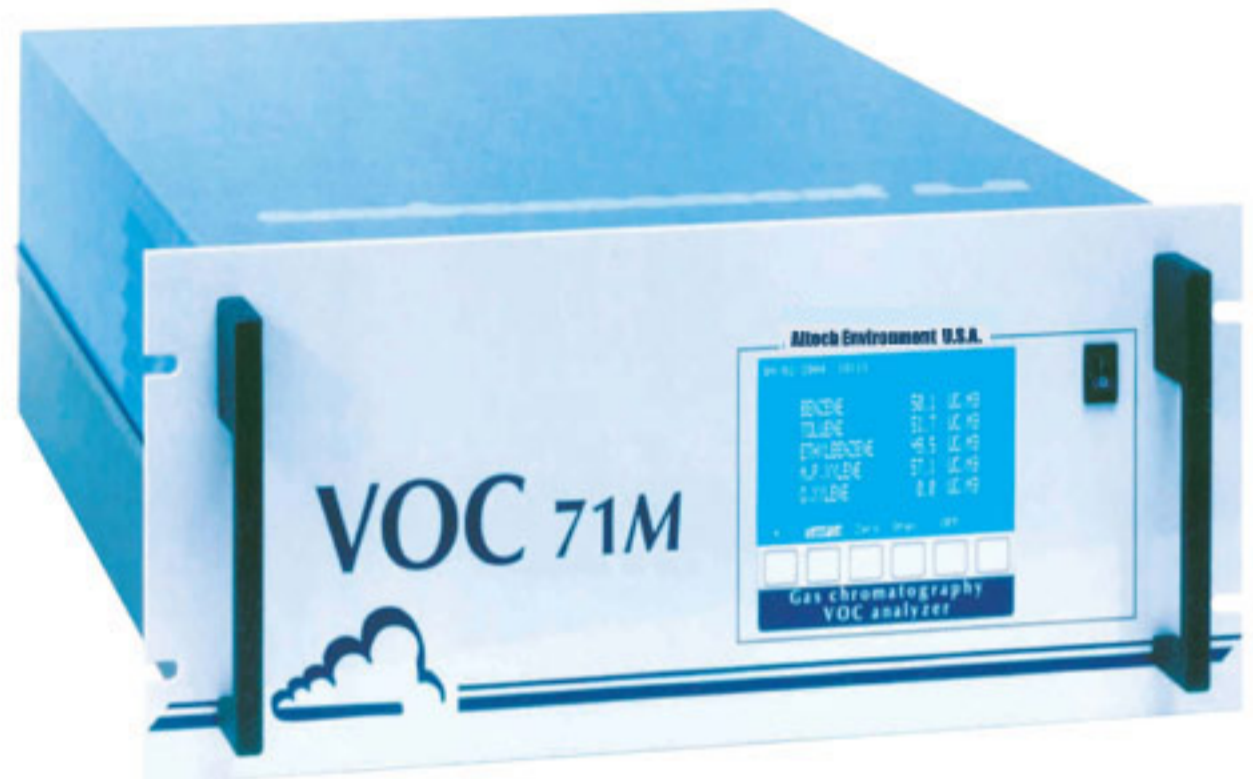


Gas Chromatograph Volatile Organic Compounds Analyzer model VOC71M

Flame Ionization Detector (FID)
or
Photo Ionization Detector (PID)



INSPECTED BY ACIME
Instruments for the environment

EN 14662:2005
compliant

Measured compounds:

