LABTRON

GAS CHROMATOGRAPHY LGC-B12

www.labtron.com | info@labtron.com

Gas Chromatography LGC-B12 is a compact and tabletop, Flame Ionization Detector (FID) comprised gas chromatography, comes with RT to 450°C of temperature range and 40°C / min of maximum heating rate. With optional detectors such as TCD, ECD, FPD, and NPD, features 3 detectors installation at a time, offers packed column and capillary column installation at the same time. Designed with large oven capacity to hold 2 capillary column of 0.32 mm diameter, thermal insulation and chromatography workstation software, supports self-test, power protection, keyboard lock, automatic ignition and anti-power mutation interference function. Equipped with 5.7-inch LCD display, double column compensation function and internet connection, this gas chromatography offers 16-phase temperature program with effective restraining of baseline drift and the influence of background noise.

Features

- A compact and tabletop, Flame Ionization Detector (FID) comprised gas chromatography
- RT to 450°C of temperature range and 40°C / min of maximum heating rate with 16-phase temperature program
- TCD, ECD, FPD, and NPD as optional detector, with 3 detectors installation at a time
- Packed column and capillary column installation at the same time
- Large oven capacity to hold 2 capillary column of 0.32 mm diameter
- Thermal insulation, maximum outer chamber temperature of 40°C
- Chromatography workstation software, for easy and convenient data processing
- Supports self-test, power protection, keyboard lock, automatic ignition and anti-power mutation interference function
- 5.7-inch LCD display, for convenient indication of temperature, time and gas flow
- Double column compensation function for effective restraining of baseline drift and the influence of background noise
- Internet connection for easy data transferring and program update
- Highly-efficient, stable and reliable with easy and convenient operation

Application

Gas Chromatography is used for the separation of compounds in complex mixtures based on the polarity of compound across food industries, pharmaceuticals, dairy, microbiology, biotechnology, environmental analysis etc.

Specifications

Model	LGC-B12	
Oven	Temperature Range	RT to 450°C
	Temperature Accuracy	≤±0.1°C
	Temperature Program	16-phase
	Maximum Temperature Heating Rate	40°C/min
Sample Injector	Temperature range	RT+ 7 °C to 420 °C
	Temperature control	Automatic
	Injector type	Column or split
	Maximum sample inlet	3 pcs
	Carrier gas flow type	Constant pressure
	Pre column pressure range	0 to 400 kPa
	Pre column pressure accuracy	0.1 kPa
	Mobile phase flow range	H_2: 0 to 200 ml/min, N_2: 0 to 150 ml/min
FID Detector	Temperature range	RT + 7 °C to 420 °C
	Maximum installation	Dual detector
	Flame ignition mode	Automatic
	Flame Ionization Detector (FID)	Logarithmic amplifier Mechanical valve Baseline signal display Ignition coil control
	Detection limit	≤3×10^{-12} g/s (Sample: n-hexadecane)
	Baseline drift	≤1×10^{-13} A/30 min
	Linear range	≥10^7
Power Supply	AC 110/220 V±10%, 50/60 Hz	
Packaging Dimension (W×D×H)	820×670×600 mm	
Gross weight	71 kg	

Standard Accessories

Accessories no.	Accessories name
1	FID detector
2	Chromatography workstation software

Optional Accessories

Accessories no.	Accessories name	
1	Hydrogen generator	
2	Air generator	
3	Thermal Conductivity Detector (TCD) (Optional)	Sensitivity: >10000 mv. ml/ mg (Sample: n-hexadecane)
		Linear range: $\geq 10^5$
4	Electron Capture Detector (ECD) (Optional)	Detection limit: $\leq 1\times10^{-14}$ g/ml (Sample: n-hexadecane δ-666)
		Linear range: $\geq 10^3$
5	Flame Photometric Detector (FPD) (Optional)	Detection limit: $\leq 2\times10^{-11}$g/s (S of thiophene) Detection limit: $\leq 1\times10^{-12}$g/s (P of methyl parathion)
		Linear range (S): $\geq 10^2$ Linear range (P): $\geq 10^3$
6	Nitrogen and Phosphorus Detector (NPD) (Optional)	Detection limit: $\leq 1\times10^{-12}$g/s (Azobenzene) Detection limit: $\leq 1\times10^{-12}$g/s (Marla sulfur phosphorous)
		Linear range: $\geq 10^3$