# MULTI-WAVE Probe

# WATER QUALITY MONITORING SOLUTIONS



SA SERIES

# FEATURES & BENEFITS

- Affordable real-time monitoring solution
- Four wavelength UV-VIS probe with LED technology
- Long-life LED light sources
- Operator friendly, low maintenance design
- Quick and simple optical measurements
- Reagent free operation
- Multiple parameter configuration available
- Parameters include BOD, COD, TOC, DOC, UV254, UVT, TSS, colour, O<sub>3</sub>

## MUNICIPAL DRINKING WATER MUNICIPAL WASTEWATER INDUSTRIAL PROCESS WATER INDUSTRIAL WASTEWATER

#### **REAL-TIME MONITORING SOLUTION**

#### SA Series Multi-Wave Probe

Real Tech's robust SA series submersible probe provides affordable real-time measurement of organic matter and other compounds 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.

#### **Real-time Actionable Data**

With the right sensor and hardware configuration, we then build a custom calibration to monitor the aggregate organics parameter(s) or compounds of interest in real-time, accurately and reliably.

## **MEASUREMENT PRINCIPLE**

The SA sensor utilizes light at various wavelengths, depending on the desired parameter(s) to be monitored. Many compounds absorb light in the UV-VIS spectrum. The absorbance of these compounds is directly proportional to their concentration. Compounds that may interfere with measurement, such as particles, are compensated for using additional reference wavelengths. The result is reliable, low-cost, real-time measurement for many parameters and compounds, including BOD, COD, TOC, DOC, UV254, UVT, TSS, colour,  $O_3$ .







CHARACTERISTIC		TECHNICAL DATA				
MODEL	SA2010	SA2020	SA2040	SA2100		
Path Length	1 mm	2 mm	4 mm	10 mm		
Parameters		BOD, COD, TOC, DOC, U	V254, UVT, TSS colour, O <sub>3</sub>			
Range	Dep	pends on model selected. Re	efer to range chart on next p	age.		
Units		Parameter specific (r	mg/L, cm <sup>-1</sup> , % or PCU)			
Sampling Time		10 se	conds			
Calibration	Zero to DI wa	ter. Factory parameter calib	ration allows field adjustme	nt as required.		
Cleaning	Real Air Clean automatic pressurized air cleaning system					
Self-Diagnostics		Detection and diagnosi	s of internal system fault			
Alarms	Continuous det	tection of leaks, lamp outpu	t, humidity, temperature an	d electrical fault		
Humidity Control		Humidity sensor v	vith desiccant pack			
Wavelength	4	application-dependent UV	and visible light wavelengtl	ns		
Light Source		LI	ED			
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	5 lb					
Dimensions	11"H x 2.875″ Diameter					
Warranty	2-year limited warranty (Extended care packages available)					

MENSIONS

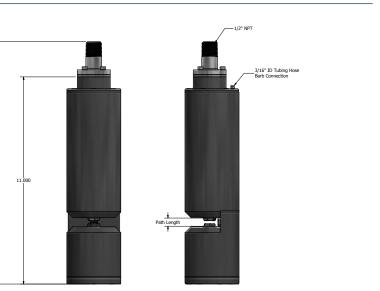
series sensors are submersible obe instruments installed directly -situ using a mounting kit attached a tank wall or railing.



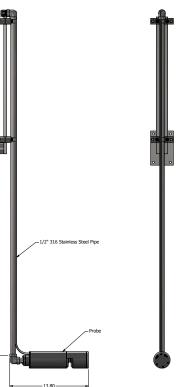
Length variable depending on depth of water

\* Technical Specifications are subject to change without notice.

# DIMENSIONS FOR SA PROBE



# **MOUNTING FOR SA PROBE**



#### **MODELS & RANGE**

The SA series models include multi-wave probe sensor, 35 feet of communication cable and 35 feet of air tubing. Controller, mounting kit and cleaning system sold separately.

MODEL#	PATH LENGTH	BOD (mg/L)	COD (mg/L)	TOC (mg/L)	DOC (mg/L)	UV254 (cm⁻¹)	UVT (%)	COLOUR (PCU)
SA2010	1 mm	0 - 1500	0 - 3000	0 - 1200	0 - 800	0 - 20	0 - 100	0 - 6000
SA2020	2 mm	0 - 750	0 - 1500	0 - 600	0 - 400	0 - 10	0 - 100	0 - 3000
SA2040	4 mm	0 - 375	0 - 750	0 - 300	0 - 200	0 - 5	0 - 100	0 - 1500
SA2100	10 mm	0 - 150	0 - 300	0 - 120	0 - 80	0 - 2	1 - 100	0 - 600

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

\* Range for TSS and O<sub>3</sub> 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

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