

PAH Probe

Fluorometer UV

Online hydrocarbon monitoring



Applications

- Monitoring drinking water resources
- Biological wastewater treatment plants protection
- Control of industrial discharges
- PAH measurement in process water

Advantages

- In situ measurement, no sampling no reagents
- Direct analog output (4-20 mA) without external transmitter
- Optical window with coating to minimize clogging
- Real time measurement
- Automatic compensation of lamp power loss

Check the water quality 24 hours a day

Either for control wastes or spot a pollution in natural environment, hydrocarbons monitoring in water became a public authority's priority. Our energy consumption as well as the increase of industrial production build-up hydrocarbons pollutions in water. In front of these problem affecting health and environment, it is mandatory to strengthen detection in natural environment. The respect of the standards has as an objective to secure a good chemical condition of surface water.

The HAP probe is a fluorimeter that accurately and continuously measures the concentration of Polycyclic Aromatic Hydrocarbons in water. The UV fluorescence measurement principle used is much more sensitive than the conventional infrared scattering or absorption method. The sensor is able to detect any trace of PAHs in resource water or in cooling water condensates, for example.

This immersible probe operates without sampling and requires no on-site calibration. The only maintenance operation is to re-calibrate the probe every 2 years and to replace the excitation lamp after 4 years of use.

Adapt it to your installations

The sensor has many accessories to optimize its integration in processes, manholes or to monitor water level variations, automate cleaning and facilitate the exploitation of the data. Measurement campaigns and mobile applications are also possible with an optional battery operating system.

The sensor measures the sum of **Polycyclic Aromatic Hydrocarbons**. These PAHs are present in petroleum and refined products and therefore form an excellent tracer for detecting and quantifying hydrocarbons in water.



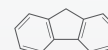
Naphtalene



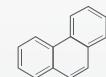
Acenaphthylene



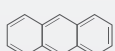
Acenaphthene



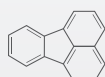
Fluorene



Phenanthrene



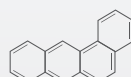
Anthracene



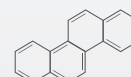
Fluoranthene



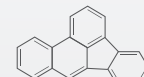
Pyrene



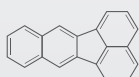
Benzo[a]anthracene



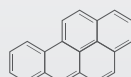
Crysene



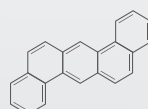
Benzo[b]fluoranthene



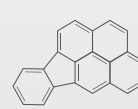
Benzo(k)fluoranthene



Benzo[a]pyrene



Dibenzo(a,h)anthracene



Ideno(1,2,3-c,d)pyrene



Benzo(g,h,i)perylene

PAH Probe

Fluorometer UV

Technical specifications

		PAH Probe	BTX Probe
Measurement technology	Light source	Xenon flash lamp + filter (254 nm)	or 254 nm
	Detector	Photo diode + filter (360 nm)	Photodiode + filter 289 nm
Measurement principle		Fluorescence	Fluorescence
Parameter		PAH, oil	Mono-aromatic hydrocarbons
Measuring range	enviroFlu-HC 500	PAH: 0...50 ppb, 0...500 ppb Oil: 0...1.5 ppm, 0...15 ppm typical	enviroFlu-BT: Anisole: 20 ... 10,000 µg / l p-Xylene: 60 ... 10,000 µg / l Toluene: 0.25 ... 130 mg / l Benzene: 2 ... 1000 mg / l
	enviroFlu-HC 5000	PAH: 0...500 ppb, 0...5000 ppb Oil: 0...15 ppm, 0...150 ppm typical	
Detection limit		enviroFlu-HC 500 0.3 ppb enviroFlu-HC 5000 0.5 ppb	Detection limit : Anisole: 20 µg / l p-Xylene: 60 µg / l Toluene: 260 mg / l Benzene: 2000 µg / l
T100 response time		< 10 s	
Measurement interval		> 5 s	
Material		Stainless steel (1.4571/1.4404) or titanium (3.7035)	
Dimensions (L x d)		311 mm x 68 mm	
Weight		2.7 kg stainless steel - 1.9 kg titanium	
Interface	Digital	RS-232	
	Analog	4-20 mA, 0...5 VCC	
Power supply		12...24 VDC (± 10 %)	
Consumption		< 3,5 W	
Maintenance effort		<0.25 h / month (standard use - cleaning the optical window)	
Calibration interval		24 months	
Warranty		24 months in the European Union	
Max. pressure	with SubConn	30 bar	
	with fixed cable	3 bar	
	in FlowCell	1 bar, 2...4 L/min	
Protection type		IP68	
Sample temperature		+ 2 ... + 40 °C	
Ambient temperature		- 5 ... + 55 °C	
Storage temperature		- 20 ... + 80 °C	
Inflow velocity		0,1 ... 10 m/s	

