ICP-MS3580 Inductively Coupled Plasma Mass Spectrometer

Product Introduction

Inductively coupled plasma mass Spectrometer (ICP-MS) is a new analysis technique for micro, trace and ultra-trace elements developed in the 1980s.ICP-MS can determine most elements in the periodic

table, and has a very low detection limit, an extremely wide dynamic linear range, simple spectral line, less interference, high precision, fast analysis speed and other performance advantages.

ICP-MS3580 is a self-developed product, the performance of the instrument is better than the national standard, fully meet the application needs of users in different industries, cost-effective; Moreover, it has excellent instrument performance and efficient analysis effect. The daily operation of the instrument consumes low equipment cost.

Performance Feature

◇Integrated gas path module, reduce gas path joint, lightweight, modular, to ensure that the instrument is easy to move

◇The self-developed solid-state power supply can ensure the operation of the instrument in a variety of modes (such as conventional mode, cold plasma mode),Moreover, multiple modes can be run in the same method, which saves a lot of analysis time and facilitates research.

◇The adoption of mainstream market design greatly saves the instrument space for users, especially third-party detection users, and also increases the possibility for future vehicle-mounted applications.

◇The solid state light source with excellent automatic matching function effectively limits the diffusion of ions during the ionization process, ensuring the focus of ions and a very high pass rate.The ion optical system with deflection ensures the best ion focusing effect, effectively reduces the background noise, and improves the signal-to-noise ratio.

◇The use of thermoelectric original integrated quartz concentric torch pipe to avoid the cumbersome operation of disassembly rectangular pipe and possible damage;

◇The instrument is equipped with a highly sensitive optical fiber sensor, which can monitor the working condition of the flame in real time under the working condition of the instrument, and automatically shut down the instrument in case of abnormal flameout.

◇The split design of fog chamber and swirl fog chamber reduces the influence of temperature change in combustion chamber on atomization efficiency, and enables more intuitive observation of real-time injection state. The extended fog chamber with patented technology can effectively separate gas and liquid and reduce the interference of water vapor.

◇The plasma gas, auxiliary gas and carrier gas in the work of the instrument are all controlled by high-precision imported mass flow controller (MFC), which has continuous adjustable flow and high accuracy of output air flow, ensuring the accuracy of test data.

◇Peristaltic pump for twelve rotor four channel automatic design, peristaltic pump speed can be adjusted according to the demand flow Settings; It can meet customers' special requirements for online sample dilution and online addition of internal targets.

◇The Interface room is composed of two parts: sampling cone and intercepting cone.Standard configuration includes sampling cone (cone hole 1.1mm),And interception cone with excellent salt

resistance (cone hole 0.75mm);In addition, high sensitivity intercepting cone can be selected according to the actual needs of users;

◇Quick switching software interface in Chinese and English, "one-click" parameter setting intuitive and fast, improve the user's work efficiency, but also provide the ability to automatically control the instrument and its accessories, perfect for Windows professional operating system

Technical Indicators

Quality-Quantity Range：2~260 amu

Measurement Range ： ≥109

Sensitivity：Li≥50； In≥180； U≥200（Mcps/ppm）

Detection Limit ：Li≤2；In ≤0.1；U≤0.1（ppt）

Resolution ：0.2~2.0amu

SNR：≥50×106

Background Noise：≤2 cps（Full mass range）

Mass Axis Stability：≤0.05 amu/24 h

Stability RSD：short period≤2%；long time≤3%

Oxide Ion：CeO+/Ce+≤2.5%

Doubly Charged Ion：69Ba2+/138Ba+ ≤3%

Isotope Ratio：（107Ag/109Ag）≤0.2%

Abundance Sensityivity：≤1×10-6Low mass end；≤5×10-7High quality end

Application Area

Universities, quality inspection centers, environmental monitoring stations, enterprises, agricultural systems, geology and mining, environmental protection, geology and metallurgy, electronic and electrical appliances, food safety, chemical and pharmaceutical, etc.