

## Ace MODERN ADVANCE RESEARCH TECHNOLOGY



# **GAS CHROMATOGRAPH**



### High Tech for Scientific Research





General description

The new generation gas chromatograph G5 bases on decades of R & D experience, with intelligent electrical control system, professional high-sensitivity detector and a full range of application solutions, is your trusted partner.



# Features

### **Double Stable Gas Path**

Stable

# achieves the characteristics of high precision, good

Accurate

### Accurate qualitative and quantitative results

results.

### Intelligent digital control system

The computer-controlled system, large-screen LCD display, multiple Intelligent temperature protection and data network transmission make it possible to realize the laboratory digital management

# Abundant injector/detector

1

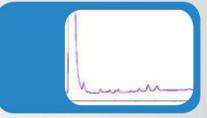
The double adjustment design of voltage-stabilizing valve and stable-

flow valve or needle valve are used in the pneumatic system. The use of Digital dial knob

repeatability, convenient and intuitive flow adjustment.



The stable gas flow and temperature control combined with high sensitivity detector bring you more accurate qualitative and quantitative analysis





You can configure the modular to meet your application requirement. Powerful Anti-control software can realize more excellent expansion configuration, convenient, time and labor-saving.



2



### Column Oven



Withlargeovenspace, G5i s capable of convenient installation for capillary column or double packed column, achieve multi-dimensional and chromatographic analysis Easily. Excellent temperature control system to achieve the fast and accurate temperature control. The double rear door mechanism ensures rapid cooling and reduces the analysis cycle.

### Injector

Packed Column Injector and Capillary Split / Splitless injector can be optional. They are available for the installation of a variety of columns (stainless steel columns, glass columns, capillary columns) and can realize the perfect combination of 5 kinds of injections and load up to three kinds of injectors simultaneously.



### Detector

Six kinds of high-performance detectors can be optional, namely FID, TCD, FPD, NPD, ECD and PID. Maximum three detectors can be installed simultaneously. One or two Detectors can be easily upgraded from the basic one detector system after purchasing instrument.

### Hydrogen Flame Ionization Detector(FID)

Easy to disassemble and clean nozzle and ion collection unit

Thermal Conductivity Detector (TCD)

Unique air-insulated structure makes TCD has a higher stability

Flame Photometric Detector (FPD)

Optimal nozzle structure and optical design to ensure lower detection limits and a wider dynamic range

Nitrogen and phosphorus detector (NPD)

Highly sensitive bead to ensure superior detection limits

Electronic Capture Detector(GC1120 ECD)

Sophisticated structure design and high stability of the source film ensures the reliability of the analysis results

### Photo Ionization Detector (PID)

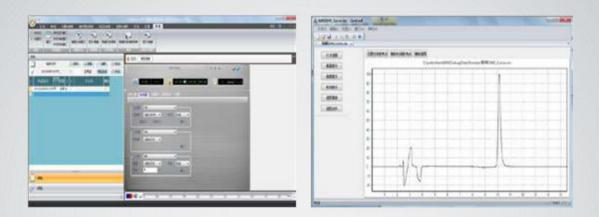
Non-destructive high-sensitivity detector can be used in series with a variety of detectors to expand the scope of application

### Software

Intelligent anti-control software can achieve real-time control of the instrument, data acquisition and processing.

Real-time control of the instrument includes various functions such as temperature control, detector selection and setting, program temperature control and curve tracking, and flow rate display (optional).

Data handling include dual channels (can be extended) high speed data acquirement, integral with manual or auto parameters setting, 5 kinds of quantity methods, baseline correction and making report function



### Accessory





Auto-sampler





Hydrogen gas generator

Nitrogen gas generator





Thermal desorption





Headspace Sampler



Automatic air source



### Application

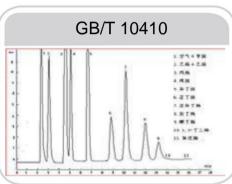
Gas chromatograph plays an important role in laboratory analysis. It also show a wide range of applications in petrochemical industry, coal mining and metallurgy, food safety, medical and health, environmental protection and water conservancy, university research and other industries.

High-quality G5 GC ensures accurate analysis result. The comprehensive solutions meets your application requirements. Excellent after-sales service makes you worry-free.

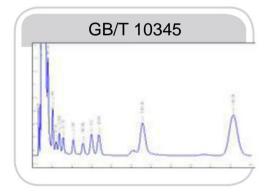
# Analysis of the macro component of LPG

### Analysis of Monomer Hydrocarbons in Naphtha

SH 0714

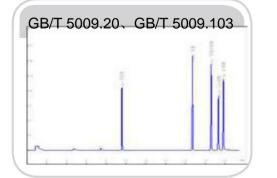


### Analysis of Liquor components

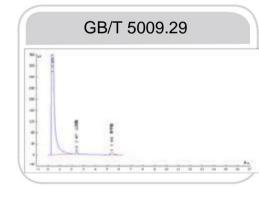


### Analysis of organophosphorus

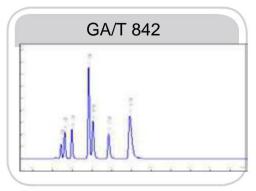
### pesticide residues in food



Analysis of food additives



### Analysis of alcohol in blood



### Specification

### Temperature control

Temperature range:	7°C above
	increment)
Oven, front / rear detector,	front / rear
	7-stages te
Temperature programming:	software su
	programmi
Temperature programmed rate	0.1°C ~ 40°C
setting:	
Thermostatic timing per stage:	0 ~ 655 mi

### Hydrogen Flame Ionization Detector (FID)

Detection	≤ 7×10-12g/s	
Limit	(n-hexadecane)	
Noise	≤ 2×10-13A	
Drift	≤ 4×10-13A/30min	
Linear range	10 <sup>7</sup>	

### Flame Photometric Detector (FPD)

Detection	≤ 8×10-13g/s(P)
Limit	(Parathion-methyl)
Linear range	10 <sup>4</sup>
Detection	≤ 8×10-11g/s(S)
Limit	(Parathion-methyl)
Linear range	10 <sup>3</sup>
Noise	≤ 4×10-13 A
Drift	≤ 1×10-12A/30min

### room temperature (R.T.) ~ 400°C (1°C

injector, auxiliary, 6 parts in total

emperature programming (Anti-control supports 10 - stages temperature ning)

/min (0.1°C increment, measured at 200°C )

### in (1 min increment)

Thermal Conductivity Detector (TCD)		
Sensitivity	≥ 6000mV.mL/m (Benzene)	
Noise	≤ 0.04 mV	
Drift	≤ 0.2 mV/ 30mim	
Linear range	10 <sup>4</sup>	

# Nitrogen and phosphorus detector (NPD)

. /	
Detection	≤ 5×10-13g/s(N)
Limit	(Azobenzen)
Linear range	10 <sup>3</sup>
Detection	≤ 5×10-14g/s(P)
Limit	(Malathion)
Linear range	10 <sup>3</sup>
Noise	≤ 2×10-13 A
Drift	≤ 1×10-12A/30min
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