BOD/COD PROBE

REAL-TIME MONITORING SOLUTION

BOD/COD Probe

Real Tech's robust BOD/COD submersible probe 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 for 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 compressed air cleaning systems that lower maintenance while improving system performance, and mounting kits for simple installation and operation. 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 probe 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 probe an ideal choice for real-time organics monitoring.
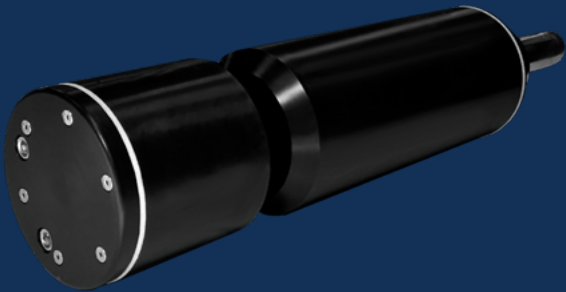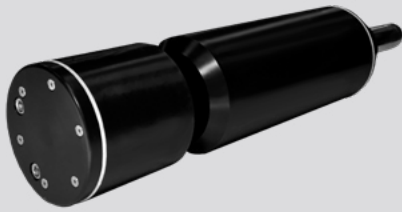
FEATURES & BENEFITS

- 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

REALTECH INC.

BOD/COD PROBE SPECIFICATIONS

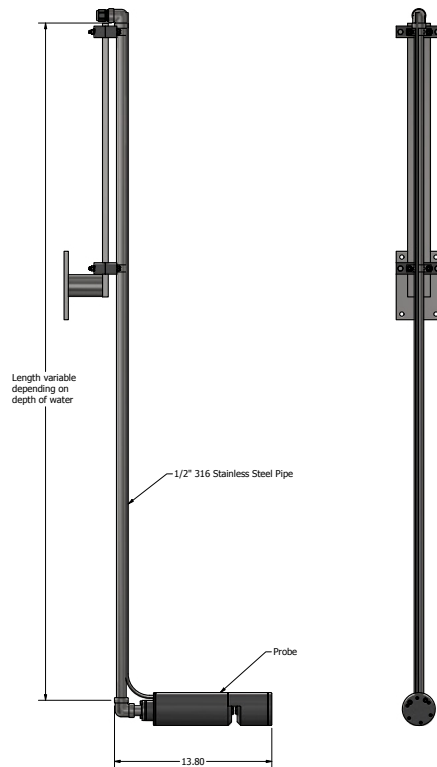| CHARACTERISTIC	TECHNICAL DATA			
MODEL	**BA2010**	**BA2020**	**BA2040**	**BA2100**
Path Length	1 mm	2 mm	4 mm	10 mm
Parameters	BOD, COD, TOC, TSS			
Range	Depends on model selected. Refer to range chart on next page.			
Units	mg/L			
Sampling Time	10 seconds			
Calibration	Zero to DI water. Factory parameter calibration allows field adjustment as required.			
Cleaning	Real Air Clean automatic pressurized air cleaning system			
Self-Diagnostics	Detection and diagnosis of internal system fault			
Alarms	Continuous detection of leaks, lamp output, humidity, temperature and electrical fault			
Humidity Control	Humidity sensor with desiccant pack			
Wavelength	Multiple wavelengths			
Light Source	LED			
Electrical/Comm.	From controller			
Storage Temp.	-20 to 60℃ (-4 to 140°F)			
Operating Temp.	0 to 45℃ (32 to 113°F)			
Weight	5 lb			
Dimensions	11" H x 2.875" Diameter			
Warranty	2-year limited warranty (Extended care packages available)			

DIMENSIONS

The BOD/COD probe is a submersible instrument installed directly in-situ using a mounting kit attached to a tank wall or railing.

