

Flame/Graphite Furnace Atomic Absorption Spectrophotometer ST-AAS110A/120A/130A



Specification of Atomic Absorption Spectrophotometer

Main Specification	Wavelength Accuracy	190-900nm
	Wavelength Range	Better than ± 0.25 nm
	Resolution	2 spectral lines of Mn at 279.5nm and 279.8nm, 0.2nm and valley-peak energy ratio less than 30%
	Baseline Stability	0.004A/30 min
	Background correction	The D2 lamp correction capability at 1A is better than 30 times correction at 1.8A is better than 30 times.
Light Source	Lamp Turret	6 lamp (ST-AAS 110A/120A), 4 lamp turret (ST-AAS 130A)
	Lamp current adjustment	400 Hz, 0~25mA, 0~10mA
	Lamp Power supply mode	400 Hz
Optical System	Monochromator	Single Beam, Czemy Tuner design grating monochromator
	Grating	1800 l/mm
	Focal Length	277mm
	Blazed Wavelength	250nm
	Spectral Bandwidth	0.1nm, 0.2nm, 0.4nm, 1.2nm, automatic change
Flame Atomizer	Burner	10 cm single slot all titanium burner
	Spray Chamber	Corrosion resistant all plastic spray chamber
	Nebulizer	High efficiency glass nebulizer with metal sleeve, sucking up rate 6-7 ml/min
	Emission Burner provided ST-AAA-110A/120A	
Graphite Furnace	Temperature range	Room temperature ~300°C
	Heating Rate	2000°C/s
	Graphite tube dimensions	28 mm (L) x 8 mm (OD)
	Characteristic mass	Cd $\leq 0.5 \times 10^{-12}$ g, Cu $\leq 5 \times 10^{-12}$ g, Mo $\leq 1 \times 10^{-11}$ g
	Precision	Cd $\leq 3\%$, Cu $\leq 3\%$, Mo $\leq 4\%$
Detection and Data Processing System	Detector	R928 Photomultiplier with high sensitivity and wide spectral range.
	Software	Windows operating system
	Analytical Method	Working curve auto fitting, standard addition method, auto sensitivity, auto calculation of concentration & content
	Repeat Times	Maximum 20 times of repeat measurement, auto calculation, standard deviation and relative standard deviation
	Multi-Task Functions	Sequential measurement for multi-element determination in one sample
	Condition Reading	With model function
Characteristic Concentration and Detection Limit	Result printing	Measurement data and final analytical report printout, editing with excel
	Standard RS-232 serial port communication	
	Normal Air C ₂ H ₂ Flame	Cu: Characteristic concentration ≤ 0.025 mg/L, Detection limit ≤ 0.4 mg/L
	Rich Oxygen Air-C ₂ H ₂ Flame	Ba: Characteristic concentration ≤ 0.22 mg/L, Al: Characteristic concentration ≤ 0.4 mg/L
	Hydride Vapor generate can be connected for hydride analysis	
Dimension	Main Unit (cm)	102 x 49 x 54
	Graphite Furnace (cm)	42 x 42 x 46
Weight	Main Unit (cm)	80 kg
	Graphite Furnace (cm)	50 kg