

# AQUALABO

Smart water solutions



## NEW NEON & MES5

NEW PORTABLE FIELD  
MESMETER DEDICATED TO TSS,  
TURBIDITY, SLUDGE BLANKET  
DETECTION AND TEMPERATURE  
MEASUREMENTS

### APPLICATIONS

Urban wastewater treatment (Inlet/Network (TSS, Turbidity), Aeration tank (TSS), Settling tank (Sludge blanket), Outlet (Turbidity))  
Treatment of industrial effluent (Aeration tank (TSS), Settling tank (Sludge blanket), Outlet (Turbidity))  
Sludge treatment processes

### ADVANTAGES



- Intuitive, simple and quick to use: immediate handling
- Robust, waterproof IP67 and lightweight
- Digital sensor technology: measurement reliability
- Data recording and transfer via Wifi

### OPTICAL TECHNOLOGY

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 TSS (g/l), Turbidity (FAU) and Sludge Blanket in % IR transmission. For improved accuracy, the sensor optics are temperature-controlled.

For a suspended solids measurement, the sensor is calibrated directly on the material to be measured (sludge sample).

In Turbidimeter mode, the sensor delivers measurements over a range of 0-4000 FAU (Formazine Attenuation Unit) and is calibrated with Formazine solutions.

Temperature: measurement and control of optics via NTC.

## NEON DIGITAL PORTABLE DEVICE

Always ready for use, the NEON handheld meter, combined with the MES5 sensor, can be used to read TSS, Turbidity, Mud Film and temperature in wastewater treatment plants or sludge treatment processes. NEON also offers a recording function (30,000 measurement points) in punctual and automatic mode. Data transfer to a PC is made easy thanks to the WiFi Transfer function (no additional cable required).

Resistant to interference: pre-amplification built into the sensor and digital signal processing.

All data relating to calibration, history, users and measurements is processed directly in the MES5 sensor and transmitted to the NEON handheld instrument.

### SPECIFICATION

<b>Measuring range</b>	TSS: 0-50 g/L   Turbidity: 0-4000 FAU   Sludge Blanket: 0-100 %   Temperature: 0.00 - 50.00
<b>Resolution</b>	TSS: 0.01 g/L   Turbidity: 0.01 to 1 FAU   Sludge Blanket: 0.01 to 0.1 %   Temperature: 0.01 °C
<b>Accuracy</b>	TSS < 10   Turbidity: +/- 5% (range 200-4000 FAU)   Sludge Blanket : +/- 2%   Temperature: +/- 0.5
<b>MES5 sensor</b>	IR optics (870 nm) based on absorptiometry
<b>Recording</b>	30 000 points   Wifi download
<b>Functions</b>	Auto off: (Auto off, 2, 5, 10, 15, 30 min) Light intensity: 5 min max Contrast management Main Zoom measurement function Recording: instant recording, interval recording (time interval) Indication of measurement stability Freezing measurement function with measurement stability condition
<b>Power supply</b>	3 x 1.5V AA batteries 850 hours (without recording) 225 h (1 recording/min)

### Technical Data NEON housing

<b>Weight</b>	880 g
<b>Dimensions (H x l x e)</b>	146 x 88 x 33
<b>Protection class</b>	IP 67
<b>Operating temperature</b>	-5 to 50 °C
<b>Storage temperature</b>	-10°C-60°C
<b>Screen</b>	LCD graphic   Backlight
<b>Material</b>	ABS
<b>Sensor connexion</b>	Cable gland type PG9 Sensors on 3, 7 et 15 m

### Technical specifications MES5 sensor

<b>Weight</b>	750 g (sensor + 3 m cable)
<b>Protection class</b>	IP68
<b>Operating temperature</b>	0 to 50 °C
<b>Storage temperature</b>	- 10°C to + 60°
<b>Pressure max.</b>	5 bars
<b>Material</b>	POM-C