

# BIO-ZAW

## BOD / Toxicity Analyser



The BIO-ZAW series features online analysers for the short-time measurement of the biochemical oxygen demand (BOD) and toxicity assessment.

The employed biomass is taken from the plant, making BIO-ZAW a reliable support when assessing the plant's treatment capacity.

Available in three different housings: Standing with castors as BIO-ZAW-LAB, wall-mounted as BIO-ZAW-PRO or as BIO-ZAW-FIX in a heated stainless steel cabinet for outdoor installation at the site of measurement.

- Genuine biology
- No reagents required
- Easy operation
- Low operating costs

### Method

The BIO-ZAW monitors the oxygen concentration of a sample of biomass in its measurement tank. Bacteria in the sample consume oxygen with their metabolic processes. The observed respiration, the biochemical oxygen demand, is a measure for biological activity. It is one of the most important criterions to determine the performance of a biological treatment step.

Toxic contaminants in the sample water reduce the biological activity and can therefore easily be detected by the measurement of respiration.

No sample preparation is necessary. Sample intake and discharge are performed via a shared tube. A suction basket prevents larger particles from being sucked in, avoiding damage to the analyser.

### Applications

Wastewater treatment plants

## General technical data

### **BIO-ZAW Series Analysers**

Measuring method	Respirometry
Measuring cycle	Adjustable
Measuring range	0~300 mg/lh O <sub>2</sub>
Response time	< 10 min
Repeatability	± 1% of full scale
Sample feed	self-suction
Suction height	max. 5 m
Sample volume	0.4 l/measurement cycle
Signal output	4~20 mA, RS 232, optional RS 422
Alarm output	Potential free contact
Power supply	230 V AC ± 10%, 50 Hz, optional 115 V AC ± 10%, 60 Hz
Sample temperature	4~35 °C

## Housing data

### BIO-ZAW-LAB

Description	Sheet steel housing with castors
Power consumption	Max. 350 VA
Ambient temperature	10~35 °C
Dimensions	690 mm × 1780 mm × 690 mm
Weight	Approx. 95 kg
Protection class	IP 44

**Product code 747 910**



### BIO-ZAW-PRO

Description	Sheet steel housing for wall mounting
Power consumption	Max. 350 VA
Ambient temperature	10~35 °C
Dimensions	600 mm × 1140 mm × 400 mm
Weight	Approx. 80 kg
Protection class	IP 44

**Product code 747 920**



### BIO-ZAW-FIX

Description	V2A stainless steel isolated with 40 mm PU foam
Power consumption	Max. 450 VA
Ambient temperature	-20~45 °C
Dimensions	720 mm × 1930 mm × 720 mm
Weight	Approx. 140 kg
Protection class	IP 65

**Product code 746 900**

