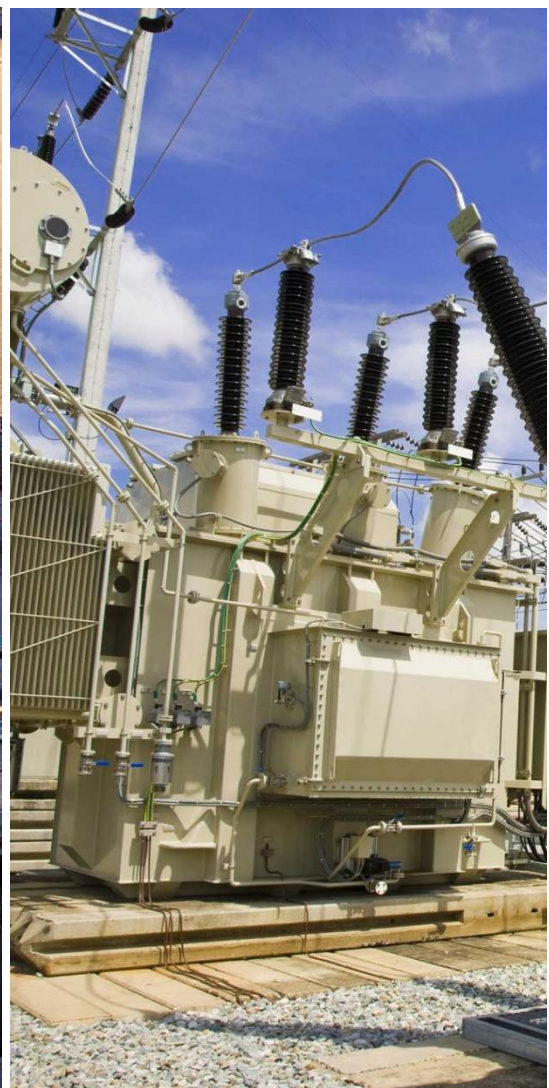




PHXTEC 700 Micro GC
In-Lab | Field Case | Process





Micro GC Systems

700 Micro GC systems are developed based on a new generation of micro gas chromatography platform with PHXTEC latest micro fabrication, pneumatics control, and detector technologies.

700 Micro GC module is designed with a size of only 257×120×87 mm. Sample injection, column oven and detectors are highly integrated, each module is an independent gas chromatograph. Micro GC system can deliver a result in seconds with less space, less power and gas consumption than benchtop GC systems.

The system supports various detectors such as FID, FPD、 TCD (MEMS) and PID. 700 Micro GC is widely used in petrochemical, environmental monitoring, natural gas, scientific research, coal mine, and process control.



Product Line

700 Bench GC	In-Lab / Process
700 Portable GC	Field Case
700 Elite GC	Field Case
700 EX Process GC	Process



Features

Micro Fluidics Injector

- > More compact compared to our previous product
- > Very low dead volume

Electronics Pneumatics Control Module

- > Pressure, flow and valve control
- > Better immunity to environment change

Small Column Oven

- > Only 70 mm diameter
- > Supports capillary and micro-packed columns

Micro TCD (MEMS)

- > 200nL internal volume eliminates peak broadening
- > Tens of times the sensitivity of traditional TCD

Micro FID

- > Modularized design
- > Small size and low gas consumption

ANYWHERE

Easy to install

Quick launch

Reliable field solution



700 Micro GC Module

Advantages

Light and small

Customized micro parts and the compact design reduced the size and weight greatly.

Modularized design

Injector, column oven, detector and circuit board are highly integrated in a module.

Parallel running

Each module runs independently, analyzes the sample in seconds.

Standalone module

GC protocol is completely embedded, module can run without an external mainboard.

Multiple detectors

Support FID、FPD、TCD(MEMS) and PID.

High sensitivity

FID MDL<0.05 ppm, TCD MDL<1 ppm, tens of times the sensitivity of traditional TCD

Low consumption

Less carrier gas consumption than traditional lab GC, flow rate of carrier gas less than 10 ml/min.

Easy maintenance

With standard pneumatics and electrical interface, user can install in several minutes easily.



Scenarios

In-Lab

700 Micro GC can complete the gas analysis in seconds. In certain aspects of the analytical performance, 700 Micro GC is even better than traditional lab GC.

Field Case

With our widely used portable solution, 700 Micro GC can be quickly moved to anywhere to run. Get immediate answers as your demands

Process

The low carrier gas and power consumption makes 700 Micro GC convenient for installation near the sampling point in the process analysis.



