



Atomic Absorption Spectrometer

Applications

For analysis of various metallic constituents in

- Soil
- Micro Nutrients
- Pesticide
- Water
- Metallurgy
- Coal
- Glass
- Steel, etc.
- Fertilizer
- Plants
- Foods
- Biological Matter
- Plating
- Petrochemicals
- Cement

AAS can determine the amount of metal in liquids. It can measure the quality of metal elements in various samples through atomic absorption analysis.

Emission analysis by flame, graphite furnace and hydride method.

SALIENT FEATURES

- High energy Double Beam Optic System
- Mono-Chromator Czerny Turner Holographic 1800 lines/mm grating with flashing wavelength at 250nm.
- Modes of operation includes absorbance, Emission & Concentration.
- Background correction with D₂ Lamp Source.
- Precise vertical, horizontal and rotational alignment of Titanium burner.
- Light source Hollow Cathod Lamp power supply with adjustable current and deuterium lamp with fixed current.
- Built in Microprocessor, auto control, data processing, multi function, keypad and LCD display.
- Highly integrated micro-digital circuit, with the functions of integral holding, peak height, peak area, auto zero adjustment, linear, nonlinear curve fittings, various parameters and display of working curves on the screen and report printing etc.
- Fuel gas acetylene (C₂ H₂) with precision pressure indication, flow adjustment, gas supply cut-off and power cut-off.
- Single lamp turret, 100 mm single slot titanium burner
- Saving of optimum Parameters, RS232 Interface
- Oil - free diaphragm air compressor

Optional Accessories:

Graphite Furnace, Graphite Tube, Hydride Generator, Hollow Cathod Lamps, Stabilizer, UPS, Acetylene gas cylinder, Software, Calibration Standard Solutions



SPECIFICATIONS	MODEL	AAS-1909
	Make	LABMAN
	Optic System	Double Beam,
	Grating	1800 lines / mm
	Mono-Chromator	Holographic, Czerny Turner
	Wavelength Range	190-900nm
	Wavelength Accuracy	$\leq \pm 0.5\text{nm}$
	Wavelength Repeatability	$\leq 0.3\text{nm}$ (single direction)
	Wavelength scanning speed	1.2nm/min; 300nm/min
	Spectral Bandwidth	0.2nm, 0.4nm, 0.7nm, 1.4nm, 2.4nm, 5.0nm
	Resolution	< 40%
	Baseline Stability	$\pm 0.004\text{Abs}/30\text{min}$
	Characteristic Concentration of Copper	$\leq 0.004 \mu\text{g}/\text{ml}/1 \%$
	Detection Limit of Copper	$\leq 0.008 \mu\text{g}/\text{ml}$
	Background Calibration ability	Greater than 30 times.
	Ambient Temperature	10°C - 35°C
	Lamp Turret	Single
	Light Source	Hollow Cathod Lamp (HCL)
	Background correction	Deuterium Lamp (D ₂)
	Burner (100 mm)	Titanium alloy
	Fuel	Acetylene (C ₂ H ₂)
	Oxidant	Air
	Hollow Cathod Lamp	Cu (Standard)
	Display	Backlight LCD display
Detector	Photo Multiplier Tube (PMT)	
Unit	mg/L, $\mu\text{g}/\text{L}$, %, μg , ng, pg.	
Air Compressor	Oil - free diaphragm air compressor	
Interface	RS232	
Power supply	220V, 3A, 50Hz	
Packing dimension & weight	1220 x 770 x 730 mm / 160 kg.(main instrument)	
Accessories dimension & Weight	800 x 400 x 900 mm / 65 kg	

★ Specifications subject to change without notice.