

# TU - 3700

## UV-Vis Double Beam Spectrophotometer



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

**Analytical Technologies Limited**

An ISO 9001 Certified Company

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

## INSTRUMENT CHARACTERISTICS

### Convenient Operation, Flexible Expansion :

- With its scientifically designed workflow, you can start your measurement work with just three clicks.
- The instrument's system platform allows for expandable applications, such as online teaching, intelligent assessment, and water quality testing.
- Customizable methods are available for users, with support for storage devices and network-based migration.
- Data can be exported to a USB drive, and the storage space is expandable

### Stable Performance, Effient Operation

- With the ability to complete a spectrum scan in just 2 seconds,our product boasts a scanning speed of 30000nm/min.
- It can withstand high concentrations of samples with an absorbance range of -4 to +4 Abs, ensuring accurate measurements.
- Featuring a minimum spectral bandwidth of 0.2nm, our product effortlessly handles the detection of complex samples.
- The instrument's specifications have been tested and certified by an authoritative metrology institute, guaranteeing Class I accuracy.
- Equipped with an Ethernet interface, our product ensures stable and rapid communication

### Aesthetic design and freind practicality

- Mirror-like Exterior: The product boasts a sleek and streamlined design, with sharp and smooth lines that exude elegance.
- 9.7-Inch Capacitive Touchscreen: Equipped with a large, high-resolution display, our product offers a seamless and responsive user experience.
- Acid, Alkali and Solvent-Resistant Finish: The glossy finish of our product is resistant to corrosion from acids,alkalis and organic solvents,ensuring its durability and longevity.
- Spill-Proof Sample Chamber: The sample chamber is designed to prevent accidental spills, ensuring that no liquids are leaked or wasted during usage.

## INSTRUMENT CHARACTERISTICS

Model	5-grade changeable slit	Fixed slit	Color touch screen
TU 3700AS	√		√
TU 3700A		√	√
TU 3700S	√		
TU 3700B		√	

### Performance indicator :

Maximum allowable error of wavelength	±0.1nm ( D2@656.1nm ) ± 0.3 nm full wavelength range
Wavelength repeatability	≤0.1nm
Wavelength transmission speed	Max. wavelength scanning speed 30000 nm/min
Spectral bandwidth	TU3700S, TU3700AS: 0.2, 0.5, 1.0, 2.0, 5.0 nm
Stray light	< 0.01T% (220nm); ≤ 0.05T% (360nm)
Photometric range	-4.0-4.0Abs
Maximum allowable error of transmittance	±0.3%T (0-100%T) ±0.002Abs(0.5Abs) ±0.004Abs (1.0Abs)
Transmittance repeatability	<0.1%T (0-100) %T <0.0002Abs(0.5Abs) <0.0002Abs(1Abs)
Noise	≤0.05%T RMS: within 0.00005Abs (700nm)
Baseline flatness	±0.0005Abs
Drift	≤ 0.1% T (500nm, preheating for 1h, test for 1h) ±0.0004Abs/h (500nm)

## Functional Indicators

Optical system	TU3700 series double beam
Screen	TU3700A, TU3700AS: 9.7 inch color touch screen; TU3700B, TU3700S: no screen;
Light source	Tungsten halogen lamp and deuterium lamp
Detector	Silicon photodiode
Optical grating	Plazed holographic grating
Data output	Data can be exported by USB flash disk
Printing	Supports all printer models
Online mode	Network port communication, supports wifi
Overall dimensions	Dimensions of TU3700A and TU3700AS spectrophotometers: width 512.1,height 274,depth 572.1 Dimensions of TU3700B and TU3700S spectrophotometers: width 512.1,height 249.7,depth 572.1 Outer package size: width 715, height 575, depth 715 Note: Unit: mm
Net Weight	28 kg
Wavelength range	190-1100 nm
Power	150W

Optional accessory	Functional description
Standard optical path sample cell	A 10mm * 10mm conventional cuvette can be selected for use You can also choose to use a micro cuvette with an optical path of 10mm to reduce the volume of the measurement sample used
Adjustable optical path fixed length sample cell	Colorimetric cells with optical paths of 5, 10, 20, 30, 40, 50 and 100 mm can be accommodated through insertion
Adjustable optical path quintuplet long sample cell	Colorimetric cells with optical paths of 5, 10, 20, 30, 40, 50 and 100 mm can be accommodated through insertion The sample cell can be freely switched from No. 1 to No. 5 for convenient measurement
Octuple cell	Optional 10mm * 10mm conventional cuvette for use The sample cell can be freely switched from No. 1 to No. 8 for convenient measurement

## HPLC Servicing, Validation, Trainings and Preventive Maintenance :

**HPLC Servicing** :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

**Trainings** :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

**AMC's/CMC** :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

**Validations** :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

**Instruments** :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 global. 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



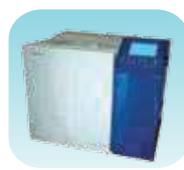
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Spectro 2080+  
Double Beam



Infra FTIR



Optima Gas  
Chromatograph  
3007



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Chromatograph



Atomic Absorption  
Spectrophotometer



Liquid Particle  
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](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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