

Flame Atomic Absorption Spectrophotometer **AS2100**

Features

- Compact design;
- Advanced flame atomization system design for elemental analysis;
- Closed and isolated optical system;
- Suspended vibration-isolation optical platform;
- Automated intelligent control;
- Humanized software data system;
- Safe, reliable and convenient flame system

Application

- Minerals : rare earth analysis and precious metals analysis
- Environmental : Environmental Protection & Water quality testing
- Material science : alloy materials & building materials
- Scientific research: Elemental quantitative analysis in scientific research such as medical and health, and higher education institutions

Description

The single flame atomic absorption spectrophotometer AS2100 is a brand new product carefully built by Optosky. The flame sensor identifies the flame by sampling the flame temperature, eliminating the interference of external light on the sensor, and improving the reliability of flame identification; computer control completes automatic ignition. It ensures that ignition can only be carried out when safety conditions are met; when the flame is extinguished abnormally, it will automatically alarm and cut off the gas; the electronic gas circuit control of the flame gas flow will automatically alarm when the gas circuit pressure is insufficient.

AS2100 is compact in design and easy to operate. It provides safe, reliable and durable analysis methods for routine laboratory analysis, production process control and experimental teaching. It has excellent performance, accurate indicators and stable performance. It can meet many common needs and is deeply favored by users. favorite.

It is widely used in quantitative analysis of elements in rare earth analysis, precious metal analysis, environmental protection, water quality testing, alloy materials, building materials, medical and health, universities and other scientific fields.



1. Parameter

Table 1: Performance Parameters of Single Flame Atomic Absorption Spectrometer AS2100

Model	AS2000
Wavelength Range	190~900nm
Grating Line Density	1800 lines /mm
Absorbance Range	-0.1~2.5ABS
Wavelength Repeatability	$\leq 0.5\text{nm}$
Wavelength Accuracy	Full spectrum $\pm 0.15\text{ nm}$
Optical System	Integrated optical platform, fully enclosed optical system (single beam)
Detector	Photomultiplier tube
Resolution	Able to separate manganese doublet lines (279.5 and 279.8 nm) with a spectral bandwidth of 0.2 nm and a valley-to-peak energy ratio of <30%
Spectral Slits	0.1nm,0.2nm,0.4nm,0.7nm,1.0nm,2.0nm (automatically switchable)
Background Correction Technology	D2 background subtraction (background signal 1 ABS, background reduction capability ≥ 50 times)
Static Baseline Drift	$\leq 0.002\text{ABS}/30\text{min}$ (Cu)
Lamp Holder	Standard 6-lamp turret, optional 8-lamp turret
Characteristic Concentration (Copper)	$\leq 0.02\text{ug/ml}$
Measurement Repeatability (Copper)	$\leq 0.5\%$ (Cu, Absorbance > 0.8ABS)
Detection Limit	$\text{Cu} \leq 0.004\text{ug/ml}$
Gas Flow Control	Needle valve control

Safety Protection	Automatic gas cut-off for low pressure, power interruption, abnormal flameout, and burner mismatch;
Background Subtraction Method	Self-absorbing background subtraction method
Burner	Air-acetylene flame burner 100mm
Nebulizer Chamber	Polypropylene coated
Ignition Method	Automatic ignition
Ignition Dynamic Baseline Drift	$\leq 0.003 \text{ABS}/30 \text{min}(\text{Cu})$
Dimensions	700*500*530(mm)
Weight	80kg