

TS 2090Plus

Spectrophotometer Double Beam



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

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

The TS 2090Plus 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.

►► Features:

- New optical platform, enabling the host machine with excellent optical properties, metering performance, low stray light and noise, high metering accuracy and stability.
- 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.
- 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 λ) 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.
- 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.

►► Standard Accessories

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

►► Optional Accessories

- UV WIN8 Spectrum data processing software

►► Specifications

TS 2090Plus	
Photometry	Double Beam
Monochromator Type	Czerny-Turner
Focal Length	200mm
Grating	1600 lines/mm
Detector	Dual Silicon Photodiodes
Spectrum Bandwidth	0.5nm, 1nm, 2nm, 4nm, 5nm
Wavelength Setting	8-inch color touch-screen
Wavelength Display	0.1nm
Wavelength Range	190-1100nm
Wavelength Accuracy	±0.1nm (at 656.1 nm)
Wavelength Reproducibility	±0.1nm
Scanning Speed	Fast-Medium-Slow, upto 10000 nm/min
Stray Light	≤0.02%T(at 220nm NaI, 340nm NaNo ₂), 1% (198 nm KCl)
Photometric Range	Absorbance -3 to 3 Abs Transmittance 0% To 300%
Photometric Accuracy	±0.3%T, ±0.0015 Abs (0-0.5A), ±0.0025 Abs (0.5-1A)
Photometric Reproducibility	≤0.15%T 0.0005Abs (0-0.5A) 0.0002Abs (0.5-1A)
Baseline flatness	≤±0.0001 A(190-1100nm)
Baseline Stability	±0.0003 Abs
Baseline deviation absorbance	±0.0005
Baseline Correction	Automatic
Slew speed	24000 nm/min
Noise	0.000016 A (0 Abs, 500nm)
Drifting	≤0.0003 Abs/h (250nm and 500nm after 2h warm up)
COM Port	USB
Light Source	Hamamatsu D2 lamp, Osram halogen tungsten
lampPower	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, Kubelka-Munk, log (1/R), log (Abs), Abs*Factor, Intensity
Resolution	0.2nm
Data Intervals	10, 5, 2, 1.0, 0.5, 0.2, 0.1 nm
Display Range	-0.3 to 4.0A
Solutions (EP/BP/TGA)	±0.010A (60 mg/L K ₂ Cr ₂ O ₇)
Room Temperature	15-37°C
Humidity	80%

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



UV/VIS
Spectro 2080+
Double Beam



Infra FTIR



Optima Gas
Chromatograph
3007



Optima Gas
Chromatograph
2979 Plus



Flash
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

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 @



HPLC Solutions MultipleLabs Analytical Bio-Med Analytical Distributors Analytical Foundation (Trust)

Corporate & Regd. Office:
Analytical House, # E67 & E68,
Ravi Park, Vasna Road, Baroda,
Gujarat 390 015. INDIA

T: +91 265 2253620
+91 265 2252839
+91 265 2252370
F: +91 265 2254395

E: info@hplctechnologies.com
info@multiplelabs.com
info@analyticalgroup.net
info@analyticalbiomed.com

W. www.analycalgroup.net
www.hplctechnologies.com
www.multiplelabs.com
www.ais-india.com

Sales & Support Offices:
across the country :
Distributors & Channel
partners World Wide