

# AAS FUSION D-3351



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

**Analytical Technologies Limited**

An ISO 9001 Certified Company

[www.analyticalgroup.net](http://www.analyticalgroup.net)

ATL presents a wide range of Quality Equipments required in day-to-day function of a Chemical Laboratory to Advanced Instruments used for Quality Assurance/Control and Research.

Our Single/Double Beam Atomic Absorption Spectrophotometer offers a State-of-the-art technology bundled with many features as a Complete economical package.

### ►► **Features :**

- Advance technology for intelligent stray light measure and correction.
- Original Optical Noise Reduction & Automatic measurement and stray light dynamic detected without any reference materials and increment cost. It improves instrument's optical performance, optical precision, Linear range and background correction effectively.
- Developed interval lamp control technology. It makes normal hallow cathode lamps self-absorption background correction possible without and influence to instrument's stability. Meanwhile it will prolonge working life of the lamp. Normal hallow cathode lamps are highly economical than special lamps.
- Original "Hg lamp-reagent" gradient measurement. we established an exact mathematical model to estimate "single/double beam linear and balance" specification. This technology provided a fast and economic method for instrument self testing system. It also established a brand new method to improve instrument's detection performance.
- Numerous technological innovation and renewal such as design aesthetics, element lamp multi-dimensional automatic adjustment system, gas path electronics functional and modular design, No-adjustment D-lamp holder and so on.

### ►► **STANDARD CONFIGURATION (Flame):**

AAS Main Unit(1no.), Flame Burner Titanium (100mm) (1no.), Burner mounting plate (1no), Glass Atomizer(1no), D<sub>2</sub> Lamp (1no), Copper (Cu) Hollow Cathode Lamp (1no), Acetylene regulator (1no), Tubing and ferrules (5nos) for Air & Acetylene, Aspiration tubes for atomizer (3nos), sealing washers (5nos), Waste tube (1no), Fuses (5nos), Data cable Rs232 (1no), Power Cable (1no), Control Software CD (1no), Hardware lock for control software (1no), Manual (Softcopy- 1no; Hardcopy- 1no)

### ►► **OPTIONS:**

- Graphite Furnace
- Auto-Sampler for Graphite Furnace
- Hydride Generator
- Wide range of Hollow-Cathode Lamps(Single/Multi Element) available on request.

**►► Specification :**

<b>Optical system</b>	
Instrument Type	Single/Double Beam Reflection Achromatic Optics System
Monochromater	Aberration corrected Czerny-Turner
Dispersion elements	Grating system 1200line/mm characterization area 40mm <sup>2</sup> Scintillation wavelength 250nm
Bandwidth	0.1,0.2,0.7,1,2 nm ( 6 step auto switching )
WL Range	190-900
WL Accuracy	±0.2
WL Repeatability	±0.1 nm max
Resolution	Min 3 lines(279.5 & 279.8 Peak and Valley)
HCL housing	6 lamp turret (1 for measurement, 4 in warm-up mode) (optional 8 lamp)
Gas control	Automatic control & optimization (flow/pressure)
Safety measures	Gas Leak check, prevention of gas release when flame dies out, prevention of flashback through pressure monitoring.
<b>Photometric Properties</b>	
Measurement	A,T,C
Photometric Range	0-125%, -0.1-3.00A
Static Baseline Drift	(Cu) ±0.003A/30min
Dynamic Baseline Drift	(Cu) ±0.006A/30min
Background Correction	High speed self-reversal (BGC-SR) method; High speed D2 lamp method (BGC-D2)
<b>Flame</b>	
Characteristic Concentration	(Cu) 0.025 µg/ml max
Detection limit	(Cu) 0.00 µg/ml max
Precision	RSD = 0.5%
Burner	Water cooled Titanium
Nebulizer	high-efficient Nebulizer
Spray chamber	anticorrosion material
Safety measures	Flame fuel gas, power assisted gas abnormal pressure protection
<b>Data Process</b>	
Test manner	Flame, flame emission
Concentration	Standard curve, standard addition, interpolation
Times of repetitive	Measurement 1-30 times, Average Value of A&C
Report Print	parameters, data result
<b>Other</b>	
Dimension & Weight (Flame)	700 x 420 x 550 mm; 103 Kg(approx.)
Power (Main unit with Flame)	AC220V ±10%, 50Hz without sharp fluctuations
Working Temperature range	10° ~ 30
Working Humidity range	40% ~ 85%

## 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](mailto:Info@analyticalfoundation.org)

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

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

## Reach us @



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