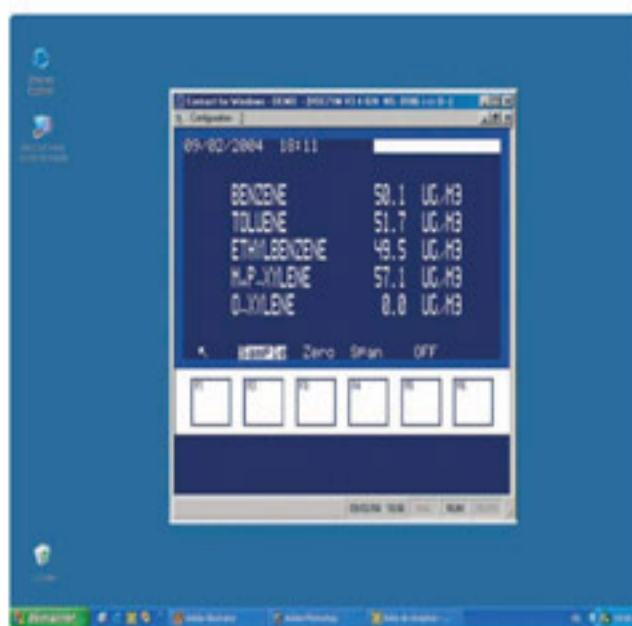
- BTEX :
 - Benzene
 - Toluene
 - Ethylbenzene
 - m & p-Xylene
 - o-Xylene
- 1-3 Butadiene
- ...

Major fields of application:

- Ambient air monitoring
- Monitoring of industrial sources emitting VOCs
- Photochemical pollution studies (stationary and mobile laboratories)

Main features:

- High sensitivity, stable, linear PID or FID detector
- Long-life capillary column
- Selectable 15 or 30 minute cycles for continuous sampling
- Self-contained and completely automated
- Nitrogen (PID) or hydrogen (FID) used as carrier gas
- Graphic Liquid Crystal Display (LCD)
- Interactive menu driven software
- Synoptic flow diagram display
- Remote troubleshooting diagnostics
- RS232 or RS422 interface and 8 analog outputs
- Stand alone analyzer (PC not required)
- Approvals: ACIME (France), AEA (United Kingdom)



Remote Control



GC - PID or FID VOC Analyzer - model VOC71M

Specifications:

- Compounds measured:
benzene, toluene, ethylbenzene,
m & p-xylene, o-xylene,...
- Ranges : 0-100, 0-200, 0-1000 µg/m³
- Standard measurement cycle duration:
15 or 30 minute (selectable)
- Lower detectable limit:
- 0.5 µg/m³ on the 15 minute cycle
- 0.25 µg/m³ on the 30 minute cycle
- Sample volume:
- 1 liter on the 15 minutes cycle
- 2 liters on the 30 minutes cycle
- Sample flow rate: 0.07 lpm
- Data storage: last 1500 average values
for each compound

Communication:

- 8 selectable independent outputs:
0-20 mA / 4-20 mA / 0-1 V / 0-10 V
- Digital output: 2x RS232 or RS422

Chassis:

- 19" rack mountable, 4U
- Dimensions: (L x W x H)
581 mm x 483 mm x 177 mm
22.9" x 19" x 7"
- Weight: 22 kg (48 lbs)
- Power: 115 V, 60 Hz or 230 V,
50/60 Hz - 360 VA
- External compression dryer assembly (FID)
- Operating temperature: 10-35 °C

Utilities:

- Nitrogen: QS ≥ N55
40 ml/min. -1.7 bars (PID)
- Hydrogen: QS ≥ N55
30 ml/min. -1.7 bars (FID)
- WinCHROM™:
Multi-task data management
software for Windows 9x/2000/XP
Real time chromatograms display
and data storage
Export data in Ascii and xls formats
for processing tasks such as calculation
of specific parameters (concentration,
retention time, etc.).

Options:

- PID or FID version
- Additional compound: 1-3 Butadiene
Other compounds available upon request
- Additional carrier gas filtration
- Internal permeation bench

Principle of operation:

Its metrology is based on the gas chromatographic separation of the compounds of interest combined with a detection achieved by a photo ionization detector (PID) or a flame ionization detector (FID).

The VOC71M combines three main functions : Sampling / Analysis / Data Handling. The sampling is performed in cyclic mode with two tubes filled with selective sorbents. While one tube is collecting sample, the other one is desorbed. This allows the instrument to achieve nearly 100 % sampling time coverage.

