

PHA-100 Portable Hydrocarbon Analyzer

The detection and measurement of petroleum hydrocarbons in water was historically achieved by sampling followed by gas chromatography or infrared analysis. With the advent of PetroSense® **PHA-100**, the world's first patented fiber optic chemical sensor (FOCS®) built into a portable analyzer, it is now possible to measure ppm levels of petroleum hydrocarbons in vapor or ground water via a sampling well, in the field and in real time.

The **PHA-100** portable hydrocarbon analyzer is designed to meet field monitoring requirements. In the analytical mode, it gives fast and accurate quantitative data for petroleum hydrocarbons in water and vapor. The data correlates very well with lab gas chromatographic analysis. In the screening mode, it offers fast relative data on petroleum hydrocarbon contamination, tracking field gas chromatograph data for TPH, and responds strongly to BTEX components.

Typical Applications Include:

- Remediation Monitoring
- Site Assessment
- Well Plume Monitoring
- Storm/Waste Water Monitoring
- Hydrocarbon Breakthrough
- Leak Detection AST/UST



FCI ENVIRONMENTAL, INC.

PERFORMANCE SPECIFICATIONS

	VAPOR	WATER (PHA-100W, WL)
Operating Range	0-20,000 ppm as TPH	0-2,000 ppm as TPH
Lower Limit of Detection	<10 ppm as xylene	0.1 ppm as xylene
Hydrocarbons Detected	C6 and higher MW petroleum hydrocarbons	C6 and higher MW petroleum hydrocarbons
Accuracy/Precision	±15% of reading	±10% of reading
Response Time (initial)	<5 seconds	<5 seconds
Response Time (to 95%)	<1 minute	<5 minutes
Operating Temperature Range	0° - 50° C	0° - 50° C
Trend Correlation with GC data	95%	98% vs. EPA Method 8020

HARDWARE SPECIFICATIONS

Readout	Backlit LCD - parts per million, °C or °F, water or vapor
Logging Memory	Data from 100 samples
Battery Life	8 hours normal operation (Low battery indicator)
Charge	12 hour charge period, AC or vehicle
Dimensions	10" (25cm) wide, 12" (30 cm) high, 7" (18cm) deep
Weight	10 lbs. (4.5 kg)
Analog Outputs	
Temperature	0-2.55 volts 0°C - 50°C
Concentration	0-2.55 volts
Water	0-180 ppm xylene
Vapor	0-4,000 ppm xylene
Serial Output	9600 baud
Calibration	Simple calibration with certified, pre-mixed p-xylene standards
Probe Dimensions	C: 0.75 in. (19 mm) L: 8 in. (20 cm)
Cable Length	100 ft. (30 m)

FEATURES

- Detects Petroleum Hydrocarbons Directly in Water, Vapor and Floating Liquid Product
- Operates in Analytical or Screening Mode
- Provides *In-Situ*, Real-Time Information
- Quick Zero
- Automatic Media Sensing
- Easy to Use, Menu-Driven Software
- 3rd Party Certified Equivalent to EPA Method 8020
- Florida DEP Approved Equivalent to FID for Soil Vapor Analysis
- Probe Stability Indicator
- Logs Data from 100 Samples
- Serial Output to Laptop or Printer
- Easy to Calibrate
- Intrinsically Safe, UL, CUL, KEMA ia, CE

ACCESSORIES

- Rugged, professional air/water tight carrying case
- Supply of calibration solution
- Charger
- Interface cable
- Calibration containers/Components
- Waste disposal filter



VISIT OUR WEBSITE AT
www.petrosense.com

FCI Environmental, Inc. has developed a range of products and systems based on its patented fiber optic chemical sensor (FOCS®) technology which provide in-situ and continuous monitoring capabilities with real-time information obtained from sites. The PetroSense® product line was initially launched in late 1994, and FCI is continuing to explore further commercial applications for its technologies. FCI Environmental, Inc. manufactures sensor systems for pipeline leak detection, aboveground storage tank monitoring, oil production, water quality monitoring and industrial wastewater compliance monitoring and control markets.

FOCS and PetroSense are registered trademarks of DecisionLink, Inc.

Manufactured under one of the following U.S. Patent Numbers: 4,824,206; 4,913,519; 4,846,548; 4,929,049; 5,026,139; 5,094,958; 5,109,422; 5,165,005; other Patents Pending.

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