

## AF-630/640 Atomic Fluorescence Spectrophotometer



### **AF-630 Three-channel Atomic Fluorescence Spectrometer (Environmental protection type)**

### **AF-640 Double-channel Atomic Fluorescence Spectrometer (Environmental protection type)**

#### **Application Fields:**

Environmental monitoring

Food

City water supply and drainage

Drinking water

Clinical medicine

Agriculture environmental protection and agriculture product

Chinese medicine

Harmful elements detection in cosmetics

Geology and metallurgy

Ocean environment and water product

Education and scientific research

Determination of Hg As Sb Bi Se Te Pb Sn Ge Zn Cd

#### **Instrument Features**

1Five patented techniques with independent intellectual property

2Environmental protection type atomic fluorescence spectrometer with world-first “High-efficiency Hg-elimination Technique” can decontaminate Hg pollution in lab environment efficiently and protect analysts’ health. (Patent)

3Chinese first quartz atomizer with “full-ceramics infrared heating temperature control” technique has super-long lifetime. (Patent)

5Advanced spraying jet type hydride /vapor generation gas-liquid separation system and automatic waste liquid discharge

6Standard RS-232 port communication; supporting USB interface communication

7The newest special device of “Gaseous Mercury Determination”, the detection limit of which reaches 1ng/m<sup>3</sup>, can determine Hg content in the air, natural gas, lab and working field etc. (Patent)

8The newest special device with special technology, “Determination of Ultra-trace Hg in Water Samples” is adopted, with detection limit up to 0.0004 ug/l, realizing direct determination of ultra-trace Hg in Class I and II ground water and seawater.

9Realize three or two elements determination simultaneously

10Newly designed light closed optical alignment system is adopted

11Gas line auto-control, auto-protection and auto-alarm functions incorporated

### **Brand-new Windows98/Me/2000/XP operation software**

1Fluorescence signal profile real-time display and overlap

2Graphics scale auto zooming

3Working curve auto fitting, multi-graphics display;

4Multi-functions of single-step running, continuous running and auto-sampling operation

5All kinds of analysis program, analysis data and signal graphics can be stored and printed out

6Several kinds of report format are available

7Detailed software online help is provided

8Expert system provides physical parameters of various elements, preparation of standard solutions, sample preparations, interference elimination and more than 500 relative articles on analysis methods of domestic and abroad writers

## Specifications

Element	D.L	RSD	Linear range
As Sb Bi Se Te Pb Sn	0.03 ug/L	1%	$10^3$
Hg	0.003ug/L		
Cd	0.001ug/L		
Zn	2.0ug/L		
Ge	0.3ug/L		
Hg in gas state (air, natural gas, lab, testing site etc)	1.0ng/m <sup>3</sup>	5%	$10^2$
Hg in water sample (Sea water, surface water etc)	0.0004ug/L	2%	