

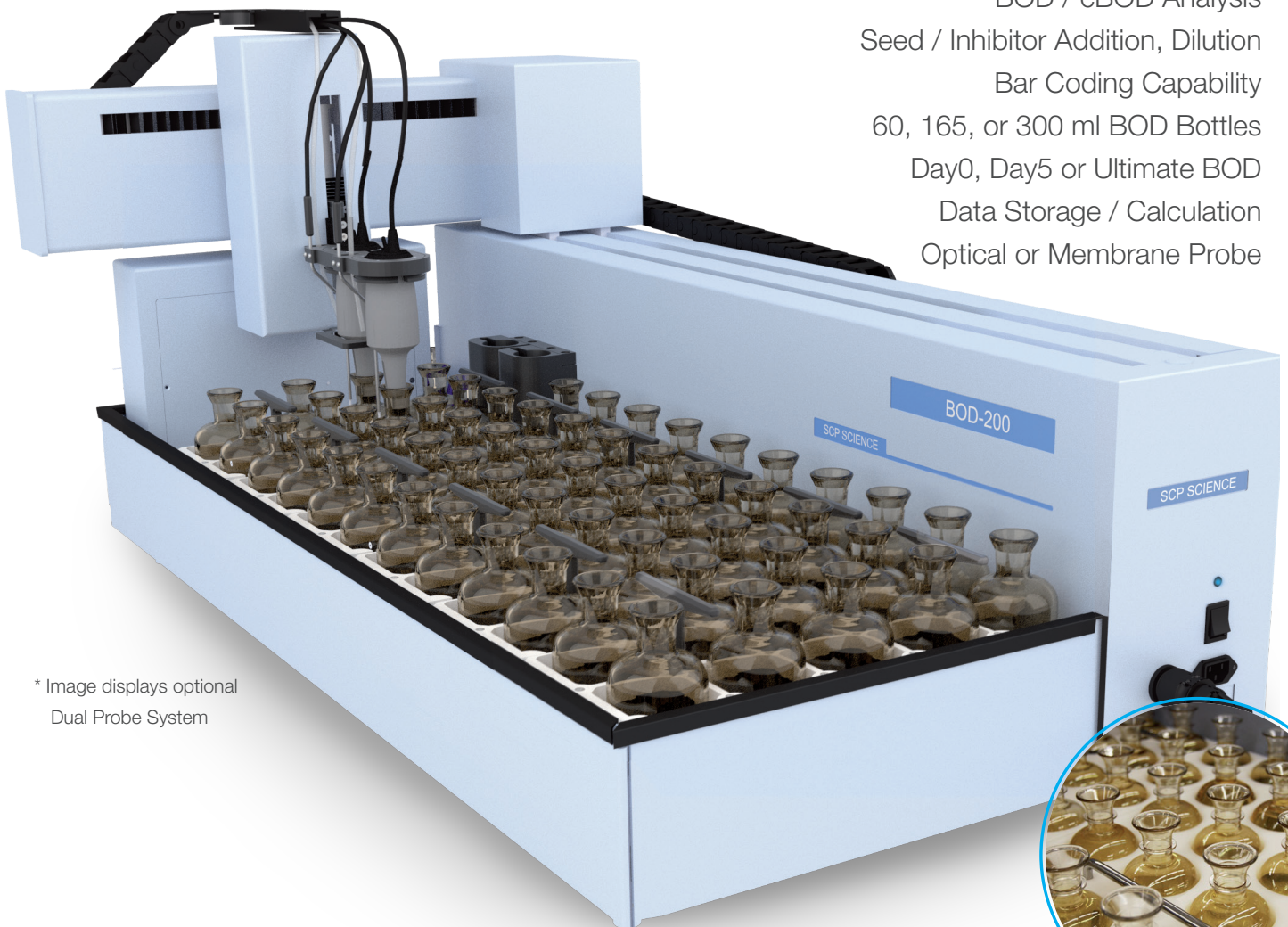
Automate your processes  
Automate your lab  
Innovate

with *Easy*PREP  
**BOD-200**

## Automated Analyzer

Full Process Automation:

- BOD / cBOD Analysis
- Seed / Inhibitor Addition, Dilution
- Bar Coding Capability
- 60, 165, or 300 ml BOD Bottles
- Day0, Day5 or Ultimate BOD
- Data Storage / Calculation
- Optical or Membrane Probe



\* Image displays optional  
Dual Probe System

**ENVIRONMENTAL  
TESTING**  
made  
*Easy*PREP

**SCP SCIENCE**  
[www.scpscience.com](http://www.scpscience.com)

The EasyPREP portfolio provides environmental testing laboratories with the technologies required to comply with environmental water legislation through automated, unattended, environmental analyzers.

