Automate your processes
Automate your lab
Innovate

with *Easy***PREP**

BOD-200

Automated Analyzer

Full Process Automation Provides Unattended:

BOD Analysis
CBOD Analysis
DO Analysis
Seed Addition
Water Addition
Sample Dilution
Sample Homogenization
Compatible with Bar Coding Capability
300 or 60 ml BOD Bottles
Allows 5 or 7 day Incubation Period
Data Recording and Result Calculator

ENVIRONMENTAL TESTING made *Easy* PREP

OPTICAL PROBE

SCP SCIENCE
www.scpscience.com

Environmental awareness and monitoring are crucial in ensuring a healthy and balanced ecosystem. Environmental Law plays a vital role in regulating the use of natural resources and in protecting the environment. Numerous regulations have been put forth at national and international levels in order to reinforce practices that would maintain a healthy environment.

The *Easy***PREP** portfolio provides environmental testing laboratories with the technologies required to comply with environmental water legislation through automated, unattended, environmental testing, analytical platforms.

The BOD-200 provides users with the capability to conduct BOD, CBOD and DO analysis. Analyze CBOD in conjunction with BOD to verify if non-compliant BOD results are due to nitrification and to obtain results more reflective of real effluent quality then under nitrifying conditions.

Overview

THE BOD-200 AUTOMATES BOD, CBOD AND DO ANALYSIS FOR ENVIRONMENTAL TESTING, STATE AND MUNICIPAL TESTING LABS

- Improve lab productivity by assigning personnel to value added tasks instead of repetitive manual BOD measurements.
- Ensure that lab complies to your accuracy and precision requirements.
- Ensure repeatability. Results are only reflective of sample variations.
- Quick Reference and Tracking of result records.

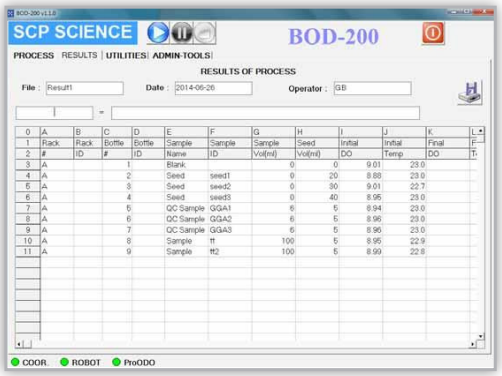
BIOCHEMICAL OXYGEN DEMAND, BOD, MEASURES OXYGEN DEPLETION WHICH REPRESENTS THE BREAKDOWN OF ORGANIC MATERIAL BY MICROORGANISMS

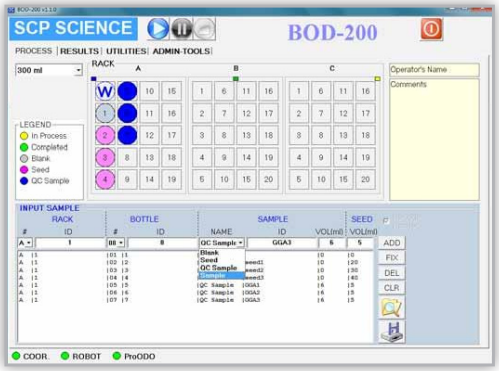
Carbonaceous BOD, CBOD, measures oxygen depletion from the breakdown of organic material by microorganisms in which the contribution from nitrogenous bacteria has been suppressed.

Features

- Universal platform accommodates 300ml re-usable glass and/or disposable plastic bottles and 60 ml glass bottles.
- Bar Coding option provides sample, bottle and rack tracking throughout the process.
- Optimize laboratory management by opting for a 5 or 7-day incubation period.
- Auto Wash Station prevents cross contamination.
- Automatic flagging of abnormal results.
- User defined bottle labeling.
- Method building, data acquisition and analysis, compliant with requirements.
- Automated software calculation of BOD, CBOD concentration.
- Software calculated volume of dilution water.
- Controlled liquid dispensing accuracy.
- Intergrated blade stirrer for homogenization and optimal stabilization time.
- YSI Optical Probe.
- Rinsing station for residual sample removal, automatic rinsing between samples.
- Combined BOD and CBOD Analysis.

