BENZENE SENSOR

(BZL) SERIES

FEATURES & BENEFITS

- Affordable real-time benzene monitoring
- Multiple wavelength sensor uses UV LED technology for superior measurement performance
- Wastewater to high purity measurement ranges
- Bypass style sensor with multiple flow cell selections to meet application demands
- Operator friendly, low maintenance UV LED design
- Reagent free optical measurements
- Simple to install and operate

REAL-TIME MONITORING SOLUTION

Benzene Sensor
Real Tech's bypass Benzene sensor provides affordable real-time measurement of benzene in water or wastewater. Designed to meet the needs of many monitoring applications, the BZL series offers multiple flow cell designs and sensor path length selections to meet the desired measurement range.

Controllers and Accessories
Our innovative modular product platform ensures our clients gain the real-time water quality monitoring system that meets their specific demands and budget. With multiple controller and accessory options available such as automatic chemical cleaning systems that lower maintenance while improving system performance, Real Tech provides a total solution for all of your unique water quality needs.

Liquid Ai Compatible
Our Liquid Ai data services complement our real-time water quality monitoring systems. Calibration Health Monitoring ensures accuracy and reliability is 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 Benzene sensor provides superior measurement performance across multiple wavelengths of light using UV LEDs. Many compounds absorb light in the UV-VIS spectrum, and how much the compounds absorb is directly proportional to their concentration. Compounds that may interfere with benzene measurement are compensated for using additional reference wavelengths. Real Tech's innovative Benzene sensor is advancing water and wastewater management.

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

REALTECH INC.

BENZENE SENSOR SPECIFICATIONS

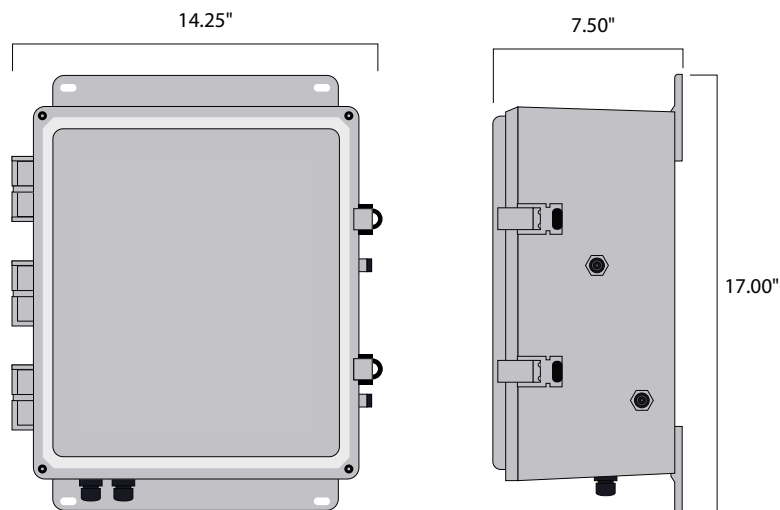| CHARACTERISTIC	TECHNICAL DATA		
Model Series	1000 series	2000 series	4000 series
Path Length	0.5, 1, 2, 4, 10 mm	1, 2, 4, 8 mm	25, 50, 100,150 mm
Parameters	Benzene		
Range	Depends on model selected. Refer to range charts.		
Units	mg/L, ppm, µg/L		
Sampling Time	30 seconds		
Calibration	Factory calibrated. Field adjustment of calibration is possible.		
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	UV LED		
Flow Rate	500 – 1000 mL/min	300-1000 mL/min	
Pressure Rating	85 PSI maximum	20 PSI maximum	
Fluid Connections	3/8" OD tube push-in fittings	1/4" OD tube push-in fittings	
Wetted Materials	Kynar, FEP, Quartz, SS316L, Viton	Kynar, Polyethylene, Quartz, SS 316L, Viton	
Electrical/Comm.	From controller		
Ambient Temp.	0 to 45°C (32 to 113°F)		
Water Temp.	0 to 90°C (32 to 194°F) at 21°C (69.8°F) Ambient temperature		
Enclosure	NEMA 4X, wall mountable		
Weight	22 lb	24 lb	
Dimensions	17"H x 14.25"W x 7.5"D	15.82"H x 13.82"W x 9.00"D	
Warranty	2-year limited warranty (Extended care packages available)		

* Technical Specifications are subject to change without notice.

