

PRODUCT DATASHEET

BioMonitor

BOD ANALYZER FOR CONTROLLING WWTPS

Monitoring biological treatment processes.



Rapidity

Simplicity

Acuracy

Applications

- Environmental protection
- BOD monitoring
- WWTP control

BioMonitor - For biological treatment processes.

LAR's BioMonitor is an online BOD analyzer for the determination of biochemical oxygen demand (BOD), respiration and toxicity in waste water. Using BioMonitor, operators can control their waste water treatment plant in an optimal way. The BioMonitor helps operators to maintain

maximum performance of their treatment processes with an automated, online method. This provides the most useful data as quickly as possible. Using the plant's own activated sludge it delivers direct information on the treatment processes.

Applications

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- Environmental protection
- BOD monitoring
- WWTP control

Features

In contrast to the standard BOD5 method the BioMonitor measures the total BOD.

- Measurement range: 1-200.000 mg/l BOD, 0-100 % Toxicity, Respiration in mg O₂/l x min
- High reproducibility
- Short-time monitoring of total BOD and Sludge Activity

Benefits

The measurement of the BOD takes place in less than 4 minutes and therefore it is faster than the BOD5 measurement, which requires 5 day

- Monitoring of BOD and Sludge Activity allows to maintain maximum treatment performance
- BioMonitor reproduces most closely the treatment processes and delivers results within only 3-4 minutes
- Reduced consumption of chemicals using the plant's own biomass
- No memory effects



Technical Data

Measurement Technique and Sample Preparation

Measurement Method	Continuous 2-stream respiration measurement
Measurement Ranges	BOD: 1 - 50 mg/l, 1 - 200,000 mg/l ASR: 0 - 5 mg/l/min
Sensitivity	1ppm
Oxidation Principle	Determination of oxygen consumption by reactor cascade using the plants activated sludge, measurement of the self consumption of the activated sludge
Accuracy	2% of FSR
Repeatability	2% of FSR
Cycle Time	Continuous determination
Response Time TOC	min. 3 - 4 minutes (application dependent)
Bacteria Culture	Original Activated Sludge
Accessories	<ul style="list-style-type: none">• Maintenance-free particle separator• Sludge recycling unit

Temperature and Humidity

Permissible sample temperature	5-25°C
Ambient Temperature recommended	10-25°C
Ambient Air Humidity	max 80% (non condensing)

Dimensions and Weight

Housing	IP 54
Dimensions	W 630 x H 862 x D 575 mm
Weight	90 kg approx.
Particle size	soft particles max. 2mm

Electric and Hydraulic Specifications

Inflow and Outflow	30 mm ID tube or threaded, 32 mm OD or as specified
Power Supply	230 /115 V~, 50 / 60 Hz, 100 VA
Analogue Output	0/4-20 mA
Serial Interface	RS 232, Combined alarms, Life-Zero, USB 2.0
Remote Control	Through TCP/IP Protocol (Internet)

Equipment Devices and Data Output

High resolution and back-lit TFT touch screen graphic display, 10,4"
Self explanatory software and service checklist; Autostart funktion
Standard data interfaces, e. g. office PC

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