I-GRAPHX
INDUSTRIAL GRAPH XOLUTIONS

Micro gas chromatography

I-GRAPHX CGC COMPACT - GC

More Products: Gas Analyzer | H2 analyzers | Micro dosing systems | Electronic pressure control units | Accesories

High-speed chromatography – measures selectivity and with high precision in seconds.

The **CGC Compact GC** measures the quality and quantity of up to 10 gas components quickly, safely and with high accuracy.

Our smallest gas chromatograph is the most compact on the market and can be configured for a large number of applications. The **CGC** is universal for all applications in plant construction and independent systems, where fast and precise gas analysis is required. Its chromatographic separation ensures that there is no irritation of the measurement signal by cross-sensitivity interference components.

The Micro Dual Channel Thermal Conductivity Detector used in the **CGC** is an in-house development of I-GRAPHX GmbH. It is made with Microchip Technology (MEMS) and uses the unique specific physical heat conduction of each gas component.

A combination of MEMS Chip separation columns and/or classic capillary separation columns enable quick and efficient analysis on a Single-Channel system with the smallest media consumption.

Typical applications:

CGC401 – Hythan, Biogas, CCS, PEM, Fuel Cell
CGC402 – LNG, LPG
CGC403 – Biogas, Natural Gas
CGC404 – Perm. Gas1, Syngas Biogas enlaged, Landfill
CGC406 – Fluegas
CGC410 – Perm. Gas2
CGC411 – Solvents, Alcohols
CGC412 – Light HC's, Natural Gas

Properties:

- Fast Selective Chromatography
- Qualitative and quantitative high-precision gas analysis
- Monitoring of continuous processes
- Low operating costs due to minimal maintenance effort

Technical data:

- 2 point or multi-point calibration
- Electronic pressure regulation
- Measuring range 10 ppm - 100 %
- Display Vol. %, resolution up to 1 ppm (web server application)
- Accuracy: < 0.1 % of meas.
- Power supply: 24 VDC, 3 A
- Ambient temperature range: -10° C to + 50° C

Connections:

- Media: tube fitting (others on request)
- Connections: USB (internal), RS485 (Modbus RTU, GC Manager)
- Monitoring: via web server through optional HMI
- Analog OUT: 4-20 mA (1 channel)

Unit size:

- W x H x D: 220 x 120 x 90 mm
- Weight: about 2.5 kg

We reserve the right to make changes to technical data, dimensions, weights, construction and products. The illustrations are non-binding and show any special equipment.

© I-GRAPHX GmbH • 02/2026 • Technical changes and errors reserved.

I-GRAPHX GmbH | Gutenbergstr. 31 | 21465 Reinbek | Germany | +49 40 333 860 55 | info@i-graphx.com | i-graphx.com