INTELLIGENT

Multiple terminals

View anywhere

Remote control

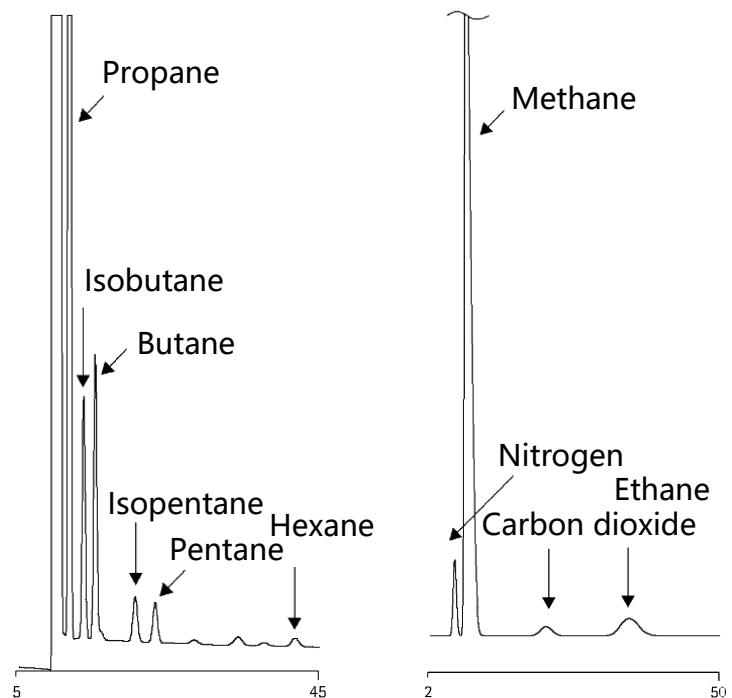


Applications

- > Permanent Gases
- > VOCs/BTEX
- > TOGA
- > Petrochemical, mudlogging
- > Mine gas
- > Natural gas and extended natural gas
- > Refined gas
- > Syngas, Biogas
- > Catalyst research
- > SO₂ and H₂S
- > Fuel cell
- > Spring gas

FAST

**Convenient
Analyze in seconds**



Specification

Module

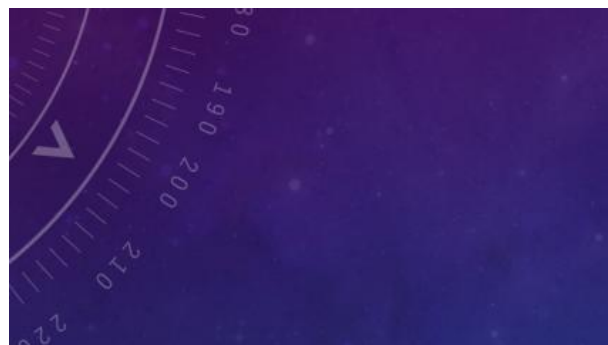
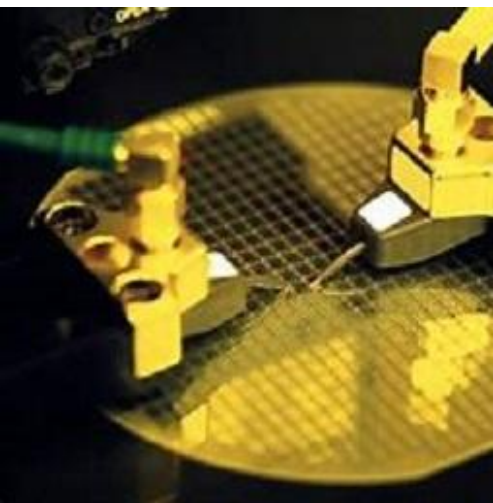
Thermal	Maximum 250°C, 0.01°C resolution
Oven	Isothermal or Temperature Programming
Pressure	Compensated EPC, 0.01psi resolution
Injector	Straight, backflush
Column	Capillary, Micro pack
Detector	FID, MDL 0.05 ppm FPD, MDL 0.05 ppm TCD (MEMS), MDL 0.5 ppm PID, MDL 1 ppb
Dimension	257×120×87 mm
Weight	1.2–1.5 Kg
Power	24VDC, minimum 10 W

ACCURACY

Measure precisely
Simplify Analysis

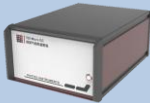
Instrument

Injection	Internal pump or syringe
Carrier Gas	H ₂ , He, N ₂ , Ar
Runtime	0.5-10 min
Repeatability	≤0.5% RSD
Workstation	NextLab-WL (ChromXin)
Control Terminal	Computer, tablet
Power	24V DC, 90-220VAC adaptor
Communication	RJ45, RS232, WIFI
Conditions	0-50°C, 0-95%RH





700 Micro GC Series

	700 Bench	700 Portable	700 Elite	700 EX Process
				
Modules	Up to 4	Up to 4	Up to 1	Up to 4
Battery	N/A	Yes	Yes	N/A
Gas Tank	N/A	Up to 2	Up to 1	N/A
H2 Generator	N/A	Optional	Yes	N/A
Application	In-Lab / Process	Field Case	Field Case	Process
Dimension	255×158×420 mm	480×380×210 mm	370×300×130 mm	Φ250×349 mm
Weight	7 Kg (2 Channel)	12 Kg (2 Channel)	6 Kg	18 Kg



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