

# UV- TS 2080

Spectrophotometer Double Beam



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**Analytical Technologies Limited**

An ISO 9001 Certified Company

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The UV-TS 2080 spectrophotometer double beam applies a new optical bench, with 5-speed adjustable bandwidth ARM chip control and data processing, 8-inch color touch-screen which displays menu and spectral curve and can analyze spectrum test data. It's quite easy for user and computer interaction. The instrument can perform following operations, including photometry, automatic scanning spectral measurement, quantitative analysis, dynamic analysis, and multi-wavelength measurement. Compliance with all Pharmacopoeia requirements

## ►► Features:

- New optical platform, enabling the host machine with excellent optical properties, metering performance, low stray light and noise, high metering accuracy and stability. With Blank correction real time blank correction facility available
- Unique system of deuterium and tungsten lamp installation, facilitating the light source to automatically switch to the best position, and allowing users to operate the instrument, replace the light source and maintain the instrument more conveniently, accurately and safely. Network access via wireless connectivity. Data transferred to PC via Network
- Sophisticated hardware and software design, empowering the instrument with powerful spectral data processing and storage capabilities, and performing following functions, including automatic scanning of measured spectrum, multi-wavelength (1-3  $\lambda$ ) measurement, kinetic measurement, Quantitative analysis, time course measurement, fixed wavelength measurement, validation, Daily maintenance 1-3 curve fitting, 1-4 derivative spectra, spectra printing and storage and data analysis. Compartments: optics compartments sealed
- 8-inch color touch-screen, with a good user-machine interface, easy-to-operate.
- Standard functions include IQ Accessories, Start button, Analog output
- USB communication port.
- Built in validation program, diagnostic and security function

## ►► Standard Accessories

Operation manual	1
Quartz cuvette 1cm	2pcs
Power cable	1
Fuse	2pcs

## ►► Optional Accessories

- UV WIN8 Spectrum data processing software

## ►► Software : UV Spectra TM control Software

Photometric; spectrum; Quantitation; Kinetics, Time scan, DNA and Protein Quantitation with stand-alone PC mode. Provision to collect the resulting excel file, ASCII file, PDF file and image file. Built in Validation program, diagnostic and security functions. Additionally Multi-Component measurement available stand-alone mode Upgradation: The instrument shall be upgradable with integrating sphere attachment in future to measure Reflectance

## ►► Specifications

	TS 2080
Photometry	Double Beam
Monochromator Type	Czerny-Turner
Focal Length	200mm
Holographic Grating	1200 lines/mm Czerny-Turner mounting with high energy and high quality monochromator light
Detector	Silicon Photodiodes
Spectrum Bandwidth	1nm (over entire wavelength range)
Wavelength Setting and Display	0.1 nm
Wavelength Range	190-1100nm
Wavelength Accuracy	±0.1nm (at 656.1 nm)D2 spectral line
Wavelength Reproducibility	±0.1nm
Scanning Speed	≥3000 nm/min to 2nm/min, 29000 nm/min survey scanning
Stray Light	<0.02%T( at 220nm NaI, 350nm NaNo <sub>2</sub> ), 0.5% (198 nm KCl)
Photometric Range	Absorbance -4 to 4 Abs Transmittance 0% To 400%
Wavelength Repeatability	±0.1nm
Photometric Accuracy	±0.3%T, ±0.0015 Abs (0-0.5A), ±0.002 Abs (0.5-1A)
Photometric Repeatability	≤0.15%T, <±0.0002Abs (0-0.5A), 0.001Abs (0.5-1A)
Baseline flatness	≤±0.0005 Abs(190-1100nm)
Baseline Stability	<0.0003 Abs/Hr (700 nm, one hour after light source turned ON)
Baseline deviation absorbance	±0.0005
Slew speed	≥29000 nm/min
Noise	0.000016 A (0 Abs, 500nm)
Drifting	≤0.0003 Abs/Hr (700 nm, one hour after light source turned ON)
Port	4 USB port for PC and Printer Connectivity, data storage and transfer through USB Pen drive
Light Source	High intensity Tungsten-Halogen and Deuterium lamp with automatic changeover with 3year warranty
Power	Ac220V±22V 50Hz±1Hz, 200W
Packaging Size	740mm x 630mm x 450mm, 35kg
System dimension	59cm x 46cm x 25cm
Scan Ordinate Modes	Absorbance, % transmittance, % Reflectance, Kinetics, Time Scan, Data Processing etc.
Resolution	0.2nm
Data Intervals	10, 5, 2, 1.0, 0.5, 0.2, 0.1 nm
Sample Compartment	Adequate dimension with facility to interchange holder
Maintenance	Baseline correction, Lamp usage time display and reset, Security setting etc.
Room Temperature	15-40°C
Output	Flash drive as well as PC connection

## Regulatory compliances



## Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



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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 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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