

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