

EXPERTS IN ANALYSIS



mobilGC

Portable gas chromatograph
with internal gas supply

www.ECH.de



Description

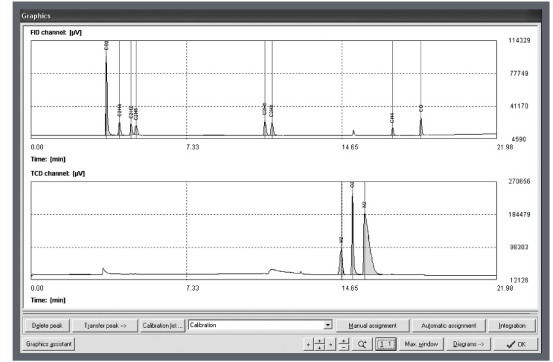
The MobilGC is an gas-phase chromatograph and easy to use. The device is suitable for on-site operation, online-process monitoring and laboratory work. Its special feature is the internal gas supply, which allows the on-site use.

You can chose between two detectors (FID, TCD) or both, according to the analytical problem. Commonly capillary columns as well as packed and micro packed columns can be used. The columns are individually heated. It is possible to adjust various temperature programs for each column. Your sample is injected manually or automatically into a sample loop. The automatic injection is realized by an internal pump.

The comfortable software allows fast and accurate analysis and various evaluation modes. Fully automated online measurements are possible.

Applications

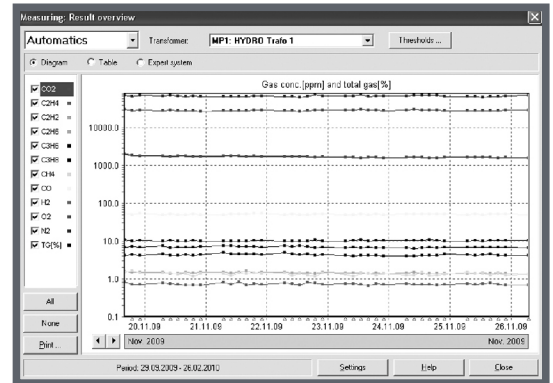
- Emission- and immission measurements
- On-site-analysis, process control, online monitoring
- Suitable for continuous limit value monitoring of total concentration of hydrocarbons in gas samples
- Integrated gas extraction technique, specifically for head-space-technique or gas-in-oil-analysis



Chromatogram

Principle

- Separation of the compounds of the injected gas mixture in one or two columns, isotherm or using modifiable temperature program (individual column heating)
- Commonly capillary columns as well as packed and micro packed columns can be used
- Application of coupled column techniques
- Sample dosing realized by use of a sample loop (6-port-valve) or manual injector
- Digital detectors (FID, TCD) with high detection sensitivity
- Carrier gas argon, nitrogen, helium or hydrogen
- Comfortable software for control and automatic evaluation of the chromatograms
- Various expert systems and evaluation procedures according to DIN 38409-H53, ASTM 3612, IEC 60567, IEC 60599 and IEC 61181



Concentration profile

Concentration range

Concentr.: 10101.00 ppm

Dos. volume: 200.0 µl

Dilution factor: 1.0000

Area: (Mean): 4975.88 min²µV
(STD): 81.62 min²µV

5045.74
4995.72
4886.17

Buttons: OK, Cancel, Help, Delete

Calibration

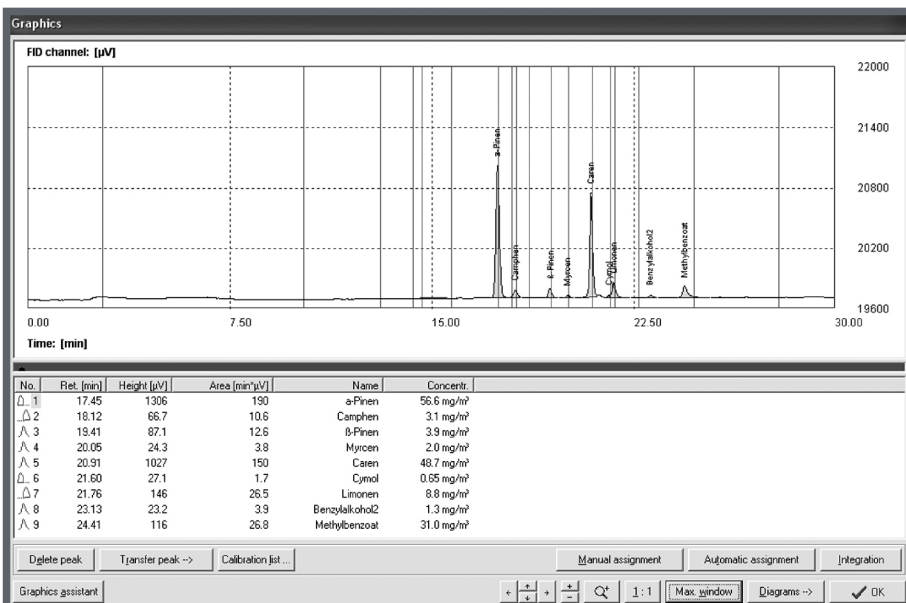
Calibration list

FID channel			
No.	Name	Unit	Retention [min]
1	CO2	ppm	5.73
2	C2H4	ppm	7.31
3	C2H2	ppm	8.31
4	C2H6	ppm	8.77
5	C3H6	ppm	14.29
6	C3H8	ppm	14.55
7	CH4	ppm	19.75

TCD channel			
No.	Name	Unit	Retention [min]
1	H2	ppm	17.15
2	O2	ppm	17.57
3	N2	ppm	18.17

Buttons: OK, Cancel, Help, Parameters, Comment, Modify, Delete

Calibration list



On-site-analysis of emission control

Advantages

- Portable gas chromatograph for on-site operation, online-process monitoring and laboratory work
- Device in a case suitable for outdoor use
- Internal gas supply for one week (40 hours) of operation
- Detectors (FID, TCD) with digital data acquisition
- Methanizer for quantitative converting of CO and CO₂ into methane
- Application of common columns
- Individual heating of each column with adjustable temperature programs up to 250 °C
- Adaptation of hardware to various sample types
- Fully automated measurement procedure and easy calibration principle
- Special gas-in-oil-analysis with partial vacuum degassing
- Process monitoring with overview measurements and detail measurements
- Creation of various measurement methods for device control
- Integration of sum peaks and single peaks

Specifications

Working range:	1 ppm ... 100 %
Resolution:	0.1 ppm
Typical measurement duration:	2 ... 30 min (dependent on the sample)
Sample volume:	0.01 ... 1 mL
Number of columns:	Max. 2 (types selectable)
Temperature of column heating:	Max. 250 °C, individually adjustable with temperature programs
Internal carrier gas supply and fuel gas supply:	One week (40 hours) of operation
Power supply:	230 V/50 Hz
Power consumption:	Up to 240 W
Dimensions:	500 x 457 x 305 mm (W x H x D)
Weight:	23 kg

We are here for you



ECH Elektrochemie Halle GmbH
Otto-Eissfeldt-Str. 8
D-06120 Halle (Saale)
Germany
Tel.: +49 345 279570-0
Fax: +49 345 279570-99
E-mail: info@ech.de
Website: www.ech.de



MobilGC with 19" standard casing