* Water temperature range based on material compatibility only. Contact Real Tech to verify application.
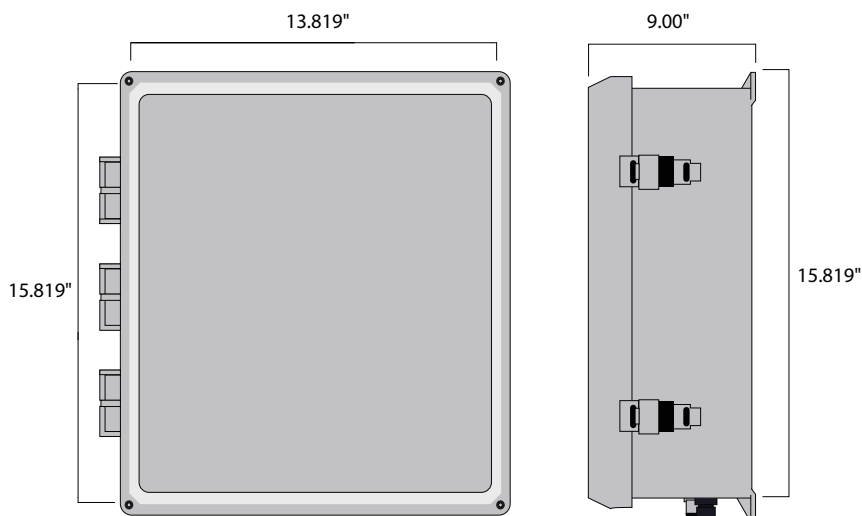
DIMENSIONS

The benzene sensor is a bypass cabinet instrument 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.

DIMENSIONS FOR 1000 & 2000 SERIES MODELS

14.25" 7.50" 17.00"

DIMENSIONS FOR 4000 SERIES MODELS

13.819" 9.00" 15.819"

15.819"

SENSOR SELECTION

MODEL SERIES	DESCRIPTION
1000	Ideal for closed loop, high pressure or high solids wastewater monitoring applications
2000	Ideal for general water monitoring applications
4000	Ideal for high purity water monitoring applications

SENSOR MODELS & RANGE

Includes benzene sensor, flow cell, calibration bottle and dehumidifier. Controller and accessories sold separately.

MODEL#	PATH LENGTH	BENZENE (mg/L)
BZL1005	0.5 mm	0 - 22,000
BZL1010	1 mm	0 - 11,000
BZL1020	2 mm	0 - 5500
BZL1040	4 mm	0 - 2750
BZL1100	10 mm	0 - 1100
BZL2010	1 mm	0 - 11,000
BZL2020	2 mm	0 - 5500
BZL2040	4 mm	0 - 2750
BZL2080	8 mm	0 - 1375
BZL4025	25 mm	0 - 440
BZL4050	50 mm	0 - 220
BZL4100	100 mm	0 - 110
BZL4150	150 mm	0 - 70

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

CONTROLLERS

Controllers include proprietary inputs for Real Tech sensors and accessories.

PRODUCT #	NAME	DESCRIPTION
S--229005	Real Controller Lite	Wall mounted controller with 4-line x 20-character back lit LCD display. Includes modbus RTU (RS485)
S-169000	Real Controller	Wall mounted controller with 4-line x 20-character back lit LCD display. Includes modbus RTU (RS485), 1 channel of 4-20 mA out and digital I/O module
S-11TPC	Real Controller Pro	Wall mounted controller with 12.1" colour LCD touch panel PC interface (PC inside cabinet model). Includes Modbus TCP
S-11TPCD	Real Controller Pro	Wall mounted controller with 12.1" colour LCD touch panel PC interface (PC external on door model). Includes Modbus TCP

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
UVT-078130	Real Clean System I	Automatic chemical cleaning system for use with 2000 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 series models
UVT-129122	Pump Clean System II	Self-priming pump and automatic chemical cleaning for use with 4000 series models
S-178121	Dual Feed II	Dual feed option includes Digital I/O module for use with controllers

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