





# UV-Vis Spectrophotometer with PMT



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

# Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net



### **Product Description:**

the UV-Vis spectrophotometer is designed with brand new light path & sensitive Photomultiplier receiver, which can be widely used in the research and production of organic chemistry, biochemistry, medical testing, food testing, environmental protection, water testing industry, etc. The latest ARM system and long optical system ensure high accuracy and good stability of the instrument. They are the best choice of high quality spectrophotometer.

#### **Feature**

- Imported Deuterium lamp & photomultiplier tube makes the instrument more accurate, stable & high-efficient.
- the in-house massive memory is capable of saving up to 1024M for test data & working curves. It supports USB storage.

The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.

- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
- Socket type deuterium lamp and tungsten lamp can make lamps switching without optics debugging and easier to be replaced.
- Data processing: software based with integrating & derivative plot facility (minimum up to 2nd order derivative)
- Large room for samples can hold cuvettes of various specifications.
- Auto 8-cell holder is optional.
- 21 CFR Management software is optional.

## **>>** Specifications:

Model	РМТ- 3080F	PMT- 3080SF	РМТ- 3080V	PMT- 3090F	PMT- 3090SF	PMT- 3090V
Picture						
Type of sample cell	quartz					
Grating	Holographic grating, 1200 lines/mm					
Optical System	Double beam sealed optics					
Wavelength Range	185-1100nm					
Spectral Bandwidth	2nm	1nm	0.1/0.2/0.5/1/2/5 with 0.1 nm increment	2nm	1nm	0.1/0.2/0.5/1/2/5 with 0.1 nm increment
Wavelength Accuracy	±0.1nm (656.1nm D2)					
Wavelength Repeatability	±0.05nm					
Wavelength Reproducibility	<0.05nm or better					
Photometric Accuracy	±0.002Abs at 0.5 Abs, ±0.003 at 1 Abs, ±0.006 at 2 Abs, ±0.3%T					
Photometric Reproducibility	±0.001 Abs (0.5 Abs), ±0.0001 Abs (1 Abs) ±0.002 Abs (2 Abs) ±0.1%T					
Photometric Range	-3 + 3Abs Transmittance %, Reflectance 0-300%					
Photomatric Mode	Absorbance, Transmittance %, Reflectance, energy					





Stray Light	MAX 1.0%, At 200 nm (KCI): Max 0.005%, At 220 nm Nal ASTM method): Max:0.0025% At 340nm/370nm (NaNO2)							
Noise	±0.00005Abs							
Stability	±0.0002A/h@500nm ±0.0002A/h@700 nm							
Baseline correction	Automatic		Automatic	±0.001A				
Baseline flatness	±0.0003 Abs							
Baseline Drift	0.0002 Abs/h							
Work mode	T, A, C, E							
Scanning speed	Fast, Mid, Slow 4000nm/min							
Resolution	0.1nm							
Wavelength Slew Rate	12000 nm/min							
Wavelength setting	Auto							
Display	7" color LC	)	10.1" color touch LCD with Up to 4 Decimal					
Light Source	Imported Deuterium & Tungsten lamp (Automatic change)							
Detector	Imported Photomultiplier tube							
Output	USB/RS232							
Power	AC 220V/50Hz or AC 110V/60Hz							
Ambient temperature	10-45°C							
Humidity range	10-90%							
Dimension	590 x 475 x 250mm	760*560*280mm	590 x 475 x 250mm	760*560*280mm				
Net Weight	20kg	28kg	20kg	28kg				
Shipping Size	770*630*340mm	950*750*420mm	770*630*340mm	950*750*420mm				
Gross Weight	27kg	36kg	27kg	36kg				



# UV SPECTRA <sup>™</sup> Control Software

5.

The Analytical windows based PC application software UV/Vis analyst takes the best features of the stand alone version plus more powerful data processing. expanded data collection and storage capability. It comes standard with Analytical PC models and is optional to stand alone models.

#### The PC application software offers:

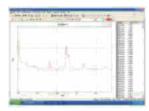
- Photometric Mode 1.
- 2 Quantitative tast (standard curve)
- 3 Wavelength Scan
- 4. **Kinetics**

Multi-Wavelength 6. System Utility 7

DNA/Protein

Use up to 20 standards to establish standard curve. Four methods for fitting a curve: 1. Linear fit 2. Linear through zero 3. Square fit 4. Cubic fit

#### Quantiative tast (standard curve)



wavelength scan

#### Automatically record peaks and valleys. The quantity of channels is unlimited. You can simultaneously store as many as desired. Post run manipulation and processing includes:

- 1. Re-Scaling axes, curve
- 2. 1st to 4th derivative
- 3. Smoothing, combination, zooming, overlap.

# **Optional Accessories**



4-Cell Holder For 10mm Swu.Cuvette



8 - Position Auto Cell Changer



4-Cell Holder For 50mm Swu.Cuvette



(single Cell)



Solid Sample Holder



4-Cell Holder For 100mm Swu.Cuvette



10mm Water jacketed 4 Cell Holder



Square Cuvettes Glass

04

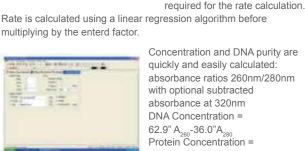




Water jacketed

Cell Holder





The kinetic mode may be used for time course scanning or reaction rate calculations. Abs vs, Time graphs are

displayed on the screen in real time.

Waiting time measurament time and

Post run manipulation includes re scaling, curve tracking and

selection of the part of the curve

intervals may be entered.

Other wavelengths and factors may be entered.

Up to 20 wavelengths can be setected and multiple samples can be measured. (Auto cell changer is required to run multiple samples automatically)

Multi-Wavelength



Micro Cell Holder



Test Tube Holder

Halogen Lamp 6V10w

12v20w









12V2UVV HALUGEN LAMP 6V10W, 12V20W

Constant Lemperature Sipper System

Constant Temperature System

Sipper System

Thermal Printer

Deuterium Lamp

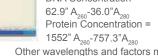


KINETICS (ABS VS. TIME)

multiplying by the enterd factor.

**DNA / PROTEIN** 

# absorbance at 320nm DNA Concentration =





# 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 Maintenace 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, troubleshooting. 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, Manufaturing, 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**

Infra FTIR



UV/VIS Spectro 2080+ Double Beam



**Optical Emission** Spectrophotometer



Fully Automated

CLIA

NOVA-2100

Chemistry Analyzer

DSC/TGA





PCR/Gradient PCR/

RTPCR

Semi Auto Bio

Optima Gas

Chromatograph

3007







Optima Gas Chromatograph 2979 Plus



HEMA 2062



TOC

Analyzer



Flash

Chromatograph

Micro Plate

Reader/Washer



Atomic Absorption

Spectrophotometer

URINOVA 2800

Urine Analyzer

Ion Chromatograph





Liquid Partical Counter



Total Organic Carbon 3800





Water purification system



Hematology Analyzer

Laser Particle Size Analyzer

# Regulatory compliances



## **Corporate Social Responsibility**

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



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 personallities 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 DETOXIFY human minds, souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.





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