

Single Flame Atomic Absorption Spectrometer **AS2000**

Features

- HCL : 4 hollow cathode lamps (can be installed)
- Safety control for abnormal situations, such as insufficient pressure, air leakage, flameout.
- Provides 6 levels of slit (automatic switching)
- The software adds a method storage function. Users can store the standard curve and call it up at any time, which can save analysis time.
- Good stability, wide measurement range, low detection limit

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 (FAAS) AS2000 is a brand new product carefully crafted by Optosky. The original optical path design greatly improves the sensitivity in the ultraviolet region. The outstanding mechanical and optical system, coupled with excellent software, ensure the accuracy of measurement.

The economical single flame atomic absorption spectrophotometer AS2000 can install 4 hollow cathode lamps at the same time, providing 6 slits (automatic switching); the instrument has good stability, wide measurement range, low detection limit, high resolution and high sensitivity; The software adds a method storage function. Users can store the standard curve and call it up at any time, which can save analysis time and adapt to your pursuit of automated and accurate measurement results.



1. Parameter

Table 1: Performance Parameters of Single Flame Atomic Absorption Spectrometer AS2000

Model	AS2000
Wavelength Range	190~900nm
Grating Line Density	1800 lines /mm
Absorbance Range	0 - 2.5ABS
Wavelength Repeatability	±0.1nm
Wavelength Accuracy	Full spectrum ±0.2 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,1nm,1.2nm,2.0nm (automatically switchable)
Background Correction Technology	D2 background subtraction (background signal 1 ABS, background reduction capability ≥50 times)
Static Baseline Drift	≤0.004ABS/30min (Cu)
Lamp Holder	4-lamp turret
Characteristic Concentration (Copper)	≤0.025ug/ml
Measurement Repeatability (Copper)	≤0.5% (Cu, Absorbance > 0.8ABS)
Detection Limit	Cd ≤0.3pg
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-absorption and deuterium lamp background subtraction methods, can correct 1A background. When the background signal is 1A, the background deduction ability is ≥ 50 times
Burner	Air-acetylene flame burner 100mm
Ignition Method	Automatic ignition
Ignition Dynamic Baseline Drift	$\leq 0.004\text{ABS}/30\text{min}(\text{Cu})$
Dimensions	700*500*530(mm)
Weight	80kg