The EasyPREP BOD-200 provides users with the capability to conduct BOD and cBOD analysis. Analyze cBOD in conjunction with BOD to verify if non-compliant BOD results are due to nitrification. Obtain results more reflective of real effluent quality than when under nitrifying conditions.

## Overview

### THE BOD-200 AUTOMATES BOD AND cBOD ANALYSIS FOR STATE, MUNICIPAL, AND COMMERCIAL TESTING LABORATORIES

- Improve laboratory productivity by assigning personnel to value-added tasks instead of repetitive manual BOD measurements.
- Ensure that your laboratory complies to accuracy and precision requirements.
- Ensure repeatability. Results are only reflective of sample variations.
- Track and reference detailed records of results.

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 all BOD bottle types.
- Barcode reader option provides sample tracking throughout the entire process.
- Optimize laboratory management with Day0, Day5 or Ultimate BOD. The total oxygen consumed when a biochemical reaction is completed is Ultimate BOD.
- Automatic dispensing of liquids and quick measurement for Day0.
- Integrated blade stirrer for homogenization and optimal stabilization time.
- YSI Optical or Membrane probe, available in single or dual configurations.
- Automatic rinsing between samples for residual sample removal and preventing cross contamination.
- Prime tubing with the click of a button.



COMPLIANT WITH  
LABORATORY STANDARDS:

ISO 5815-1 | EN-1899-1 | EN-1899-2 | EN-5814 (2012) | EPA 405.1

# Software Features

RESULTS OF PROCESS

File: Result1 Date: 2014-09-26 Operator: GB

0	A	B	C	D	E	F	G	H	I	J	K	L
1	Rack	Bottle	Bottle	Sample	Sample	Sample	Seed	Initial	Initial	Final	DO	T
2	#	ID	#	ID	Name	ID	Vol(ml)	Vol(ml)	DO	Temp	DO	T
3	A	1		Blank			0	0	9.01	23.0		
4	A	2		Seed	seed1		0	20	8.88	23.0		
5	A	3		Seed	seed2		0	30	9.01	23.7		
6	A	4		Seed	seed3		0	40	8.95	23.0		
7	A	5		QC Sample	GG41		6	6	8.94	23.0		
8	A	6		QC Sample	GG42		6	6	8.96	23.0		
9	A	7		QC Sample	GG43		6	6	8.89	23.0		
10	A	8		Sample	tt		100	6	8.95	22.9		
11	A	9		Sample	tt2		100	6	8.99	22.8		

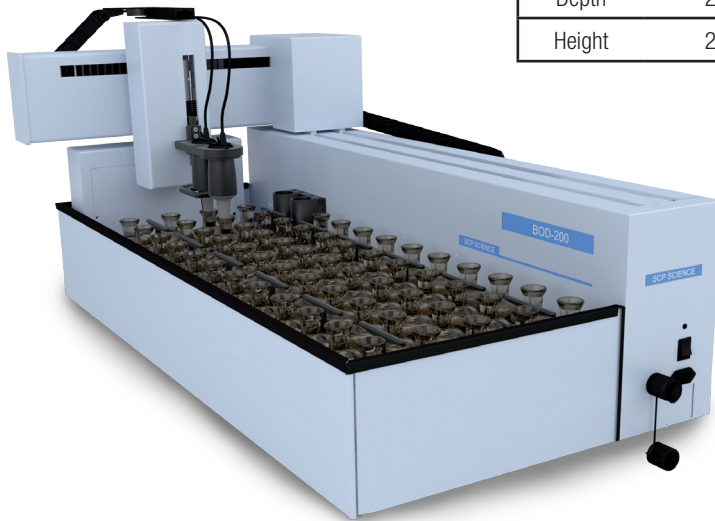
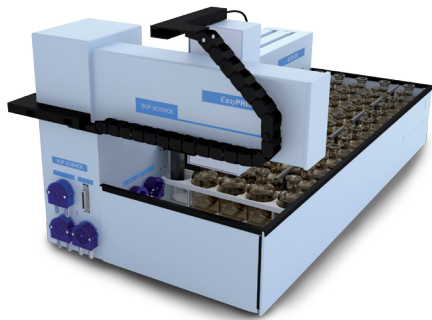
- BOD and cBOD calculations compliant with international ISO, EPA, JIS and EN regulations.
- Measure sample BOD and cBOD in the same run for best quality control of BOD results.
- Set 5-day, 7-day or n-days incubation period.
- Rack-specific time tracking of incubation period.
- Data exportable to a LIMS in a compatible .csv format.
- Automatic flagging of “out-of-range” results by applying pre-defined criteria for blanks, seed controls and standards.
- Automatic barometric pressure compensation.
- Automatic temperature compensation.
- Seed and inhibitor volume additions are user definable.
- Easy and quick probe calibration function.
- Date and time stamp.

