Atomic Absorption Spectrophotometer

Fully Automatic Flame System

Specifications of AA-3700

Spectrophotometer:	External PC-controlled Flame Atomic Absorption Spectrophotometer,
	with two analytical modes, Flame and Hydride.
Software:	AAWin 2.0 PC software, compatible with Windows XP, 7 and 8, allows for proper testing of
	a wide range of elements, using the AAS Analytical Testing Manual.
Lamp Turret:	Fully automated 8-lamp turret, with automatic lamp selection, automatic (programable) gas
	and flame controls, with D2 background correction.
Optical System:	Highest Resolution, single beam optics, 2 measurement modes of atomic absorption and emission.
	All optics are coated with a protective seal and double sealed with a special lightproof cover for
	enhanced stray light rejection and reduced dust contamination.
Safety System:	Compatibility with cathode lamps. Built in various safeties interlocks gas flow pressure burner
	heads, nebulae spray chamber release drain, drain full, etc.
Monochromator:	Optimized Czerny-Turner-Design automated wavelength selection, peaking and slit selection.
Wavelength range:	190 – 900 nm.
Grating:	Grating with 1800 lines/mm.
Slits:	Automated slit selection 0.1, 0.2, 0.4, 1.0 and 2.0 nm, within 5 steps.
Optical Bench:	Optical parts are mounted on a strong and compact structural steel basic plate for strength and
	stability with a cover to prevent dust, vapor and humidity ingress.
Detector:	Standard wide range UV-sensitive photomultiplier.
Lamps:	Automated 8-lamp turret with independent lamp power supply to each lamp, each with two
	heating circuits for lamp preheating operation.
Lamp Support:	All lamps are electronically modulated or better sensitivity and extended life time.
	Coded lamps for automatic lamp recognition without adapters.
	Multi-element coded lamps for increased element capacity & automatic selection of next element.
	High intensity boosted discharge lamps for low noise and best detection limits.
	Warranty on hollow cathode lamps are 5000 mA hours or 24 month.
Background Correction:	Background correction Self–reversal.
Flame System:	All-titanium alloy burner. Acetylene flame is available and each is coded for automatic recognition.
Flame Gas:	Fully automated gas box with automatic (Programmable) control oxidant selection with automatic
	gas sequencing.
Flame Performance:	Sensitivity: Copper 0.03 μg/ml /1%.
Burner System:	The burner chamber should be made of high strength composite material.
Nebulizer-System:	High efficiency glass nebulizer.
Spray Chamber:	Spray Chamber made by PPS.
Gas Controls:	Fully computer controlled Total Flow Gas box with dual fuel and oxidant monitoring for constant
	and stable control of the fuel/oxidant ratio. Computer controlled automated flame ignition with
	automatic input of additional gases for organic solvents.

Labomed, Inc. • 2728 S. La Cienega Blvd. • Los Angeles, CA 90034 U.S.A. • Tel. (310) 202-0811 • Fax (310) 202-7286 • Email: spectro@labomed.com • Website: www.labomed.com