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UV-3092

UV/VIS Spectrophotometer

True Double beam UV Visible Spectrophotometer
sealed & quartz coated with Czerny-Turner monochromator

FEATURES & FUNCTIONS

- Fully PC Controlled True Double beam UV Visible Spectrophotometer
- Photomultiplier tube detection provides exceptional sensitivity.
- Stray light ≤ 0.01 %T (220nm Nal, 340nm NaNO2)
- Photometric Range -4.0 - 4.0Abs
- User selectable spectral bandwidth between 0.1-5nm.
- User friendly design allows easy light source replacement and routine maintenance.
- Sample compartment design enables use of a wide range of optional accessories.
- UV-WIN software offers many operational and data processing capabilities and is supplied as standard.

OPTICAL SYSTEM & COMPONENTS

The UV3092 features an advanced continuous variable bandwidth feature making it the instrument of choice for applications with a demand for precise and accurate control of wavelength resolution. This feature allows the user to specify exactly what bandpass is required in the range of 0.1-5nm.

The double beam optical design combined with a high specification holographic grating gives excellent wavelength separation allowing the user to measure close adjacent wavelengths with excellent sensitivity.

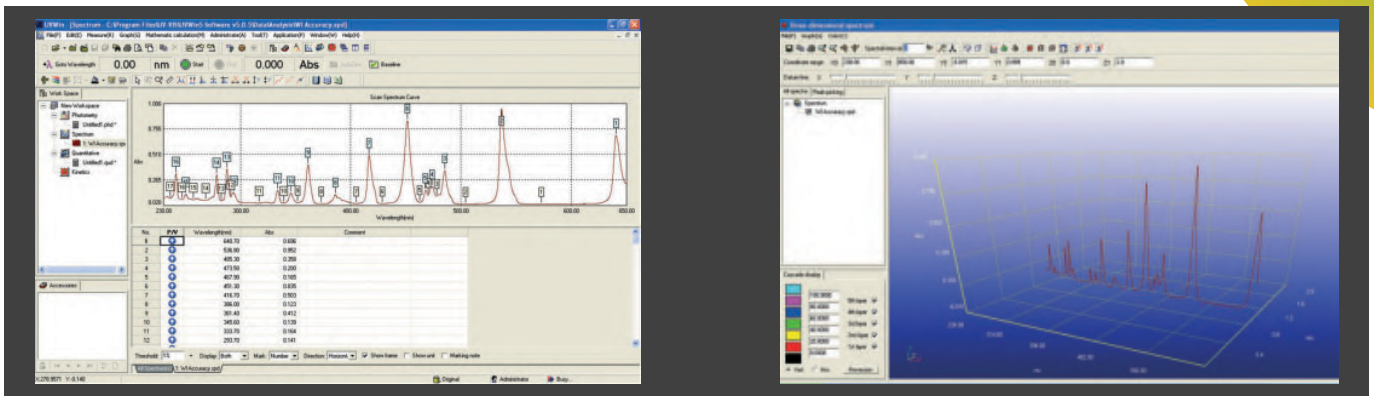
The modular design of the sample compartment allows for ease of use of a wide range of optional accessories ensuring accurate analysis of various sample types including liquids, thin films and powders.

The user friendly design of the lamp compartment allows easy replacement and simplified routine maintenance of the Deuterium and Tungsten lamps.

Full instrument control, data acquisition and processing of measurement data. This is made possible by means of the UV-Win software.