300 ml RACK A B C

Operator's Name: Comments

LEGEND: In Process, Completed, Blank, Seed, QC Sample

RACK	BOTTLE	BOTTLE	SAMPLE	SEED	SEED
#	ID	#	ID	NAME	VOLUME
A	1	B	1	ADD	ADD
A	15	10	15	Blank	10
A	15	10	15	Seed	10
A	15	10	15	QC Sample	10
A	15	10	15	Sample	10
A	15	10	15	QC Sample	10
A	15	10	15	Sample	10
A	15	10	15	QC Sample	10
A	15	10	15	Sample	10



EasyPREP BOD-200 Dimensions	
Length	45.87" (116.5 cm)
Depth	25.60" (65 cm)
Height	25.20" (64 cm)

# Probe Options

	Optical Probe	Membrane Probe
<b>Range:</b>	0-50 mg/L	0-50 mg/L
<b>Accuracy:</b>	0 to 20: ±0.1 mg/L or ±1% reading, whichever greater	0 to 20: ±0.1 mg/L or ±2% reading, whichever greater
<b>Resolution:</b>	0.01 mg/L	0.01 mg/L
<b>Response time:</b>	T90=22 seconds with stirring	T90=30 seconds with stirring

# BOD-200 Ordering Information

INSTRUMENT	
Description	Catalog No.
BOD-200 with Optical Probe	010-420-001
BOD-200 with Membrane Probe	010-420-002

RACKS (3 REQUIRED)			
Description	Bottle Volume	Bottle capacity	Catalog No.
BOD Bottle Rack, glass	165 ml	24	010-420-054
BOD Bottle Half Rack, glass	300 ml	10	010-420-086
BOD Bottle Rack, plastic	300 ml	20	010-420-035
BOD Bottle Rack, glass	300 ml	20	010-420-036
BOD Bottle Rack, glass	60 ml	42	010-420-037

INSTRUMENT OPTIONS			
<b>EasyPREP BOD-200 with Optical Probe</b>		<b>EasyPREP BOD-200 with Membrane Probe</b>	
Description	Catalog No.	Description	Catalog No.
Dual Probe Kit	010-420-003	Dual Probe Kit	010-420-004
BOD Optical Probe	010-420-030	BOD Membrane Probe	010-420-031
Probe Sensor Replacement Cap	010-420-090	Probe Sensor Replacement Cap	010-420-091

OPTIONS AND ACCESSORIES	
Description	Catalog No.
Set of Replacement Dispensing Tubing	010-420-088
Barcode reader, for rapid loading of sample identification	010-600-034
BOD Bottle Cap for 300 ml, plastic or glass bottles, pk. 25	010-420-018
Laptop computer, with operating system (N. American orders only)*	010-400-008
Optical Probe Replacement Stirrer	010-420-034

\*For orders outside of North America, please speak to your local Sales Representative or Distributor.

STANDARDS & REAGENTS		
Description	Unit	Catalog No.
BOD reagent kit containing reagents required to prepare BOD dilution water.	Kit	250-110-150
Buffer pH 7.2 (phosphate), for BOD	500 ml	250-110-100
Calcium Chloride, CaCl <sub>2</sub> , 2.75% w/v	500 ml	250-110-200
Ferric Chloride, FeCl <sub>3</sub> , 0.025% w/v	500 ml	250-110-300
Magnesium Sulfate, MgSO <sub>4</sub> , 2.25%w/v	500 ml	250-110-400
BOD Glucose Powder for check solution	10 g	250-110-500
BOD Glutamic Acid for check solution	10 g	250-110-600

Contact your Sales Representative, local Distributor, or one of our regional offices below:

CANADA	USA	FRANCE	GERMANY	UK
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