

ARGES Hydrocarbon Sensor

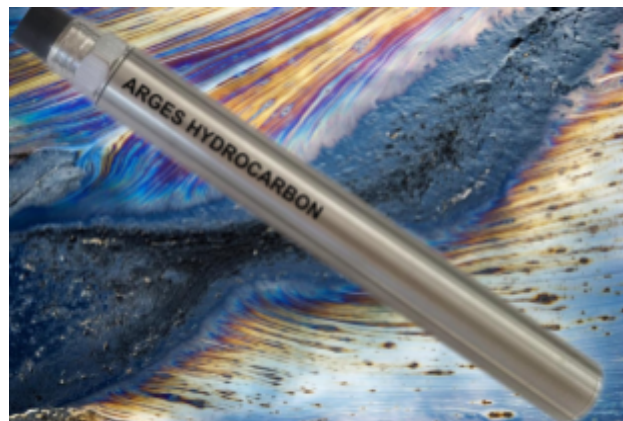
Protecting Our Waterways: Precision Pollution Detection Made Easy

The **ARGES Hydrocarbon Sensor** is an intelligent submersible fluorometer manufactured by Keynes Controls. It is a single-channel instrument capable of detecting and reporting the **sum of hydrocarbons (PAHs) present in a water sample**, enabling:

- The detection of hydrocarbon pollution in rivers, drains, and estuaries
- Full compliance with Section 82 of the UK Environment Act 2021

Why Measure Hydrocarbons: Polycyclic aromatic hydrocarbons (PAHs) are present in petroleum products, so they act as an excellent tracer for hydrocarbon pollution in water. The ARGES Hydrocarbon Sensor detects them in sources such as rivers, drains, and estuaries, giving you a clear measure of contamination levels.

Pollution Detection: Hydrocarbons fluoresce in a way the sensor can track, so the ARGES Hydrocarbon Sensor catches petroleum-based pollution in urban rivers and water systems. It identifies a wide range of PAHs, including Anthracene, Naphthalene, Fluoranthene, Pyrene, Acenaphthylene, Fluorene, Phenanthrene, Benzoanthracene, and Chrysene. These contaminants pose a severe threat to human health and cause direct or indirect harm to aquatic organisms and ecosystems.



OPC-UA Communications - (Open Platform Communications Unified Architecture) Contact Keynes Controls for further details.

The ARGES Hydrocarbon Sensor - Fast, Simple Hydrocarbon Monitoring!



Constructed from high-grade stainless steel tubing, the **ARGES Hydrocarbon Sensor** is designed for use as a stand-alone laboratory instrument or as part of a multi-parameter device within a SONDE, making it ideal for fixed installation monitoring applications.

The sensor is purely digital in operation and offers high performance measurements. The advanced power saving design ensures the sensor is ideal for remote operations. The sensor can be used as a standalone sensor or as part of a multiparameter system. **Easy to use, fairly priced, and built to deploy in minutes.**

All ARGES fluorometers have built-in temperature sensors that can be used to record the sample temperature.



Hydrocarbon Technical Features

Type	Range
Solid state ISE sensor	
Concentration range:	0.0 to 1000 NDSA ppb - Other ranges on request.
Resolution:	0.01 NDSA ppb
Excitation	365 nm UV
	Sensor Emission temperature compensated
Calibration Period	1 year typical
Warranty Period	2 years
pH Range	0 - 14
Operation	Fluorescence
Built-in Digital Communications	SDI12 / RS485 / MODBUS Digital Communications
Depth	50 m - Default
Simple Calibration	Multi-point Calibration Point Optional
SI Units SDI12 V1.4	NDSA ppb, Degree C - Automatically assigned
Analogue Output - Optional 0-2 V DC	Output proportional to Concentration / Temperature

Turbidity and Temperature effects on Hydrocarbon measurements

Temperature and turbidity increase error in dissolved hydrocarbon measurements, and other contaminants in real-world water sources can reduce accuracy further. Since dissolved hydrocarbons are toxic to aquatic species, accurate monitoring is especially important when hydrocarbons are visible on the water's surface.

Communications

All ARGES chemical sensors support SDI12, RS485 and MODBUS operations. The sensor acts as a slave unit when used compatible controllers and SCADA systems, the sensor supports 16- and 32-bit register addressing. A range optional USB converters are available to connect the sensor a Windows PC connection. The media converts can power the sensor directly from a PC USB port.

Product Size

Small enough to fit into outlet pipes. Dimensions Length x Diameter: 22 x 205 mm

Q-LOG Product Application Software

The ARGES Hydrocarbon Sensor includes free Q-LOG software for Windows to configure sensors and view real-time Measurements.



Measurement Integrity The ARGES Hydrocarbon sensor can report background light levels, which are used to ensure that hydrocarbon measurements are accurate. Excess background light can introduce errors in results. Without background light data available for examination, there is no way to post-process measurements to confirm the validity of any individual reading.

For more information, please visit the website: www.keynes-controls.co.uk

