

UV254 SENSOR

ML SERIES



FEATURES & BENEFITS

- Affordable real-time UV254 organics monitoring
- Dual wavelength sensor (254 nm and 550 nm)
- Wastewater to high purity measurement ranges
- Bypass style sensor with multiple flow cell selections to meet application demands
- Operator friendly, low maintenance design
- Reagent free optical measurements
- Simple to install and operate

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

WATER QUALITY
MONITORING
SOLUTIONS

REAL-TIME MONITORING SOLUTION

UV254 Sensor

Real Tech's bypass UV254 sensor provides affordable real-time measurement of organic matter in water or wastewater. Designed to meet the needs of many monitoring applications, the ML series offers multiple flow cell designs and sensor path length selections for 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. Our Remote Monitoring platform is a powerful data management and visualization tool that enables access to data anywhere, anytime.

MEASUREMENT PRINCIPLE

Real Tech's UV254 sensor utilizes light at the 254 nm and 550 nm wavelengths. Many organic compounds, specifically aromatic organics, absorb light at 254 nm while interfering compounds are compensated for at 550 nm. Benefiting from Real Tech's patented Ortho-Beam and innovative Split-Sense Pro technologies, lamp drift and fluctuations are compensated for, providing an accurate and stable output overtime, and superior measurement performance.

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UV254 SENSOR SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA			
	1000 series	2000 series	3000 series	4000 series
Path Length	0.5, 1, 2, 4, 10 mm	1, 2, 4, 8 mm	10 x 20 mm	50, 100, 150, 250 mm
Technology	Split-Sense Pro		Ortho-Beam	Split-Sense Pro
Parameter	UV254 (SAC 254 in accordance with DIN 38404 C3)			
Range	Depends on model selected. Refer to range chart			
Units	cm ⁻¹			
Sampling Time	10 seconds			
Calibration	Zero to DI water. 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, leak detected, system fault, etc.			
Humidity Control	Humidity sensor with large plug-in regenerating desiccant system			
Wavelength	253.7 nm and 550 nm			
Light Source	Low-pressure mercury UV lamp and LED			
Lamp Life	2 years (mercury UV lamp)			
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		17.75"H x 15.5"W x 6.75"D	
Warranty	2-year limited warranty (Extended care packages available)			

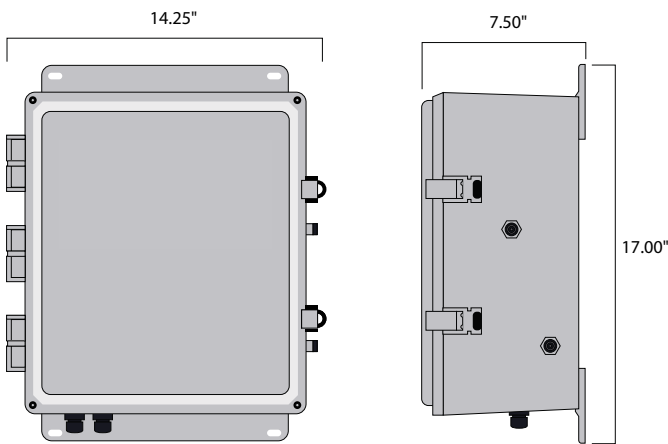
* Technical Specifications are subject to change without notice.

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

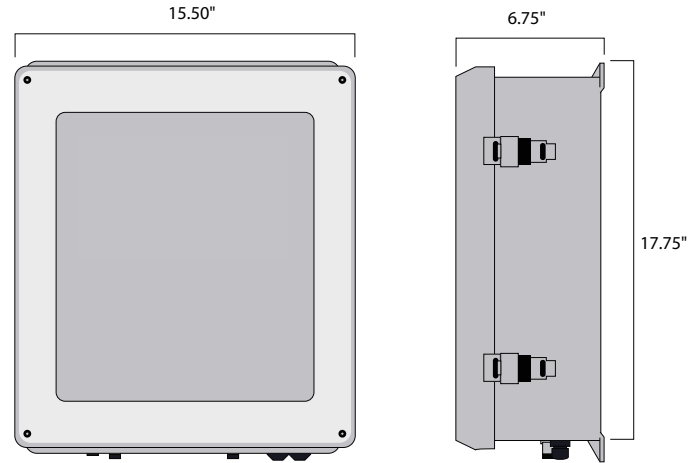
DIMENSIONS

The UV254 sensor is 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 AND 3000 MODELS



DIMENSIONS FOR 4000 SERIES MODELS



SENSOR SELECTION

MODEL SERIES	DESCRIPTION
1000	Ideal for closed loop, high pressure or high solids wastewater monitoring applications
2000 & 3000	Ideal for general water monitoring applications
4000	Ideal for high purity water monitoring applications

SENSOR MODELS & RANGE

Includes UV254 sensor, flow cell, calibration bottle and dehumidifier. Controller and accessories sold separately.

MODEL#	PATH LENGTH	UV254 (cm ⁻¹)
ML1005	0.5 mm	0 - 40
ML1010	1 mm	0 - 20
ML1020	2 mm	0 - 10
ML1040	4 mm	0 - 5
ML1100	10 mm	0 - 2
ML2010	1 mm	0 - 20
ML2020	2 mm	0 - 10
ML2040	4 mm	0 - 5
ML2080	8 mm	0 - 2.5
ML3000	10 x 20 mm	0 - 1
ML4050	50 mm	0 - 0.4
ML4100	100 mm	0 - 0.2
ML4150	150 mm	0 - 0.13
ML4250	250 mm	0 - 0.08

* 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

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 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-229035	Pump Clean Pro System (pressurized)	For high solids sample water, automatic chemical cleaning and pumping system for up to 25' vertical lift or 100' horizontal in pressurized installation (no air compressor)
S-229036	Pump Clean Pro System (non-pressurized)	For high solids sample water, automatic chemical cleaning and pumping system for up to 25' vertical lift or 100' horizontal in non-pressurized/ open channel installation (no air compressor)
S-178121	Dual Feed II	Dual feed option includes Digital I/O module for use with controllers

BACKBOARDS & ASSEMBLY

Pre-wired and plumbed solution assembled and mounted on backboard with or without stand.

PRODUCT #	DESCRIPTION
S-169033	46" x 46" Industrial grade black plastic mounting backboard and assembly
S-179034	24" x 60" Industrial grade black plastic mounting backboard and assembly
S-179036	46" x 46" Industrial grade black plastic mounting backboard with stand and assembly
S-179035	24" x 60" Industrial grade black plastic mounting backboard with stand and assembly

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