

Gas Chromatography LGC-B11



Gas Chromatography LGC-B11 is a benchtop unit with advanced flow controller (AFC) technology. System has digital control mode and polar capillary columns to separate polar analytes. GC oven is capable of 9 temperature program ramps and hold steps, and features rapid cooling: 250 °C to 50 °C < 10 minutes. Accurate flow rate control via AFC has higher level repeatability of retention time and peak area, enabling specific level of analysis by means of dual FID detectors.

Features

- ◆ 7-inch LCD display specifies temperature, gas flow and heating curve
- ◆ H₂ and N₂ mobile gas phase with AFC and constant pressure gas flow type
- ◆ Equipped with capillary analysis system and capillary split sampler
- ◆ Injection system incorporates diaphragm cleaning, split flow and auxiliary gas adjustment
- ◆ Standard unit for high-speed analysis with polar capillary column
- ◆ PEG-20M and FFAP stationary phase polar capillary columns can be coupled
- ◆ Dual FID detector with automatic flame ignition and baseline signal display
- ◆ Self-diagnostic and automatic fault recognition function
- ◆ Multi-core and 32-bit embedded hardware system ensures the reliable operation
- ◆ Equipped with chromatography workstation software to process data
- ◆ Memory function can store 20 sample test data
- ◆ RS232 interface and LAN port

Applications

Suitable for analysis of trace toxic compounds, monitoring and research in environmental protection, atmosphere and water source pollution. It is widely used for petrol-chemistry, environmental protection, epidemic prevention, pharmacology and scientific research.

Specifications

Model no	LGC-B11	
Oven	Maximum capacity	22 L
	Temperature range	RT + 5 °C to 400 °C
	Temperature accuracy	± 0.1 °C
	Temperature program	9-phase/ 10 platform
	Program total time	9999.9 min
	Maximum temperature heating rate	0.1 to 60 °C/ min
	Maximum cooling rate	< 10 mins (250 to 50 °C)
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	H2: 0 to 200 ml/min, N2: 0 to 150 ml/min
Detector	Temperature range	RT + 7 °C to 420 °C
	Maximum installation	Dual detector
	Flame ignition mode	Automatic
	Flame Ionization Detector (FID)	Logarithmic amplifier
		High voltage switch control
		Baseline signal display
		Ignition coil control

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		Detection limit: $\leq 3 \times 10$ to 12 g/s (Sample: n-hexadecane)
		Baseline noise: $\leq 5 \times 10^{-14}$ A
		Baseline draft: $\leq 6 \times 10^{-13}$ A
		Dynamic range: 10 ⁷
		RSD: $\leq 3\%$
Power Supply	AC 220 V \pm 22 V, 50 Hz \pm 0.5 Hz, 3000 W	
Packing dimension	1020 \times 660 \times 740 mm	
Gross Weight	82 kg	
Net weight	70 kg	

Standard accessories

Accessories no	Accessories name
1.	FID detector system
2.	Capillary injection system
3.	Chromatography workstation software

Optional accessories

Accessories no	Accessories name
1.	Polar capillary columns PEG-20M Stationary phase: 30 m \times 0.32 mm injector temperature: 250 °C Oven temperature: 165 °C Detector: FID-250 °C Inlet pressure: 0.04 Mpa
2.	Polar capillary columns FFAP Stationary phase: 30 m \times 0.32 mm injector temperature: 250 °C Oven temperature: 165 °C Detector: FID-250 °C Inlet pressure: 0.04 Mpa
3.	Syringe 1 ul
4.	Syringe 5 ul