

PRECISION IN EVERY DETAIL

GI-5200

Ion chromatograph

Multiple detectors and gradient configurations expand analytical choice.



PEEK

Acid- and alkali-resistant flow path

100 Hz

Conductivity-detection sampling

Quaternary gradient

Selected according to configuration

From specialist instruments to complete laboratory solutions.

Product brochure · V0.0.7

01

PRODUCT ADVANTAGES

Flexible combinations for different ion-analysis requirements.

Product introduction

GI-5200 offers optional anion/cation dual detectors and simultaneous dual-system operation. Amperometric and conductivity detectors can also form a dual-detector system. A high-performance quaternary low-pressure-gradient PEEK pump supports routine ion analysis and specialised samples.

01

All-PEEK flow path

The pump head, six-port valve and complete flow path use PEEK for resistance to acids and alkalis.

02

Bipolar pulsed conductivity detection

Automatic range adjustment without switching; sampling frequency 100 Hz.

03

Integrated temperature control

Combined temperature control of the detector, column and suppressor accommodates mainstream Chinese and imported chromatography columns.

04

Modular combinations

Options include an autosampler, eluent generator, UV detector and amperometric detector. Select simultaneous anion/cation dual-system analysis or concurrent amperometric and conductivity detection.

05

Multidetector workstation

A proprietary Chinese-language chromatography workstation supports simultaneous operation of different detectors and reasonable application-specific customisation.

06

Quaternary low-pressure constant-flow pump

The low-pulsation PEEK dual-piston pump mixes four solutions online for gradient elution. A precision stepper motor drives a precision ball screw for reliability, stability and durability. Patent number stated in the source: 2016103131422.

07

Optional automatic sampling

Compatible with either 2 ml or 10 ml vials. A 250 µl syringe is standard, other capacities are optional, and injection-volume correction is integrated.

02

DETECTORS & APPLICATIONS

From routine ions to specialised analytes.

- Third-party testing
- Food
- Industry
- Environmental protection
- Disease control
- Water supply and drainage
- Chemical industry
- Mining and metallurgy

01

Conductivity and amperometry

Isocratic or gradient analysis can cover routine anions and cations, I⁻, CN⁻, S²⁻ and other analytes. Select the actual detector and method accordingly.

02

Small-molecule and biological analysis

The source lists high-sensitivity gradient detection of small organic acids, sugars and amino acids.

03

UV-detection expansion

Adding a UV detector enables dual-detector measurement and simultaneous analysis of UV-absorbing analytes.

04

Key components

The source lists a ball-screw-driven quaternary low-pressure PEEK pump, imported motorised six-port valve, bipolar pulsed conductivity detector, amperometric detector and precision autosampler.

Configuration item	Source description
Dual system	Optional simultaneous anion/cation dual-system operation
Detector combination	Conductivity, amperometric and UV detectors selected as required
Sample vials	2 ml or 10 ml
Syringe	Standard 250 µl; other capacities optional
Injection correction	Integrated injection-volume correction

03

TECHNOLOGY & COMPANY

Continuous development across liquid and ion chromatography.



Company illustration from the original literature

Manufacturer profile

Founded in 2012, General Instruments (Shenzhen) Co., Ltd. researches, designs, manufactures and sells liquid chromatographs. Its technical team includes doctoral and master's graduates and senior engineers.

- 2015: developed an interactive liquid-chromatography teaching and training system and proposed VR-based simulation teaching.
- 2016: introduced a constant-flow delivery system with dual linear motors driving precision ball screws and applied it to ion chromatography.
- 2018: introduced intelligent two-dimensional liquid chromatography and developed DC, pulsed and integrated amperometric detection modes.
- 2019: developed dedicated instruments and multiple methods for therapeutic-drug concentration analysis and applied two-dimensional ion chromatography to related analysis.

This page summarises the manufacturer's historical literature; these achievements are not presented as in-house developments by Zhishijie.

04

QUALIFICATIONS & PATENTS

Manufacturer credentials and patents.

Industry, university and technical collaboration

The source records cooperation with universities, research institutes and multinational companies, with more than 40 patent applications by the end of 2019.



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