

BOD/COD SENSOR



FEATURES & BENEFITS

- Affordable real-time BOD/COD monitoring
- Multiple wavelength sensor with LED technology
- Operator friendly, low maintenance design
- Quick and simple optical measurements
- Reagent free operation
- Multiple parameter configuration available
- Parameters include BOD, COD, TOC, TSS

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

WATER QUALITY
MONITORING
SOLUTIONS

REAL-TIME MONITORING SOLUTION

BOD/COD Sensor

Real Tech's BOD/COD bypass sensor provides affordable real-time measurement of organic matter in water or wastewater. Designed to meet the needs of many monitoring applications, the series offers multiple sensor path length selections to meet the desired measurement range.

Controllers and Accessories

Our innovative modular product platform allows a system to be configured around the ideal sensor with controller options and various accessory products, including automatic chemical cleaning systems that lower maintenance while improving system performance and dilution systems that extend the measurement range for highly concentrated wastewaters. We can truly meet the physical demands of any installation to ensure reliable, continuous operation.

Liquid Ai Compatible

With the right sensor and hardware configuration, we then offer Liquid Ai data services to complement our monitoring systems. Calibration Health Monitoring ensures accuracy and reliability are maintained so our clients can have the utmost confidence in their results, while our Remote Monitoring platform enables access to data anywhere, anytime.

MEASUREMENT PRINCIPLE

Real Tech's BOD/COD sensor uses absorbance of UV light to measure organic compounds that naturally absorb in this region of the light spectrum. The sensor measures organics in a multi-dimensional way that results in improved correlations to aggregate organics water quality parameters, such as BOD, COD and TOC. This also allows the sensor to be able to detect changes in the composition of organics independently of their concentration. The patent pending LED technology keeps maintenance and costs at a minimum, making the sensor an ideal choice for real-time organics monitoring.

REALTECH
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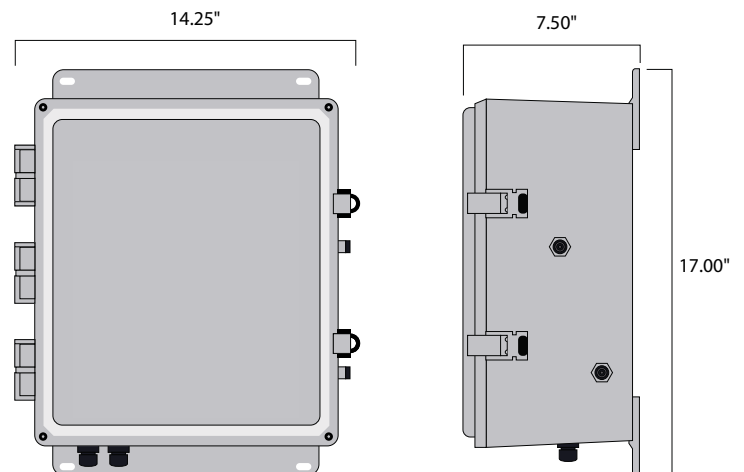
BOD/COD SENSOR SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA			
MODEL	BL2010	BL2020	BL2040	BL2100
Path Length	1 mm	2 mm	4 mm	10 mm
Parameters	BOD, COD, TOC, TSS			
Range	Depends on model selected. Refer to range chart on next page.			
Units	mg/L			
Sampling Time	30 seconds			
Calibration	Zero to DI water. Factory parameter calibration allows field adjustment as required.			
Cleaning	In-situ chemical cleaning makes cleaning quick and easy. Automatic chemical cleaning is optional.			
Self-Diagnostics	Detection and diagnosis of internal system fault			
Alarms	Dry contact terminals allow for operator configurable alarms for: high and low set points, low lamp output, leaks, system fault, etc.			
Humidity Control	Humidity sensor with large plug-in regenerating desiccant system			
Wavelength	Multiple wavelengths			
Light Source	LED			
Technology	Split-Sense Pro			
Enclosure	NEMA 4, wall mountable			
Flow Rate	300-1000 mL/min			
Pressure Rating	20 PSI			
Fluid Connections	1/4" OD tube push-in fittings			
Electrical/Comm.	From controller			
Storage Temp.	-20 to 60°C (-4 to 140°F)			
Operating Temp.	0 to 45°C (32 to 113°F)			
Weight	22 lb			
Dimensions	17"H x 14.25"W x 7.5"D			
Warranty	2-year limited warranty (Extended care packages available)			
Sensor Upgrades	High Temp. Upgrade I, High Temp. Upgrade II			

* Technical Specifications are subject to change without notice.

