

TOPLAB INDIA
"Serving Science with Solution"

TL-1800AA

Atomic Absorption Spectrophotometer



Double Beam

High stability

Most universal

Easy installation

Very competitive price

Excellent after sales service

Flame Analytical System

TOPLAB INDIA'S TL-1800AA Series Atomic Absorption Spectrophotometer is Double beam spectrophotometer, absorbed the latest technology and next generation R & D, application experience with decades of spectral instruments. The AAS product includes the Flame, Graphite furnace and Hydride generation system can be equipped with various accessories, flexible configuration program can meet different customer demand. TL-1800AA atomic absorption spectrometer can be used for analysis of complex samples, full automatic multifunctional, various analysis methods can automatically switch, unmanned automatic analysis.

TL-1800AA Series Atomic Absorption Spectrophotometer is now widely used in scientific research, quality control, disease control, Soil testing, Water testing, environmental protection, metallurgy, Fertilizer, agriculture, chemical industry .Hardware and software design of innovation to ensure the accuracy, safety, ease of use in the analysis of samples, equipment maintenance, simple and convenient.

Main features

High precision automatic optical system

Double beam Optical System with 1800 lines/ mm reticle (dispersion rate) large area grating monochromator, a new type self collimation, all lenses are quartz coating, the detection range and the stability of optical broad to ensure the precision of analysis. Automatic Optimization for 3 or 6 socket configuration 3 or 6 independent lamp power supply, can be respectively preheating

Polymer spray chamber

Polymer materials corrosion spray chamber, acid and alkali resistance, Including hydrofluoric acid, either organic or inorganic solution can be the highest sensitivity and stability

Titanium burner

Titanium burner, 100mm burner and the optional 50mm Nitrous Oxide, Air cooling pre-mixed type, corrosion resistant, resistant to high salt, greatly improve the analysis efficiency and accuracy of the flame.

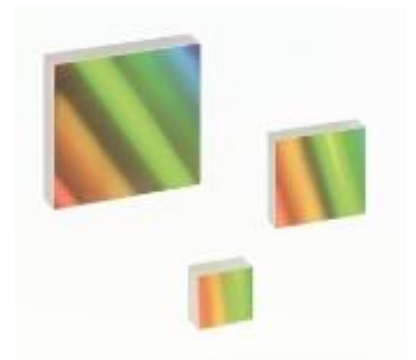
Automatic analysis

It can automatically accomplish safety ignition, extinction and switching, reliable structure, low fault rate, thus ensuring the sensitivity and reproducibility of the flame method.

The light source system Three / Six lamp automatic conversion, can be directly used high performance hollow cathode lamp, improve the sensitivity analysis of the flame, the automatic adjustment of the power supply parameters and the beam position, automatic wavelength scanning and searching peak.

Software function

PC Operated TL-1800AA system with High intelligent software, powerful function, friendly interface English operation. Automatic instruments and additional control, flame, graphite furnace operating mode can be switched automatically, automatic optimization, automatic dilution; mouse operation, automatic setup menu data and correction method.



Grating



Automatic Gas Control System

Background correction system

Using deuterium hollow cathode lamp advanced and self absorption background deduction of background correction, to eliminate the interference of molecular absorption of low content determination, reducing the noise emission of deuterium lamp and prolongs the service life, has excellent stability. Deuterium lamp background signal for 1A, background correction ability > 50 times.



Hollow Cathode Lamps

Atomizer

High efficient nebulizer common type metal glass. Lifting capacity 1-10mL. Continuously adjustable metal sleeves glass high efficiency glass atomizer. Hydrofluoric acid resistant metal sleeves high efficiency atomizer.



Atomizer

Hydride Generator (HVG)

High sensitivity: Determination of As: index: 0.08ng/ml/1%A Low detection limit: 3 times the standard deviation calculation, Numerical sensitivity is known as 2/3(ng/ml), which can meet the requirement of sample 0.01 – 0.1ppm test. HVG is necessary and suitable for analysis of As, Bi, Hg, Pb, Sb, Se, Sn etc...



Hydride Generator

Technical Parameters:

Main AAS System	Model	TL-1800AA-F3	TL-1800AA-F6
	Light Source	3 Lamps turret, automatic optimization & manual alignment	6 Lamps auto turret, automatic optimization & alignment
	Optical System	Large 1800 lines /mm grating reticle ,Double Beam Optics, fully closed optical system	
	Wavelength Range	180nm ~ 900nm Automatically peak find, a key optical optimization function	
	Wavelength Accuracy	≤0.1nm	
	Wavelength Repeatability	±0.02nm	
	Spectral Bandwidth	0.1nm,0.2nm,0.4nm,1.0nm,2.0nm (5 steps with automatic changeover)	
	Baseline Stability	≤±0.002A/30 min (Static) ≤±0.005A/30min (Dynamic)	
	Absorbance Range	0 ~ 4 A	
Flame Analytical System	Detector	Imported Photomultiplier Tube (PMT)	
	Burner Head	Full titanium combustion head, 50mm or 100mm general combustion head	
	Atomization Chamber	Polymer explosion-proof spray chamber	
	Nebulizer	Atomizer efficient glass atomizer, can also be customized	
	Ignition Type	Microcomputer control, automatic ignition through software operating	
	Gas Control	Automatic gas control system	
	Detection Limits(Cu)	0.002µg/mL	
	Precision	RSD≤0.5%	
Power Supply	220V (+5% ~ -10%), 60/50Hz / Lamp Current : Pulsed power supply		
Weight/Size	65 Kg / Dimensions: (L)700mm *(W)412mm* (H)400mm		
Interface	Computer and USB interface communication		
Software	PC communication software to control AAS system, Data processing, Data analysis, Print etc.		