

Atomic Absorption Spectrophotometer

AAS 2320D



EPC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

▶▶ Characteristics A

- Build-in computer data processing and LCD: adopting highly integrated micro digital circuit, which is stable and reliable with the functions of integral holding, peak height and area, auto zero adjusting, deuterium lamp and background, multi-linear and nonlinear curves fitting, various parameters and working curves displayed in screen and report printing, etc. It is equipped with interface for externally linking PC
- Good basic line stability: Double-beam system of optimized design can automatically compensate the light source drift and wavelength drift caused by the variation of temperature (with the function of the eliminating the affection of wavelength drift on the base line stability) and electronic circuit drift so as to reach a good basic line stability. The cathode lamp needs not be pre-heated for long time and sample can be analyzed immediately. It is the preferable instrument chosen by users to conduct analysis of multiple kinds of elements and fast analysis of samples.
- High precision of measurement: Gas path system is equipped with precision pressure stabilizing and current stabilizing devices to reach stable flame and low noise. Specially designed fine light beam passes through the flame to ensure a high precision analytical test and low characteristic concentration
- Optical path of high energy: A total reflection system is adopted to eliminate color difference in full range. By means of chemical conversion, a round light spot of the light source becomes a long light spot, which enters into the slit. Therefore the light flux of double beam is enhanced.
- Long-life and anti-corrosive atomization system: The burner is made of new type titanium alloys, anti-corrosive and fast thermal equilibrium. It meets the requirement of measurement sensitivity without water-cooling.
- Multi-functional analysis mode: for methods of flame absorption, flame emission, graphite furnace atomic absorption and hydride generation.
- Safe and reliable gas path system: Special devices of quick gas conversion and safety protection can be used to analyze air-acetylene flame as well as nitrous oxide-acetylene flame and extend the analytic elements to reach more than 60.
- Complete set of accessories: to be supplied with the instrument and ready for use after they are purchased.

►► Characteristics B

- Light-source system: Hollow cathode lamp power supply: with adjustable current Deuterium Lamp power supply: with fixed current
- Optical system: Double beam total reflection system, C-T type monochromatic Flashing wavelength: 250nm
- Flame atomization system: Inter-changeable titanium alloy burner of 10cm and 5cm slits. Gas path is equipped with pressure indication, high precision voltage stabilizing flow adjustment, fast conversion of air and nitrous oxide, gas supply cut off, power cut off, prevention of flashback and logic interlock protection devices.
- Signal processing: absorptions, concentration, emission and emission concentration; Standard curves: linear regression, curve fitting and multi-point standard calibration. Average value, standard deviation, relative standard deviation and correlation coefficient can be worked out. Standard curves, atomic absorption peak diagram, spectrum outline sketch, data as well as instrument parameters list and analytical reports can be displayed and printed out.

►► Technical Specifications

- Working spectral range: 190-900nm
- Wavelength accuracy: $\leq \pm 0.5\text{nm}$
- Wavelength repeatability: $\leq 0.3\text{nm}$ (single direction)
- Spectrum bandwidth: 0.2nm, 0.4nm, 0.7nm, 1.4nm, 2.4nm, 5.0nm
- Resolution: <40%
- Base line stability: $\pm 0.004\text{Abs}/30\text{min}$
- Characteristic concentration of copper: $\leq 0.04\mu\text{g}/\text{ml}/1\%$
- Detection limit of copper: $\leq 0.008\mu\text{g}/\text{ml}$
- Background calibration ability: Greater than 30 times.
- Standby Interface: RS 232
- Instrument power supply: 220V, 3A, 50Hz

►► Accessory

Main accessories supplied with the instrument: Several decades of accessories including air compressor, printer, one piece of (Zn or Cu) and K. Gas external pipe, acetylene cylinder pressure-reducing valve and water knockout gas filter.

►► **Optional accessories:**

- GA3202 HGA graphite furnace system: Used to conduct trace and ultra-trace analysis with an absolute sensitivity of 10-10-10-12 gram
- 5cm long-life titanium burner: The necessary accessory for nitrous oxide-acetylene flame analysis.

Hydride generator (Totally automatic): Making the characteristic concentration of As, Se, Sb, Bi, Pb, Sn, Te, Ge, In, Tl, Cd and Zn lower than ppb level with cold atomic mercury measurement method.
- Nitrous oxide reductor: The necessary accessory for nitrous oxide-acetylene flame analysis.
- Hollow cathode lamp: All specifications are available.
- Graphite tube: All specifications are available.
- Software with I/O port

Overall dimension & weight:

Shipping package dimension:

Main instrument: 1260-800-730mm 160kgs

Accessories: 880-600-1010mm 65kgs

▶▶ **Servicing, Validation, Trainings and Preventive Maintenance :**

- Servicing : We have team of service engineers who can attend to any make of instrument promptly @the most affordable cost.
- Trainings :We also take up preventive maintenance to reduce downtime of instrument's Trainings.
- AMC's/CMC : We offer user training both in-House and at customer sites on instrument principles, operations, troubleshooting.
- Validations : We have protocols for carrying out periodic Validations as per GLP/ GMP/USFDA norms.
- Instruments : We offer instruments/Renting Services Modules like pumps, detector etc. on Rent.



▶▶ **About Analytical Technologies**

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the globe. Analytical Technologies Limited is an ISO :9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

▶▶ **Our Products & Technologies**

						
UV/VIS Spectro 2080+ Double Beam	Infra FTIR	Optima Gas Chromatograph 3007	Optima Gas Chromatograph 2979 Plus	Flash Chromatograph	Atomic Absorption Spectrophotometer	Liquid Partical Counter
						
Optical Emission Spectrophotometer	DSC/TGA	Semi Auto Bio Chemistry Analyzer	HEMA 2062 Hematology Analyzer	Micro Plate Reader/Washer	URINOVA 2800 Urine Analyzer	Total Organic Carbon 3800
						
Fully Automated CLIA	NOVA-2100 Chemistry Analyzer	PCR/Gradient PCR/ RTPCR	TOC Analyzer	Laser Particle Size Analyzer	Ion Chromatograph	Water purification system

▶▶ Regulatory compliances



▶▶ Corporate Social Responsibility

Analytical Foundation is a Nonprofit Organization (NGO) found for the purpose of:



Analytical Foundation

1. Research & Innovation Scientist's awards / QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at info@analyticalfoundation.org

2. Improving quality of life by offering YOGA Training courses, Work shops / Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds, souls and body by means of Yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

▶▶ Reach us @



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