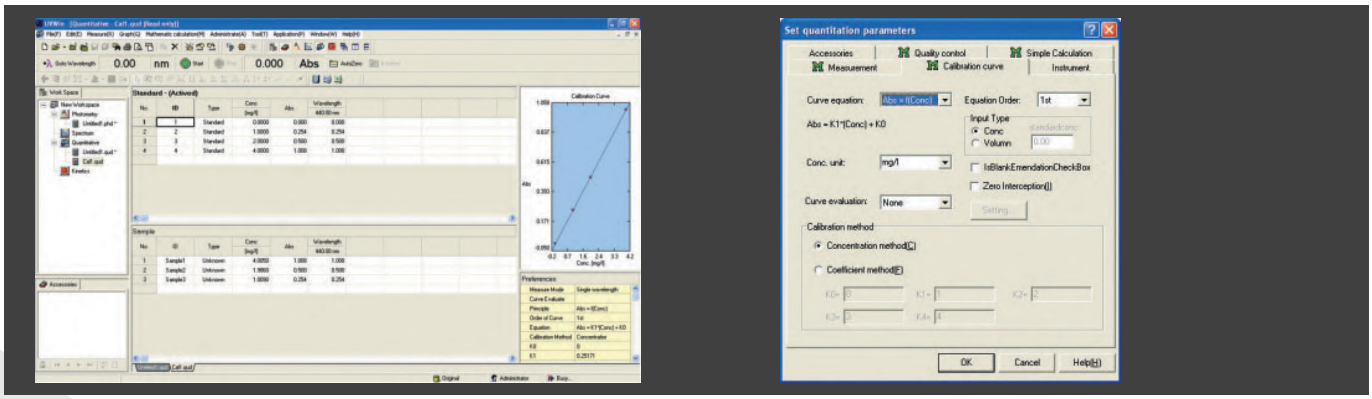
SPECTRUM WORKSPACE

- Use the spectrum workspace to scan across a user-defined spectral range measuring in either absorbance or transmission.
- Use the “Peak Pick” tool to determine the wave-length at which peaks and valleys have occurred whilst also being able to determine their amplitude.



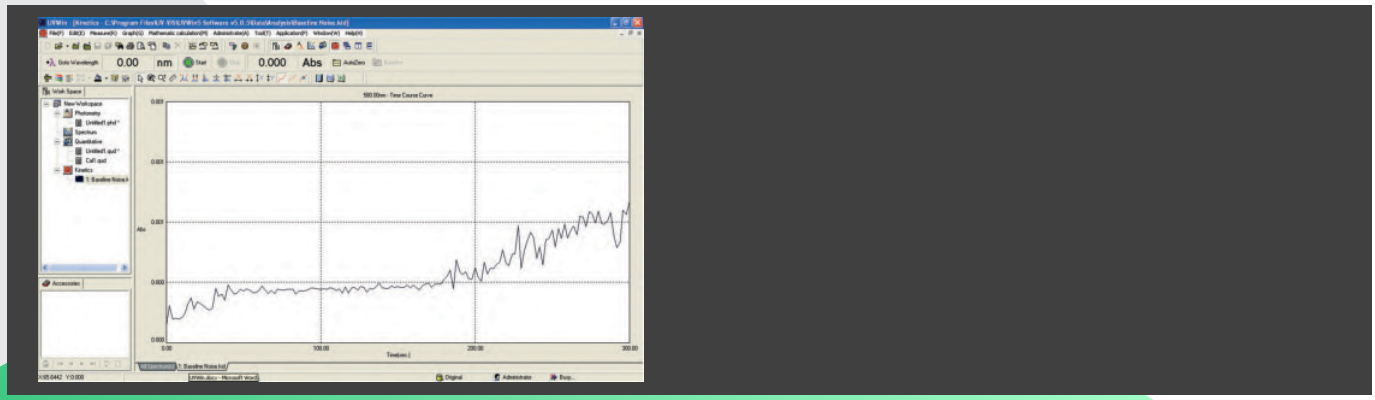
QUANTITATIVE WORKSPACE

- Use the Quantitative workspace to determine the concentration of unknown samples.
- Create a calibration curve using a series of standard solution or by directly entering the coefficients for the calibration curve equation.



