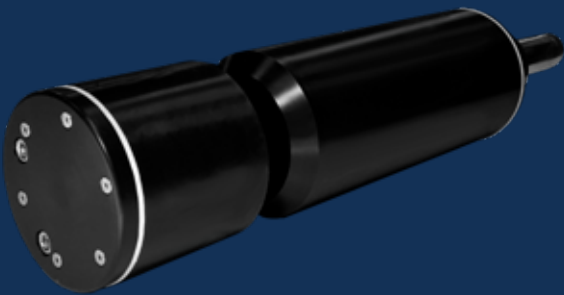


# UV254 PROBE SENSOR

**S** SERIES



## FEATURES & BENEFITS

- Accurate, reliable and affordable
- Real-time UVT or UVA organics monitoring
- Long-life UV LED light source
- Innovative custom calibration limits maintenance
- Robust submersible probe for in-situ measurement
- Simple to install and easy to operate

MUNICIPAL DRINKING WATER  
MUNICIPAL WASTEWATER  
INDUSTRIAL PROCESS WATER  
INDUSTRIAL WASTEWATER

WATER QUALITY  
MONITORING  
SOLUTIONS

## OVERVIEW

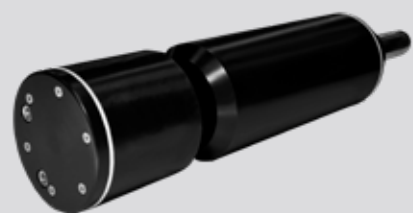
Real Tech's UV254 probe sensor provides rapid real-time measurement of organic matter in water or wastewater. Continuous organic monitoring can bring significant value to many applications including UV disinfection.

The effectiveness of a UV disinfection system is determined by the UV dose that the system is able to deliver to the water. The UV dose is dependent primarily on the combined effects of the UV light intensity, the exposure time of the system and the UV transmittance (UVT) of the water. Therefore, precise and reliable UVT monitoring is required for optimal performance and efficiency. Real Tech's S series probe is cost effective and accurate, making it a practical choice for many UV disinfection applications.

## MEASUREMENT PRINCIPLE

The S series sensor utilizes light at 254 nm wavelength as most organic compounds (specifically aromatic organics) absorb light at this wavelength. Benefiting from a long-life UV LED lamp, accurate and stable measurements are obtained with minimal maintenance or operator intervention. Measurement can be expressed as UVT or UV254.

**REALTECH**  
INC.



# UV254 PROBE

## S SERIES

# SPECIFICATIONS

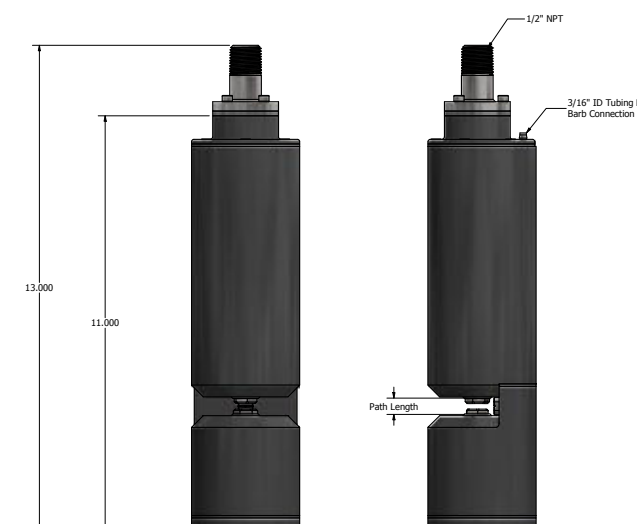
CHARACTERISTIC	TECHNICAL DATA			
	MODEL	S2010	S2020	S2040
Path Length	1 mm	2 mm	4 mm	10 mm
Parameters	UVT or UV254			
Range	Depends on model selected. Refer to range chart on next page.			
Accuracy	± 0.5% FS			
Units	% or cm <sup>-1</sup>			
Sampling Time	10 seconds			
Calibration	Zero to DI water or custom calibration to existing process sample.			
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	254 nm			
Light Source	LED			
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)			

\* Technical Specifications are subject to change without notice.

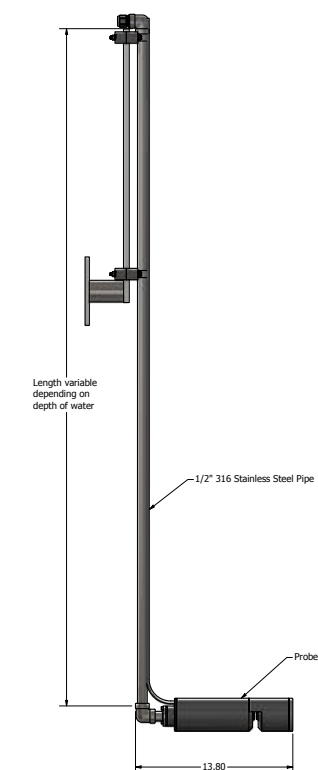
## DIMENSIONS

S series sensors are submersible probe instruments installed directly in-situ using a mounting kit attached to a tank wall or railing.

## DIMENSIONS FOR S PROBE



## MOUNTING FOR S PROBE



## MODELS & RANGE

The S series models include UV254 probe sensor, 35 feet of communication cable and 35 feet of air tubing . Controller, mounting kit and cleaning system sold separately.

MODEL	PATH LENGTH	UV254 (cm <sup>-1</sup> )	UVT (%)
S2010	1 mm	0 - 20	0 - 100
S2020	2 mm	0 - 10	0 - 100
S2040	4 mm	0 - 5	0 - 100
S2100	10 mm	0 - 2	1 - 100

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

## ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
S-169000	Real Controller	Wall mounted controller with 4-line x 20-character back lit LCD display for sensors
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 <sub>2</sub> 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 S series sensor. No pole included
S-189032	LED Probe Mounting Kit II	Provides secure mounting attachment to a tank wall or open channel wall for S series sensor. 5ft pole included
S-189033	LED Probe Mounting Kit III	Provides secure mounting attachment to a tank wall or open channel wall for S series sensor. 10ft pole included

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