DIMENSIONS FOR BOD/COD PROBE

1/2" NPT

3/16" ID Tubing Hose Barb Connection

13.000

11.000

Path Length
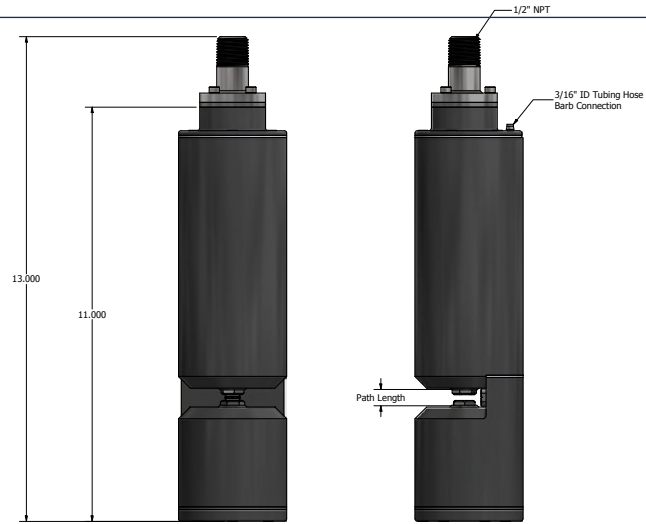
MOUNTING FOR BOD/COD PROBE

Length variable depending on depth of water

1/2" 316 Stainless Steel Pipe

Probe

13.80

PROBE MODELS & RANGE

Includes BOD/COD probe sensor, 35 feet of communication cable and 35 feet of air tubing.
Controller, mounting kit and cleaning system sold separately.

Measurement range can be extended using Real Tech's BOD/COD Sensor with Dilution system.

MUNICIPAL

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BA2010	1 mm	0 - 750	0 - 1500	0 - 400
BA2020	2 mm	0 - 375	0 - 750	0 - 200
BA2040	4 mm	0 - 190	0 - 375	0 - 100
BA2100	10 mm	0 - 75	0 - 150	0 - 40

DAIRY

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BA2010	1 mm	0 - 2500	0 - 5000	0 - 1250
BA2020	2 mm	0 - 1250	0 - 2500	0 - 625
BA2040	4 mm	0 - 625	0 - 1250	0 - 300
BA2100	10 mm	0 - 250	0 - 500	0 - 125

BEVERAGE

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BA2010	1 mm	0 - 4000	0 - 12,000	0 - 3000
BA2020	2 mm	0 - 2000	0 - 6000	0 - 1500
BA2040	4 mm	0 - 1000	0 - 3000	0 - 750
BA2100	10 mm	0 - 400	0 - 1200	0 - 300

BREWERY

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BA2010	1 mm	0 - 4000	0 - 12,000	0 - 3000
BA2020	2 mm	0 - 2000	0 - 6000	0 - 1500
BA2040	4 mm	0 - 1000	0 - 3000	0 - 750
BA2100	10 mm	0 - 400	0 - 1200	0 - 300

MEAT PROCESSING

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BA2010	1 mm	0 - 3000	0 - 5000	0 - 1250
BA2020	2 mm	0 - 1500	0 - 2500	0 - 625
BA2040	4 mm	0 - 750	0 - 1250	0 - 300
BA2100	10 mm	0 - 300	0 - 500	0 - 125

PULP & PAPER

PRODUCT#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)
BA2010	1 mm	0 - 350	0 - 1000	0 - 250
BA2020	2 mm	0 - 175	0 - 500	0 - 125
BA2040	4 mm	0 - 90	0 - 250	0 - 60
BA2100	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
S-188101	Air Clean System I	Air cleaning valve module requires on-site air (no compressor)
S-188102	Air Clean System II	Low power automatic CO_2 air cleaning system
S-188103	Air Clean System III	Automatic compressed air cleaning system including compressor
S-189031	LED Probe Mounting Kit I	Provides secure mounting attachment to a tank wall or open channel wall for sensor. No pole included
S-189032	LED Probe Mounting Kit II	Provides secure mounting attachment to a tank wall or open channel wall for sensor. 5ft pole included
S-189033	LED Probe Mounting Kit III	Provides secure mounting attachment to a tank wall or open channel wall for sensor. 10ft pole included