HYDROCARBONS SENSOR

(HFL) SERIES

FEATURES & BENEFITS

- Accurate, reliable and affordable
- Real-time hydrocarbons (oil in water) monitoring
- Output as oil and/or polycyclic aromatic hydrocarbons (PAH)
- Long-life UV LED light sources
- Innovative custom calibration for higher accuracy
- Bypass style sensor ideal for easy access, maintenance and fouling free operation
- Simple to install and easy to operate

REAL-TIME MONITORING SOLUTION

Hydrocarbons Sensor
Real Tech's Hydrocarbons sensor utilizes fluorescence measuring principal and provides rapid real-time measurement of hydrocarbons (oil) in water and wastewater. Continuous hydrocarbons monitoring can bring significant value to many applications including drinking water, wastewater and environmental monitoring.

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 monitoring systems. Calibration Health Monitoring ensures accuracy and reliability is 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 sensor utilizes fluorescence measuring principles with LEDs to excite hydrocarbons that fluoresce and emit light which allows for very low-level detection. Temperature and turbidity compensation allow for accurate and reliable measurement. Benefiting from long-life UV LED lamps, only minimal maintenance or operator intervention is needed. Measurement can be expressed as oil and/or polycyclic aromatic hydrocarbons (PAH). The bypass style sensor is ideal for locations where the sample stream is pressurized or the water presents potential for hard fouling due to high mineral content as this sensor can be equipped with an automatic chemical cleaning system that is very effective against mineral deposition related fouling.

MUNICIPAL DRINKING WATER
MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

HYDROCARBONS SENSOR SPECIFICATIONS

REAL HYDROCARBONS

SERIES

REALTECH
realtechwater.com

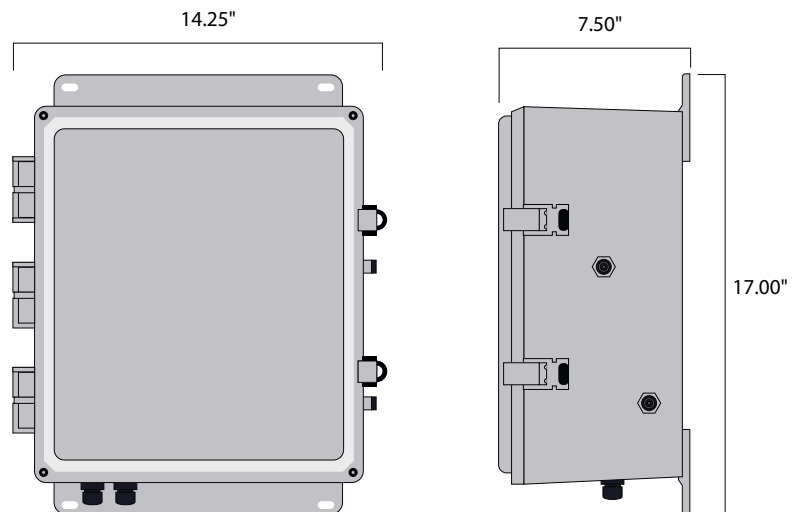| CHARACTERISTIC	TECHNICAL DATA
Parameters	Oil in water/hydrocarbons, Polycyclic aromatic hydrocarbons (PAH)
Range	0 - 15 mg/L (ppm) Oil, 0 - 300 µg/L (ppb) PAH
Resolution	5 µg/L (ppb) Oil, 0.1 µg/L (ppb) PAH
Units	mg/L (ppm), µg/L (ppb)
Sampling Time	10 seconds
Calibration	Factory calibrated. Field 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, leaks, system fault, etc.
Humidity Control	Humidity sensor with large plug-in regenerating desiccant system
Wavelength	Multiple excitation/emission pairs
Light Source	UV LED
Flow Rate	300-1000 mL/min
Pressure Rating	20 PSI maximum
Fluid Connections	1/4" OD tube push-in fittings
Wetted Materials	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
Dimensions	17"H x 14.25"W x 7.5"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 hydrocarbons sensor is a 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.

14.25"

7.50"

17.00"

SENSOR MODELS & RANGE

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

MODEL #	OIL (mg/L)	PAH (µg/L)
HFL	0 - 15	0 - 300

* Stated ranges approximate, dependent on industry, site and application

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
S-178121	Dual Feed II	Dual feed option includes Digital I/O module for use with controllers

REAL TECH INC.