TOC Sensor





FEATURES & BENEFITS

- Affordable real-time TOC monitoring
- Multiple wavelength sensor with LED technology
- Wastewater to high purity measurement ranges
- Operator friendly, low maintenance design
- · Quick and simple optical measurements
- Reagent free operation
- Multiple parameter configuration available
- Parameters include TOC, DOC, UV254, Colour

MUNICIPAL DRINKING WATER MUNICIPAL WASTEWATER INDUSTRIAL PROCESS WATER INDUSTRIAL WASTEWATER

REAL-TIME MONITORING SOLUTION

TOC Sensor

Real Tech's TOC 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, wastewater or high purity, 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 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 reagentless TOC 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 parameters, such as 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 TOC monitoring.





TOC SENSOR Specifications

CHARACTERISTIC	TECHNICAL DATA							
MODEL	OL2010	OL2020	OL2040	OL2100	OL4025	OL4050	OL4100	OL4150
Path Length	1 mm	2 mm	4 mm	10 mm	25 mm	50 mm	100 mm	150 mm
Parameters	TOC, DOC, UV254, colour							
Range	Depends on model selected. Refer to range chart on next page.							
Units	Parameter specific (mg/L, cm ⁻¹ or PCU)							
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				24 lb	
Dimensions	17"H x 14.25"W x 7.5"D 17.75"H x 15.5"W x 6.75"D					5.75″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 TOC 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.

DIMENSIONS FOR 2000 SERIES MODELS



DIMENSIONS FOR 4000 SERIES MODELS



SENSOR MODELS & RANGE

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

MODEL#	PATH LENGTH	TOC (mg/L)	DOC (mg/L)	UV254 (cm ⁻¹)	COLOUR (PCU)
OL2010	1 mm	0 - 1200	0 - 800	0 - 20	0 - 6000
OL2020	2 mm	0 - 600	0 - 400	0 - 10	0 - 3000
OL2040	4 mm	0 - 300	0 - 200	0 - 5	0 - 1500
OL2100	10 mm	0 - 120	0 - 80	0 - 2	0 - 600
OL4025	25 mm	0 - 48	0 - 32	0 - 0.8	0 - 240
OL4050	50 mm	0 - 24	0 - 16	0 - 0.4	0 - 120
OL4100	100 mm	0 - 12	0 - 8	0 -0.2	0 - 60
OL4150	150 mm	0 - 8	0 - 5.3	0 - 0.13	0 - 40

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

* Higher maximum range possible with use of Dilution System option.

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 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-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

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