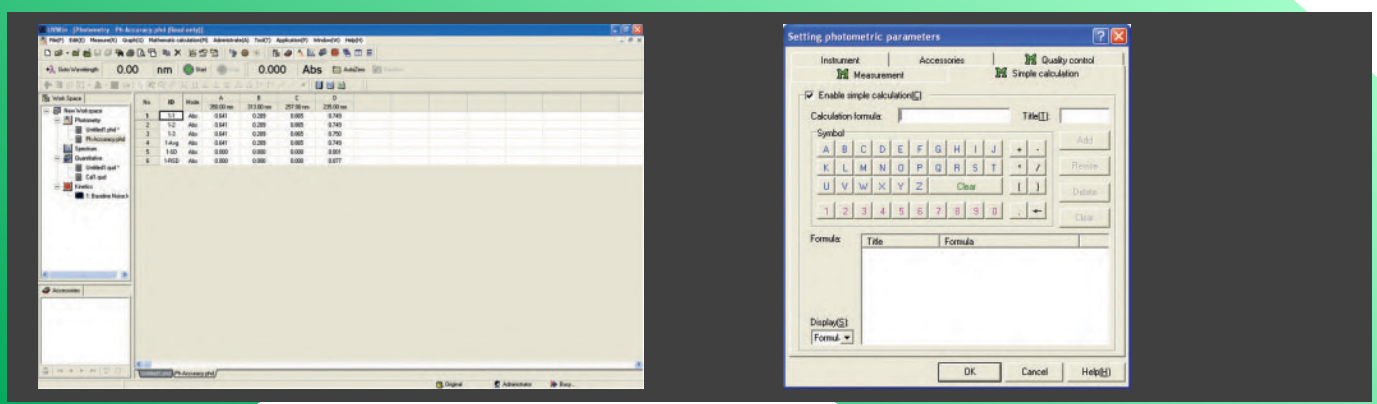
KINETIC WORKSPACE

- Monitor the change of Absorbance or Transmission as a function of time for Enzyme type reactions.
- Use in conjunction with a Flowcell for sample introduction or Peltier water circulator for temperature control.



PHOTOMETRIC WORKSPACE

- Perform a series of sequential fixed wavelength measurements in either Absorbance or Transmission.
- Automate sample measurements by configuring the instrument cell changer.

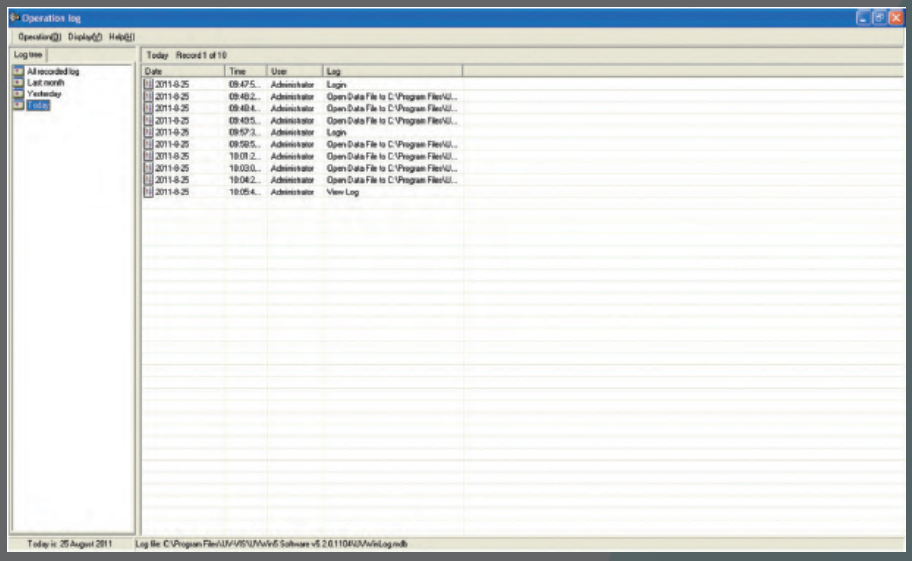


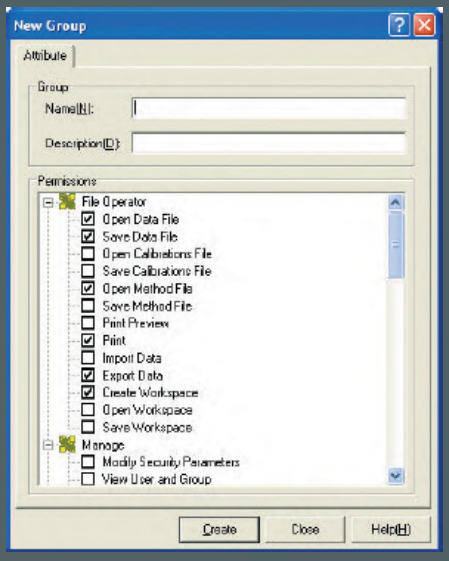
UVWin GLP

UVWin GLP offers all of the features and functionality of UVWin whilst also offering extensive Administrative capabilities along with a detailed Audit trail.

