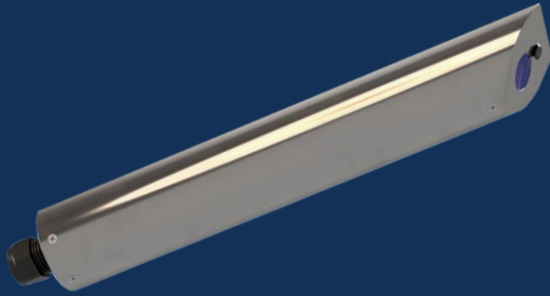


# TURBIDITY PROBE

TUA SERIES



## FEATURES & BENEFITS

- Affordable real-time turbidity monitoring for industrial and municipal wastewater applications and surface water applications
- ISO 7027 compliant measurement method
- Robust submersible probe with titanium or stainless steel housing
- Long life LED light source
- Operator friendly, low maintenance
- Simple to install and operate
- C1D1 certification for explosive environments optional (e.g., municipal plant headworks)

MUNICIPAL DRINKING WATER  
SURFACE WATER MONITORING  
MUNICIPAL WASTEWATER  
INDUSTRIAL PROCESS WATER  
INDUSTRIAL WASTEWATER

WATER QUALITY  
MONITORING  
SOLUTIONS

## REAL-TIME MONITORING SOLUTION

### Turbidity Probe

Real Tech's robust Turbidity submersible probe provides affordable real-time measurement of turbidity and is especially suited to wastewater and surface water monitoring. The probe's rugged design is built to withstand harsh environments especially found in industrial and municipal wastewater applications with options for a stainless steel or titanium body.

### 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 compressed air and pressurized water cleaning systems that lower maintenance while improving system performance, Real Tech provides a total solution for all of your unique water quality needs.

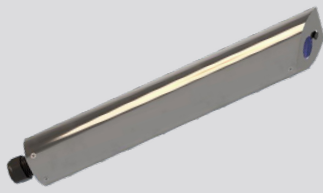
### Liquid Ai Compatible

Our Liquid Ai data services complement our real-time quality monitoring systems. Calibration Health Monitoring ensures accuracy and reliability are 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 Turbidity probe is designed in accordance with the ISO 7027 standard for turbidity measurement using nephelometry. The probe uses a near infrared LED light source eliminating interference from colour causing compounds often found in wastewater and industrial applications.

**REALTECH**  
INC.



# TURBIDITY PROBE SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA	
Model	TUA-X	TUA-S
Measurement Method	Nephelometry in accordance with ISO 7027 turbidity standard	
Parameters	Turbidity, TSS	
Units	NTU, mg/L	
Range*	5 - 4000 NTU, 5 – 5000 mg/L TSS	
Accuracy	5% of reading or 5 NTU (mg/L TSS) whichever is greater	
Resolution	1 NTU, 1 mg/L TSS	
Sampling Time	10 seconds	
Calibration	Automatic compensation for LED output and temperature change	
Cleaning	Automatic compressed air or pressurized water cleaning with optional Probe Clean 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	860 nm as per ISO 7027	
Light Source	LED	
Electrical/Comm.	From controller	
Pressure Rating	15 PSI	
Operating Temp.	0 to 50°C (32 to 122°F)**	
Housing Material	Titanium (Grade 2)	Stainless steel (SS 316)
Wetted Materials	Titanium, Epoxy, Sapphire, SS 316, Viton	Epoxy, Sapphire, SS 316, Viton
Weight	1.5kg (3.31lb)***	2.5kg (5.25lb)***
Ingress Protection Type	IPX8	
Dimensions	12.8" H x 2.0" Diameter	
Warranty	2-year limited warranty (Extended care packages available)	

Technical Specifications are subject to change without notice.

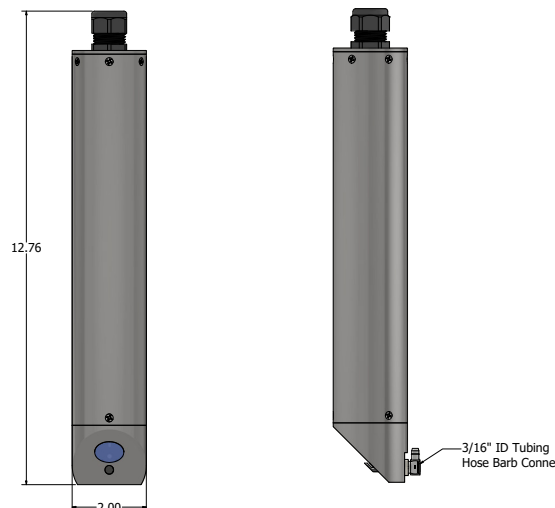
\* For high-range TSS applications, Real Tech's absorbance-based TA probe is recommended.

\*\* Operating (water) temperature absolute maximum 55°C (131°F). Instrument performance reduced when operating outside recommended operating range. Contact Real Tech to verify application.

\*\*\* Weight does not include cable. Cable weight: 0.70kg (1.55lb).

## DIMENSIONS FOR TURBIDITY PROBE

Available mounting accessories include fixed pole mounting kit and chain mounting kit



## 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
S-228070	Probe Clean System	Cleaning valve module requires on-site compressed air or pressured water for automatic probe cleaning
S-228080	Compressed Air System	Compressor for air cleaning when compressed air not available on-site
S-219081	Probe Mounting Kit I	Provides secure mounting attachment for titanium or stainless steel probe to a tank wall or open channel wall. No pole included.
S-219082	Probe Mounting Kit II	Provides secure mounting attachment for titanium or stainless steel probe to a tank wall or open channel wall. 5' pole included.
S-219083	Probe Mounting Kit III	Provides secure mounting attachment for titanium or stainless steel probe to a tank wall or open channel wall. 10' pole included.
S-229085	Chain Mount	Stainless steel chain for mounting probe in open channel

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