

## По вопросам продаж и поддержки обращайтесь:

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Нижний Новгород (831)429-08-12  
Новокузнецк (3843)20-46-81  
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## Система для анализа VPH OI Analytical

Our VPH Analysis System is GC made easy. Use one of our preconfigured systems for analysis of volatile petroleum hydrocarbons (VPH) in water, soil, and solids based on the Massachusetts VPH and similar methods. Customize your system for specific applications with our expanding line of GC detectors, sample introduction instruments, and autosampler.



The System VPH is a complete package tailored to measure aromatic and aliphatic hydrocarbons in environmental samples using the Massachusetts VPH and similar methods. This system can also be customized for analyzing BTEX and other aromatic compounds, volatile gasoline range organics (GRO), and volatile diesel range organics (DRO). The System VPH and System BTEX are identical to the System VOC but are customized for analyzing aromatics and aliphatics by using the tandem PID/FID detector combination. The PID and FID detectors installed in series using OI Analytical's patented tandem configuration generate simultaneous aliphatic and aromatic chromatograms in a single analysis. The PID/FID is the required detector for many regulatory methods such as USEPA Method 8015, Massachusetts VPH, and many GRO methods. Like the System VOC, many used methods in the world specify PID/ FID tandem detectors for VOC methods.

**Principal applications for the System VPH include:** Massachusetts Volatile Petroleum Hydrocarbon (VPH) method; benzene, toluene, ethylbenzene, xylenes, and other aromatics (BTEX); USEPA Methods 602, 8015, and 8020; GRO and DRO; leaking underground storage tank monitoring; fuel spills in soils; combined total leachate program; fuels in water (wastewater); ISO 15009 and 15680; and standard methods 6200C.

### VPH Analysis System Features:

Standard system package includes all necessary hardware for analysis: Agilent GC, OI Analytical Model 4760 Purge-and-Trap Sample Concentrator, Model 4450 Tandem PID/FID, columns, and standards

Sample Concentrator provides built-in Cyclone Water Management, rapid trap heating and cooling, Silcosteel sample pathway, unique protective sparge filter design, and optional Infra-Sparge Sample Heater for improving sample recoveries

Uses the Tandem PID/FID for excellent sensitivity and linearity

PID hidden-window design prevents lamp fouling

Third detector capability offers additional analyses

Choice of capillary columns

Choice of autosamplers available for automated analysis

Optional automated pH measurement

Includes installation and startup using appropriate standards or methods in systems delivered in the U.S.

**Standard System VPH and System BTEX Hardware**

Eclipse Purge-and-Trap Sample Concentrator  
Model 4450 Tandem PID/FID detector system  
Agilent GC  
OI Analytical low-dead-volume injector or Agilent split/splitless injector  
Method-appropriate GC capillary column

**Performance Specifications**

**Minimum Detectable Mass**

PID <40 pg benzene

FID 5 pg carbon/second propane

**Dynamic Range**

PID >10<sup>6</sup>

FID ±10% over a 10<sup>6</sup> range

**Communications Interface**

Ethernet/LAN connection to the sample concentrator and GC

**Detector Output**

1V full-scale analog voltage

**Requirements**

**Power Requirements**

110 VAC (±10%), 60 Hz  
220 VAC (±10%), 50 Hz

## Requirements

### Benchspace Requirements

109.2 linear cm (43 inches) for a standard system

### Gas Requirements

Ultrahigh purity H<sub>2</sub>, and He (99.999% purity or better)

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