HYDROCARBONS PROBE

WATER QUALITY MONITORING SOLUTIONS

HFSA / HFBA) SERIES



FEATURES & BENEFITS

- Affordable real-time hydrocarbons monitoring for industrial and municipal wastewater, and surface water applications
- Uses UV fluorescence measurement method
- Provides measurement in PAH and Oil-in-Water (OIW)
- Robust submersible probe with titanium or stainless steel housing
- Long life UV 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

REAL-TIME MONITORING SOLUTION

Hydrocarbons Probe

Real Tech's robust Hydrocarbons submersible probe provides affordable real-time measurements of Oil and PAH in water and is especially suited to monitoring municipal and industrial wastewater, surface water, raw water intake, as well as marine applications. 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 Hydrocarbons probe uses the UV fluorescence method to provide highly selective measurements of Oil and PAH independent of other background organics present in the water. The probe uses a 255nm UV LED for the excitation wavelength and measures resulting fluorescence emission at 360nm. Automatic compensation is performed for any changes in UV LED output over time along with temperature changes. The HFSA model utilizes UV 90 degree fluorescence providing higher accuracy in field conditions that have lower organics and suspended solids concentration. The HFBA model utilizes UV back fluorescence which is ideal for detection within high strength wastewater applications.





HYDROCARBONS PROBE Specifications

CHARACTERISTIC	TECHNICAL DATA		
Model	HFSA-X / HFBA-X	HFSA-S / HFBA-S	
Measurement Method	UV Fluorescence		
Parameters	PAH, OIW		
Units	ppb, ppm, μg/L, mg/L		
Range	0-5000 ppb PAH, 0.1 - 150 ppm oil		
Reproducibility	± 1 ppb PAH		
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	255nm excitation 360nm emission		
Light Source	UV 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	14.76" H x 2.0" Diameter		
Warranty	2-year limited warranty (Extended care packages available)		

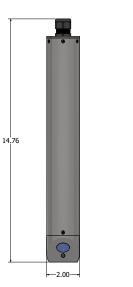
Technical Specifications are subject to change without notice.

* 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 HYDROCARBONS 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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