

# SN6 - Portable Respirometer

In collaboration with its technological partner INCONEF, SENSARA has developed a portable respirometer for the active sludge process. Its mobility enables respirometry readings to be taken quickly in the field.

## What makes it special?

In situ control of the sanitary state of autotrophic and heterotrophic bacteria, and control of waste discharges.



## Parameters:

Oxygen, Redox, pH, OUR/SOUR and Rn/AUR.

## Advantages:

- Light, resistant, transportable device that is easy to use and ergonomic.
- Low maintenance sensors.
- Reproduction of the process in real conditions.
- Toxicity trials.
- Energy optimization.
- Optimization of the process:
  - Oxygen needs
  - Nitrification rates, nitrification capacity



## Respirometry in the active sludges process

**Respirometry** is a technique that allows us to assess, control and protect the active sludge process by providing information about the state or the activity of the biomass. This enables us to anticipate most of the problems that may affect the process, so guaranteeing, right from the outset, that the correct decisions are taken to counter these problems.

Respirometry is also a **necessary tool for optimizing the active sludge process and the level of toxicity of the wastewater** for the microorganisms. It also determines the essential parameters for modeling this process.

### What are the benefits of respirometry?

- It controls aeration
- It makes the process more effective
- It reduces costs



&

**INCONEF**  
INSTALACIÓN Y CONTROL DE ENERGÍA Y FLUIDOS