

# AutoBOD®

Fast, automated, accurate - the new way to measure biological oxygen drawdown

### State-of-the-art technology

- · Optode-based oxygen measurement at high sensitivity
- Microprocessor controlled
- Patented sampling method with temperature-correction algorithm

## User-friendliness and efficiency

- Orders of magnitude faster readout (~1 hour)
- than EPA standard BOD test (5 days)
- Continuous & persistent monitoring
- Wet-chemistry free
- No sample manipulation
- Minimal training
- Multi-sample monitoring possible





## Scientifically proven accuracy

Detection limit  $< 0.81 \ \mu mol \ L^{-1} \ day^{-1}$ 

#### Successful use in research:

An autonomous, in situ light-dark bottle device for determining community respiration and net community production. Collins et al., 2018. *Limnol. Oceanogr. Methods*, 16: 323-338.

RotoBOD—Quantifying Oxygen Consumption by Suspended Particles and Organisms. Karthäuser et al., 2024. *Environmental Science & Technology*.

**Easy data processing and statistics** with our SmartBOD<sup>TM</sup> software: https://smartbod.shinyapps.io/smartbod\_2/

- Monte Carlo simulation for accurate drawdown rate and error
- Automated date plotting and download of figures and results
- SmartBOD<sup>™</sup> feedback on data properties and biological implications

## Specifications

12-bottle sample time: 15 minutes locked to 00:00, 00:15, 00:30, and 00:45 minutes from the top of the hour Data format: Fixed field length at 19,200 Baud Bottle-to-bottle transit time: 15 seconds Pre-sample dwell: 2 seconds Sample rate: 1 Hz Samples per bottle: 25 Custom sample rate: Up to 12 bottles in 300 Seconds Operating voltage: USB or external 9-16V (60 mA) Dimensions: 12 inches x 12 inches (base) x 9.25 (height) Weight: 5.07 kg empty, 8.52 kg with (12) loaded bottles Individual bottle weight: 288 g

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**Reach out!** Our team of scientists and engineers is excited to develop solutions for your unique applications and always happy to answer questions and hear your feedback. Contact: info@woodsholeanalytics.com