

## AELAB T8000 Flame Atomic Absorption Spectrometer

### Product Description

It is used to determine the content of major, trace and trace metal elements and semi metal elements in various substances. The machine adopts PC and Chinese interface operation software, which makes the instrument easy to operate and understand. The advanced electronic circuit system and USB2.0 communication control are applied to realize the automatic adjustment of the instrument's functions such as wavelength scanning, peak seeking and positioning, spectral band width, rotating element lamp holder, atomizer height and position, gas flow, lamp current and negative high voltage of photo multiplier tube. The instrument stores the reference conditions for analysis and operation of all measured elements of various analysis methods. Users can also modify the operating conditions as needed, save the operating conditions, working curves and test results, and recall them for use and processing.



### Application area

- ◆ Geology: Geological, mineral, metallurgical industry analysis, iron and steel analysis, nonferrous metal analysis
- ◆ Environment: Environmental analysis, air analysis, water quality analysis, soil and solid waste analysis
- ◆ Chemical industry: Petrochemical and light industrial products analysis, crude oil and its processed products analysis, chemical and light industrial products analysis
- ◆ Food: Food analysis, biomedicine and health product analysis
- ◆ Material Science: Analysis of building materials (glass, ceramics, coatings, etc.)

### Performance advantages

- ◆ Pure titanium atomizing chamber  
It can effectively prevent acid gas corrosion and has a longer service life.
- ◆ Mass flow controller realizes acetylene flow control  
The acetylene flow is continuously adjustable, and the flow is dynamically monitored, which is convenient to use, safe and reliable.
- ◆ Total reflection achromatic optical system  
The concave mirror is used to replace the convex lens as the optical focusing equipment of the instrument, which effectively solves the problem of different chromatic aberration of different element focus and improves the efficiency of the optical system
- ◆ Fully automated design  
Except the main switch, all instrument functions are automatically monitored and controlled by PC.
- ◆ Eight element light tower  
One lamp works, and seven lamps can be preheated at the same time, saving lamp changing and preheating time, making element measurement faster and more convenient.
- ◆ Background correction system  
Deuterium lamp background correction: 1A background can be corrected. Self absorption background correction: 1A background can be corrected.
- ◆ USB2.0 communication mode  
The old 232 serial communication mode is eliminated, USB2.0 communication interface is adopted, which improves the communication speed and is compatible with the latest computer system.
- ◆ Streamlined sheet metal process design  
The appearance is designed by streamline sheet metal technology, simple and fashionable, beautiful and generous.
- ◆ Independent intellectual property rights, powerful and perfect analysis software  
The humanized operation interface makes your operation as easy as a palm. The Windows interface operating system is automatically switched between Chinese and English, with automatic qualitative and quantitative analysis, automatic calculation of element content, and automatic generation of test reports.
- ◆ High efficiency glass atomizer  
The special high-efficiency glass atomizer is adopted, which has high atomization efficiency and strong universality.
- ◆ More security measures
  - 1) Acetylene leakage monitoring
  - 2) Acetylene pressure monitoring
  - 3) Air pressure monitoring
  - 4) Flame status monitoring
  - 5) Explosion proof switch status monitoring



### Technical indicators

Wavelength range:	190nm~900nm	Monochromator type:	Cherney Turner type
Spectral bandwidth:	0.1/0.2/0.4/0.7/1.6nm Five gear automatic switching		
Grating scribed line:	1800 lines/mm	Wavelength accuracy:	±0.20nm
Wavelength repeatability:	<0.05nm	Resolving power:	优于 0.3nm
Characteristic concentration(Cu):	<0.025µg/ml/1%	Grating blaze wavelength:	230nm
Detection limit(Cu):	<0.003ug/mL	Baseline stability:	0.002 Abs (static) 0.002 Abs(Dynamic)
Background deduction method:	Deuterium lamp+self absorption	Precision(Cu):	<0.5%