AQUALABO

Smart water solutions

NEW NEON RANGE

NEON OPEN

NEW PORTABLE FIELD METER FOR DISSOLVED OXYGEN, PH, CONDUCTIVITY, SALINITY, SLUDGE BLANKET DETECTION, TURBIDITY, SUSPENDED SOLID AND TEMPERATURE

APPLICATIONS

Fish farming: RAS, pond, offshore cage,
Aquaculture industry
Aquarium
Surface water, groundwater monitoring
Treatment of urban wastewater (inlet, aeration basin, outlet).
Industrial wastewater treatment

ADVANTAGES +

- Intuitive, simple, and quick to use, immediate handling.
- Robust, waterproof IP67 and lightweight.
- Automatic sensor recognition.
- Data recording and transfer via Wifi.

NEON OPEN DIGITAL PORTABLE DEVICE

Always ready for use, NEON Open could be connected to one sensor among DIGISENS range sensor allows reading of dissolved oxygen (% and mg/L) pH, ORP, Conductivity, Salinity, Turbidity, Suspended Solid, Sludge blanket detection. NEON Open also offers a recording function (30 000 measuring points) in a punctual and automatic mode.

Data transfer to the computer is easy thanks to the WiFi Transfer function (without additional cable).

Connection via connector and resistant to disturbances: pre-amplification integrated in the sensor and digital signal processing.

PONSEL
BY AQUALABO

SENSOR TECHNOLOGY

- **OPTOD sensor:** The OPTOD dissolved oxygen sensor uses the ASTM International Method D888-05 approved optical luminescence measurement technology and ISO 17289. This innovative method ensures reliable, accurate measurements and reduced maintenance. Without consumables or maintenance, the OPTOD sensor allows immediate return on investment. Only the DOdisk is to be changed every two years. The OPTOD sensor uses no oxygen and is suitable for all environments, including those with very low water circulation.

- **C4E Sensor:** The electrode works with a technology in 4 electrodes: an alternating current of constant voltage is established between a primary's pair of electrodes in graphite.

  The secondary's electrodes in platinum allow of regulate the voltage imposed to primary's electrodes to reflect of the fouling. The voltage measured between the primary's electrodes is in function of the resistance of place and so, of the conductivity.

- **PHEHT Sensor:** The PONSEL sensor incorporates a reference electrode, used for pH and redox measurements, type Ag/ AgCl with plasticized electrolyte saturated in KCl «PLASTOGEL»®. The «PLASTOGEL»® electrolyte communicates directly with the external medium without capillary or porous interposition. There is therefore no risk of plugging or defusing the reference.

- **VB5 Sensor:** The measurement principle is based on the attenuation of the IR signal at 870 nm through a 5mm optical slot. The sensor delivers Mud Veil measurements in % IR transmission. For better accuracy, the sensor optics are temperature regulated.

- **NTU sensor:** The measuring principle is based on Nephelometry: a diode emits in an infrared light (850nm) and a diode reception set at 90° measures the diffused radiation (standardized measurement). The sensor can be calibrated with a standard Formazine. Very economical optical technology requiring little maintenance and no consumables

- **MES5 Sensor:** The measurement principle is based on the attenuation of the IR signal at 870 nm through a 5 mm optical slit. The sensor provides measurements of MES (g/l), turbidity (FAU) and sludge veil as a percentage of IR transmission. For greater accuracy, the sensor optics are temperature-controlled

SPECIFICATIONS

Technical Data NEON housing	
Weight	880 g
Dimensions (H x l x e)	146 x 88 x 33
Protection class	IP 67
Operating temperature	-5 to 50 °C
Storage temperature	-10°C-60°C
Screen	LCD graphic I Backlight
Material	ABS
Sensor connexion	Robust 6-pin metal connector Sensors on 3, 7 and 15 m

SPECIFICATIONS

	OPTOD	C4E	PHEHT	VB5	NTU	MES5
Measuring Range	Oxygen: 0,00-20,00 mg/L ; 0,00-20,00 ppm | Oxygen: 200 % | Temperature: 0,00-50,00 °C	Conductivity: 0-200,0 µS/cm ; 0 –2000 µS/cm ; 0,00 –20,00 mS/cm ; 0,0 –200,0 mS/cm (compensated at 25°C) | Salinity: -5-60 g/Kg | Temperature: 0.00 – 50.00°C	pH: 0.00 to 14.00 (temperature compensated) | Redox: -1000.0 to +1000.0 mV | Temperature: 0.00 – 50.00°C	Sludge Blanket: 0-100 % | Temperature: 0,00 – 50,00 °C	Turbidity: 5-4000 NTU (4 ranges) 0-4500 mg/L | Temperature: 0,00-50,00°C	Suspended Solid: 0-50 g/L Turbidity 0-4000 FAU Sludge Blanket: 0-100 % Temperature: 0.00-50.00 °C
Resolution	Oxygen:0,01 | Temperature: 0.01 on 0-100 % range	Conductivity: 0,01 to 1 according to the range | Salinity: 0.01 | Temperature: 0.01°C	pH: 0.01 | Redox: 0.1 mV | Temperature: 0.01°C	Sludge Blanket: 0.01 à 0.1 % | Temperature: 0.01 °C	Turbidity: 0,1 to 1 NTU Temperature: 0,01°C	Suspended Solid: 0.01 g/L Turbidity: 0.01 à 1 FAU Sludge blanket: 0.01 à 0.1 % Temperature: 0.01 °C
Accuracy	Oxygen: +/- 0,1mg/L ; +/- 0,1ppm ; +/- 1 % Range 0-100 % Temperature: +/- 0.5 °C	Conductivity: +/- 1 % of the full range Beyond 100 mS/cm use appropriate buffer solution Temperature: +/- 0.5°C	pH: +/- 0.1 pH Redox: +/- 0.2 mV Temperature: +/- 0.5°C	Sludge Blanket: +/- 2% Temperature: +/- 0.5 °C	<5% NTU reading Temperature: +/- 0,5°c	Suspended Solid < 10 % Turbidity: +/- 5% (range 200-4000 FAU) Sludge Blanket: +/- 2% Temperature: +/- 0.5 °C
Calibration	On 1 or 2 points	On 4 ranges, 2 points per range	pH On 3 points	1 point ; 100 %	Turdidity NTU: 2 point/range Turbidity mg/L: 2 point (real sample)	Suspended Solid: 2 points (real sample) Turbidity FAU: 2 points Sludge Blanket: 1 point 100 %
Compensations	Barometric: Automatic | Salinity: Manual | Temperature via CTN: automatic	Temperature via NTC: automatic @ 25°C	Temperature via NTC	Regulation of optics via NTC	Regulation of optics via NTC	Regulation of optics via NTC
Recording	30 000 points | Wifi transfert					
Functions	Auto Off: 2, 5, 10, 15, 30 min | Light intensity: 5 level max | Contrast management Main measurement zoom function | Recording: On-site, interval recording (time interval) Indication of measurement stability | Measurement function that freezes with measurement stability condition					
Power supply	3 battery 1,5V AA | 648 h (without recording) | Up to 230 h (1 recording/minute)					