The analysis is performed, first through a pre-concentration tube interfacing the sampling tubes and the chromatographic column, thus eliminating interferences.

The desorbed sample is then injected into a fused silica capillary column for separation. A controlled temperature gradient oven permits a fast and accurate separation of VOC. Compounds are identified by their elution times through the capillary column.

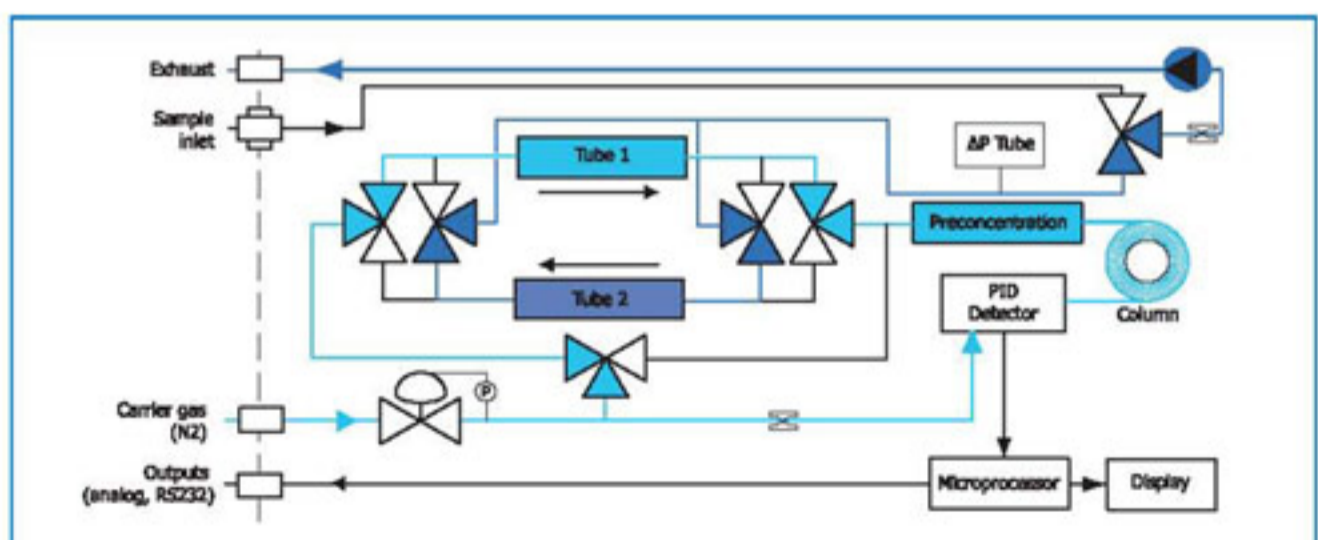
The VOC71M is controlled by an internal microprocessor board, which handles the automated sampling, user interface, data management and storage.

The VOC71M is a unique, rack mounted, stand-alone, fully automated instrument for monitoring low level specific volatile organic compounds such as benzene, toluene, ethylbenzene and xylenes. It is particularly well adapted for applications in air quality monitoring (urban and industrial sites). It is compact and yet allows performances comparable to laboratory gas chromatography instruments.

Multitask software combined with the LCD graphic display, give the user easy and fast access to the instrument setup, status and maintenance parameters. Real-time synoptic, auto-diagnostic and maintenance data screens can be displayed while the instrument is operating.

The built-in RS232/RS422 interface and digital communication protocol allow full PC instrument emulation for remote control and troubleshooting as well as a serial link.

The VOC71M may be operated either as a stand-alone instrument or linked to a PC, with a Windows™ based software WinCHROM, for hard disk storage of chromatograms, and post-data processing. The VOC71M, is probably the most compact, versatile and cost-effective VOC analyzer available for ambient air monitoring networks.



Distributed by:



Altech
Environment U.S.A.

2623 Kaneville Court, Geneva, Illinois 60134 - U.S.A.
Tel: (630) 262-4400 Fax: (630) 262-6220
Web : www.altechusa.com - e-mail : sales@altechusa.com