DIMENSIONS

The BOD/COD sensor is a bypass cabinet instruments installed directly on a wall, railing or system backboard. Sample is supplied to the sensor from either a pressurized source or from an open-channel using an accessory pumping system.



SENSOR MODELS & RANGE

Includes BOD/COD sensor, flow cell, calibration bottle and dehumidifier.
Controller and accessories sold separately.

Measurement range can be extended using Real Tech's Dilution system.

MUNICIPAL

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BL2010	1 mm	0 - 750	0 - 1500	0 - 400
BL2020	2 mm	0 - 375	0 - 750	0 - 200
BL2040	4 mm	0 - 190	0 - 375	0 - 100
BL2100	10 mm	0 - 75	0 - 150	0 - 40

DAIRY

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BL2010	1 mm	0 - 2500	0 - 5000	0 - 1250
BL2020	2 mm	0 - 1250	0 - 2500	0 - 625
BL2040	4 mm	0 - 625	0 - 1250	0 - 300
BL2100	10 mm	0 - 250	0 - 500	0 - 125

BEVERAGE

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BL2010	1 mm	0 - 4000	0 - 12,000	0 - 3000
BL2020	2 mm	0 - 2000	0 - 6000	0 - 1500
BL2040	4 mm	0 - 1000	0 - 3000	0 - 750
BL2100	10 mm	0 - 400	0 - 1200	0 - 300

BREWERY

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BL2010	1 mm	0 - 4000	0 - 12,000	0 - 3000
BL2020	2 mm	0 - 2000	0 - 6000	0 - 1500
BL2040	4 mm	0 - 1000	0 - 3000	0 - 750
BL2100	10 mm	0 - 400	0 - 1200	0 - 300

MEAT PROCESSING

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BL2010	1 mm	0 - 3000	0 - 5000	0 - 1250
BL2020	2 mm	0 - 1500	0 - 2500	0 - 625
BL2040	4 mm	0 - 750	0 - 1250	0 - 300
BL2100	10 mm	0 - 300	0 - 500	0 - 125

PULP & PAPER

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BL2010	1 mm	0 - 350	0 - 1000	0 - 250
BL2020	2 mm	0 - 175	0 - 500	0 - 125
BL2040	4 mm	0 - 90	0 - 250	0 - 60
BL2100	10 mm	0 - 35	0 - 100	0 - 25

* Stated ranges are approximate, dependent on site and application - contact Real Tech to confirm model selection.

* Range for TSS is site specific, contact Real Tech for details.

CONTROLLERS

PRODUCT #	NAME	DESCRIPTION
S-169000	Real Controller	Wall mounted controller with 4-line x 20-character back lit LCD display for sensors
S-11TPC	Real Controller Pro	Wall mounted controller with touch panel PC interface (PC inside cabinet model)
S-11TPCD	Real Controller Pro	Wall mounted controller with touch panel PC interface (PC external on door model)

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
UVT-078130	Real Clean System I	Automatic chemical cleaning system for use with 2000 and 3000 series models
UVT-118010	Real Clean System II	Automatic chemical cleaning system for use with 4000 series models
UVT-079121	Pump Clean System I	Self-priming pump and automatic chemical cleaning for use with 2000 and 3000 series models
UVT-129122	Pump Clean System II	Self-priming pump and automatic chemical cleaning for use with 4000 series models
S-159124	Air Purge Clean System I	Automatic chemical cleaning, air purge and pump (vertical lift less than 8 ft and pumping distance less than 25ft)
S-179125	Air Purge Clean System II	Automatic chemical cleaning, air purge and booster pump (vertical lift exceeds 8ft or pumping distance exceeds 25 ft)
S-179126	Air Purge Clean System III	Automatic chemical cleaning and air purge. Client supplies pump or water is pressurized
S-169092	Dilution System I	Dilution system, automatic chemical cleaning, air purge and pump (vertical lift less than 8 ft and pumping distance less than 25ft)
S-179093	Dilution System II	Dilution system, automatic chemical cleaning, air purge and booster pump (vertical lift exceeds 8ft or pumping distance exceeds 25 ft)
S-179094	Dilution System III	Dilution system, automatic chemical cleaning and air purge. Client supplies pump or water is pressurized
S-1789121	Dual Feed II	Dual feed option includes Digital I/O module for use with controllers

Real Tech Inc.

1150 Champlain Court,
Whitby, Ontario L1N 6K9 Canada
TF: 1.877.779.2888 T: 1.905.665.6888
info@realtechwater.com

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