COMPLIANT WITH LABORATORY STANDARDS:	ISO 5815-1 | EN-1899-1 | EN-1899-2 | EN-5814 (2012) | EPA 405.1





Software Features

- Measure dissolved oxygen concentration
- BOD and CBOD calculations compliant with international ISO, EPA, JIS and EN regulations
- Complete traceability using bar coding capability for racks, bottles and samples
- Measure sample BOD and CBOD in the same run for best quality control of BOD results
- Reload pre-saved method lists for fast set-up of routine operations
- Set 5-day or 7-day incubation period
- Rack-specific time tracking of incubation periods
- Automatic data export in a LIMS and spreadsheet-compatible format
- Automatic flagging of “out-of-range” results applying pre-defined criteria for blanks, seed controls and standards
- Automatic oxygen depletion control
- Automatic temperature compensation
- User definable seed volume addition
- Easy and quick software managed probe calibration function
- Prevent growth inside the tubing by priming with a click of a button

PROBE SPECIFICATIONS:

Range:	0-50 mg/l.
Accuracy:	• 0 to 20: ±0.1mg/L or ±1% reading, whichever greater • 20-50mg/L, ±15% reading
Resolution:	0.01 mg/L
Response time:	T95=22 seconds with stirring

Optical Probe

THE BOD-200 AUTOMATED ANALYZER USES AN OPTICAL DISSOLVED OXYGEN PROBE WITH AN INTERGRATED STIRRER

ADVANTAGES OF CHEMILUMINESCENT OPTICAL PROBE VS MEMBRANE PROBE

- Accurate, reproducible results.
- Less drift than membrane probes.
- Requires fewer one-point calibrations.
- Takes reading instantly.
- No polarization or warm-up required.
- Readings are not affected by sample color or turbidity.
- Only yearly maintenance is needed.
- No electrolyte refilling.
- The lifetime of the luminescent Optical Probe is much greater than the lifespan of a membrane probe.
- Optica Probe reading are not affected by sample turbidity.

BOD-200 *Ordering Information*

STEP 1 - ORDER INSTRUMENT

Description	Catalog No.
BOD-200 (110V/230V), with software	010-420-001

ITEMS INCLUDED IN THE BASIC CONFIGURATION

Description	Catalog No.
BOD Optical Probe	---
Platform BOD-200, Universal for 300 and 60 ml bottles	---
BOD Dispensing Replacement Tubing	---

STEP 2 - SELECT 3 RACKS

Description	Bottle Volume	Bottle capacity/Rack	Catalog No.
BOD bottle Rack, glass	60 ml	42	010-420-044
BOD bottle Rack, disposable plastic	300 ml	20	010-420-040
BOD bottle Rack, glass	300 ml	20	010-420-042

STANDARDS & REAGENTS

Description	Size & Qty.	Catalog No.
BOD reagent kit containing reagents required to prepare BOD dilution water. See page 204	500ml/ea	250-110-150
Buffer pH 7.2 (phosphate), for BOD	500ml/ea	250-110-100
Calcium Chloride, C_aCl_2, 2.75% w/v	500ml/ea	250-110-200
Ferric Chloride, $FeCl_3$, 0.025% w/v	500ml/ea	250-110-300
Magnesium Sulfate, $MgSO_4$, 2.25%w/v	500ml/ea	250-110-400
BOD Glucose Powder for check solution	10g/ea	250-110-500
BOD Glutamic Acid for check solution	10g/ea	250-110-600

BOTTLES

Description	Qty (pk)	Catalog No.
BOD disposable plastic bottles, numbered, 300 ml	100	010-420-010
BOD glass bottles, numbered with Stopper, 300 ml	24	010-420-024
BOD glass bottles, barcoded with Stopper, 300 ml	24	010-420-066 to 010-420-084 010-420-106 to 010-420-120
BOD glass bottles, barcoded with Stopper, 60 ml	36	010-420-060 to 010-420-064

ACCESSORIES

Description	Catalog No.
Barcode Reader, for rapid loading of sample identification	010-600-034
BOD Bottle Cap for 60 ml and 300 ml, plastic or glass bottles, pk. 25	010-420-018
PC with Windows OS	010-400-008
Optical Probe Replacement Stirrer	010-420-034

TO LEARN MORE

Please contact one of our sales representatives at sales@scpscience.com or visit our website www.scpscience.com or comtact one of our regional offices below

COMPUTER SYSTEM REQUIREMENTS

PC Processor:	1GHz or superior
RAM memory:	1 GB RAM
Disk minimum space:	1 GB free
Ports:	1 USB port available
Operatting System:	Windows 8, Windows 7, Windows XP

INSTRUMENT DIMENSIONS

Length	45.87”
Depth	25.60”
Height	25.20”

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