN
<b>Temperature</b>	0,00 °C to + 50,00°C
<b>Resolution</b>	0,01 °C, Precision : + 0,5°C
<b>Temperature of storage</b>	0°C to + 60°C
<b>Protection scale</b>	IP 68
<b>Interface signal</b>	Modbus RS-485 standard and SDI-12
<b>Refresh rate measurement</b>	Maximum < 1 second
<b>Sensor power</b>	5 to 12 volts
<b>Consumption</b>	Standby : 25 µA Average RS485 (1 measure/second) : 20 mA Pulse current : 500 mA Heating time : 100 mS
Sensor	
<b>Dimensions of sensor mounted</b>	Mounted sensor length: gland (262 mm) not included ; Length with gland : 324 mm
<b>Weight</b>	350 g (sensor + cable)
<b>Material in contact with the environment</b>	PVC, POM-C,platinum, Polyurethane
<b>Maximum Pression</b>	5 bars
<b>Cable/ connection</b>	9 armored connectors, polyurethane jacket, bare wires or waterproof metal Fischer connector