



**ZEEMAN - DOUBLE BEAM
ATOMIC ABSORPTION SPECTROPHOTOMETER**

**Analytical Flame / Hydride Vapour and
Graphite Furnace System**



*Zeeman High Frequency Polarization
Modulation (ZHFPM) Background Correction*

Model No.: SYS-910ZD

Technical Specification:

Model No.	SYS-910ZD
Main System:	
Light Source	Eight (8) Lamps turret with automatic alignment
Optics	Zeeman-Double Beam Optics, fully closed optical system
Quasi-double beam Optics	Eliminate drifts and enable direct work with no warm-up needed
Gratings	1800 lines /mm grating, Czerny-turner type optical path design
Background Correction	Zeeman High Frequency Polarization Modulation (ZHFBM) background correction method covers whole wavelength region from 190nm to 900nm
Wavelength Range	190nm ~ 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	High Sensitivity Photo-Multiplier Tube (PMT)
Burner Head	Full titanium combustion head,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% , >0.7 abs for 5 mg/L Cu solution
Hydride Generator:	
Measurement Method	Continuous Flow
Application	Can Detect low temperature elements like As, Bi, Hg, Pb, Sb, Se, Sn, Te
Sample Consumption	0 to 7 mL/min, variable
Reagent Consumption	0 to 2.5 mL/min, variable
Atomizer	Heated absorption cell (heated by Air-C ₂ H ₂ flame in standard system)
Carrier Gas	Ar pressure: 0.32 MPa, Ar consumption: 70 mL/min
Power Requirements	AC240 V, 50 Hz
Graphite Furnace Analytical System:	
Heating Mode	Vertical heating
Temperature Control Method	Vertical optical temperature monitoring graphite tube wall temperature
Temperature Range	Room Temperature (RT) to 3000 [±]
The Program	Automatic temperature control up to 20 order
Temperature Control	The furnace enriched up to 20 times
Characteristics Volume	0.5 × 10 ⁻¹² g (Cd)
Detection Limit	0.4 × 10 ⁻¹² g (Cd)
Precision	RSD≤3%
The Cooling Water	Can choose cooling water circulation system
Safety	The graphite tube damage, water flow, air pressure and other alarm temperature overheating protection
Autosampler:	
Sample Tray	70 sample cups, 6 reagent cup
Sample Volume	1-100μl
The Smallest Increment	0.1μl
The Volume Of Sample Repeatability Volume	better than 1% (at the time of 10mL-100mL)
Repeated Sampling Frequency	up to 99 Times
Cleaning Waste Container Size	500mL each
Power Supply	AC220V 50Hz, Lamp Current : Pulsed power supply
Weight/Size	80 Kg / Dimensions: (L)988mm *(W)412mm*(H)440mm
Interface	Computer and USB interface communication
Software	PC communication software to control AAS system, Data processing, Data analysis, Print etc.

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