BioSpectrix

Precision Instruments for a Healthier and Safer World

IC6200

Integrated Ion Chromatography Series

Intelligent | Reliable | Reagent-Free | High Performance

Advanced solution for trace ion analysis in a wide range of applications

- High Sensitivity and Accuracy
- Reagent-Free Chromatography
- Intelligent Operation & Remote Control
- Robust and Stable Performance
- Compliance Ready



Environmental | Food & Beverage | Pharmaceuticals
Chemical & Petrochemical | Academic & Research

System Overview

Future-Ready Ion Chromatography for Demanding Analytical Workflows

The BioSpectrix IC6200 is a new generation intelligent integrated ion chromatograph designed for high-precision, high-stability and automated analysis of inorganic anions, cations and polar compounds. With a compact and elegant design, 10-inch intelligent touchscreen, Ethernet connectivity and one-button intelligent maintenance, the IC6200 enhances laboratory productivity while delivering outstanding analytical performance.

10-inch Intelligent Touchscreen
Easy operation and real-time system status

Remote Control
Ethernet connectivity for remote access, software update and support

Reagent-Free Chromatography
Electrolytic eluent generation and membrane suppression



High Precision and Stability
Excellent sensitivity, low noise and low drift

Intelligent Software
Advanced peak detection and integration algorithms

Compliance Ready
Supports GMP, 21 CFR Part 11, ICH and data integrity



Key Features and Advantages

Designed for Reliable, Efficient and Intelligent Ion Analysis

Intelligent Touchscreen



- 10-inch high-definition touch screen
- Real-time display of flow path and status
- One-button operation, user-friendly interface

Remote Control & Connectivity



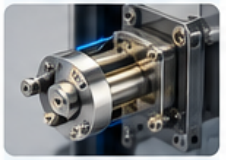
- Ethernet connection for remote control, instruction and software updates
- Supports multi-instrument control
- Convenient for centralized management

Leakage Protection



- Real-time leakage detection
- Automatic alarm and safe shutdown
- Ensures operator and instrument safety

Auto-Range Detector



- Based on DSP architecture
- Direct conductivity output value
- Detection frequency up to 100 Hz
- Flexible adjustment and auto-range function

Consumable ID & Life Monitoring



- ID coding for key consumables (such as suppressors)
- Real-time lifetime monitoring
- Effective reminders to avoid reduced detection efficiency

One-Button Maintenance



- Automatic evacuation of high-pressure flow path
- Peristaltic pump post-pump cleaning function
- Reduces manual operation and maintenance time

Core Component Advantages

Reliable Hardware for Excellent Analytical Performance

Precision Ion Chromatography Pump (PEEK Pump Head)



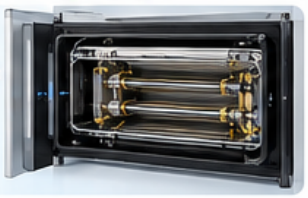
- All PEEK pump head resistant to acids, alkalis and organic solvents (including reversed-phase)
- Non-metallic flow path prevents metal contamination
- Optimized floating mechanical design extends pump lifetime and reduces maintenance cost
- Intelligent electronic pulsation suppression technology delivers high-precision, low-pulsation and low-drift flow

Non-Metallic Flow Path Design



- All key liquid-contact materials are PEEK or inert materials
- Excellent chemical resistance and corrosion resistance
- Ideal for high-purity ion analysis

Highly Precise Temperature Control



- Column oven temperature range: ambient +5 °C to 100 °C
- High temperature stability (±0.1 °C)
- Supports multiple column configurations
- Ensures excellent retention time reproducibility

Electrolytic Regenerated Membrane Suppressor

- High-efficiency electrolytic membrane suppression technology
- Stable baseline, low noise and high sensitivity
- Automatic current control and protection
- Improves detection limits for anions and cations
- Reduces manual replacement and operating cost



Reagent-Free Eluent Generation

- Built-in electrolytic eluent generator
- Automatically generates high-purity eluent
- Supports various gradients and methods
- Reduces consumption of chemical reagents and operational cost
- Environmentally friendly and safe



Autosampler Options

High-throughput, high precision and high reliability



AS2800 Series Autosampler

- High-throughput sample handling
- Reliable and precise injection
- Supports partial loop and full loop injection
- Automatic rinsing to prevent carryover
- Suitable for routine and high-throughput applications



AS3110 Series Ion Chromatography Autosampler

- High precision and stability
- Supports a variety of vial sizes
- Flexible method selection
- Ideal for complex and demanding applications

Smart Lab Chromatography Workstation

Powerful, Compliant and User-Friendly

- Intelligent peak detection and integration using second-order algorithm
- Supports Gaussian, tangent, exponential and perpendicular-line trimming
- Automatically identifies shoulder peaks and small peaks
- Guided mode for easy parameter setup with real-time preview
- Multi-level user permission management (> 3 levels)
- Electronic signatures and complete audit trail (immutable and non-deletable)
- Efficient database with automatic backup and cyclic update (last 7 days)
- Supports network deployment and multi-brand, multi-model instruments
- Complies with GMP, CGMP, 21 CFR Part 11, ICH and data integrity requirements



Wide Range of Applications

Reliable Solutions for Diverse Industries

The BioSpectrix IC6200 is widely used in pharmaceuticals, food and beverage, environmental analysis, chemicals, petrochemicals, academic research and other fields, providing accurate and reproducible results.



Pharmaceuticals

- Drug analysis
- Impurity detection
- Quality control



Food & Beverage

- Additives & contaminants
- Nutritional components



Environmental Analysis

- Anions and cations in water
- Pollutant monitoring
- Water quality assessment



Chemical & Petrochemical

- Process monitoring
- Raw material analysis
- Product quality control



Academic & Research

- Method development
- Research projects
- Education and training