ADMINISTRATION

- Administrative settings can be made where Analysts may require conformity to GLP/GMP/GRP
- Create User Groups specifying exactly what actions they are able to perform
- Add New Users to custom User Groups to determine their private settings
- Automatically log software activity in an Audit Trail
- Use Password control to ensure Users are logged in for instrument usage





CERTIFICATION

UVWin GLP has been evaluated and tested by a third party software validation specialist. As a result it was found that UVWin GLP offers all of the features and functions required for use in compliance with the guidance specified in:

- 21CFR Part 11 - Electronic Records; Electronic Signatures
- Guidance for Industry Part 11, Electronic Records; Electronic Signatures - Scope & Application, August 2003

Integrating Sphere Accessory (60 / 100 mm)

Solid: Glass, film, textile, paper, solar panel, etc

Powder: Cosmetics, drugs, dyes, etc

Liquid: Milk, tea, sea water, sewage, biological extracts

- Measurement Methods: Diffuse reflectance, total reflectance, diffuse transmission & total transmission
- Sample Placement: Front wall, black wall and Center
- Software: Glasses application software and textile application software
- The coating material has high reflectance in UV-VIS spectrum
- Larger internal space, you can install optional test accessories, such as small sample test accessory, glasses test accessory, fluorescence test accessory, movable sample test accessories
- Integrating sphere can be off-host and independent utility with external light source

OPTIONAL ACCESSORIES

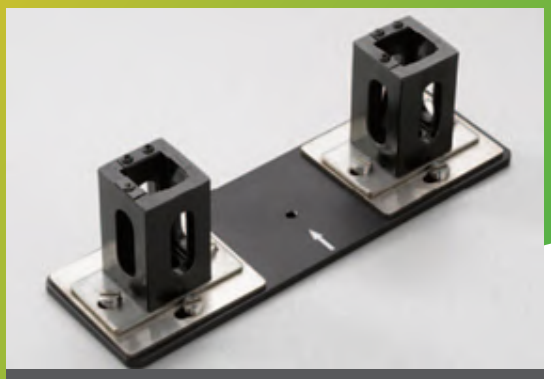
Specular Reflection

Sipper Pump

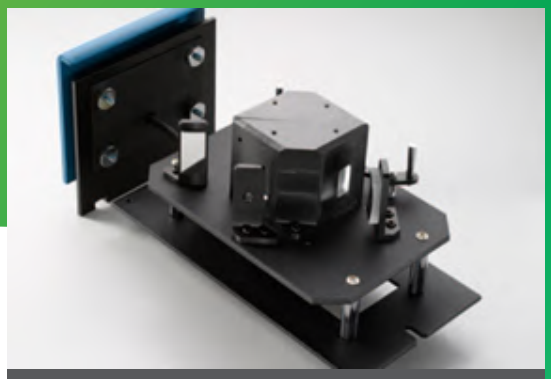
Peltier

Automatic 8 Cell Changer

Long path length holder



Micro Cell Holder



Integrating Sphere Accessory 60/100 mm

SPECIFICATIONS UV3092

Optical System	True Double beam UV Visible Spectrophotometer sealed & quartz coated with Czerny-Turner monochromator
Diffraction Grating	1200 lines/nm
Wavelength Range	190 - 900nm
Wavelength Accuracy	± 0.1nm at 656.1nm & ± 0.3nm for entire range
Wavelength Scan Rate	4000 to 2nm/min and 6 nm/min with interval of 0.05 nm by advance software
Wavelength Slew Rate	14000 nm/min
Wavelength Resolution	0.01 nm
Spectral Bandwidth	Continuous slit 0.1 - 5.0nm with 0.1nm interval
Resolution	0.1 nm
Photometric Mode	Transmittance, Absorbance, Energy Concentration, All Using UVWin Software
Photometric Range	- 4.0 - 4.0Abs
Photometric Accuracy	0.002A (0 - 0.5A), 0.004A (0.5 - 1.0A), 0.3%T (0 -100%T)
Wavelength Repeatability	± 0.05nm
Photometric Reproducibility	0.001A (0 - 0.5A)
Photometric Noise	<0.00005A at 500nm (RMS) slit 1nm.
Baseline Flatness	± 0.0005 A / h at 500nm, after warm up
Baseline Stability	0.0005A/h (500nm, 0Abs), 1hr warm-up
Stray light	⩽ 0.01 %T (220nm NaI, 340nm $NaNO_2$)
Detector	Photo multiplier tube
Light Source	Tungsten Halogen and Deuterium arc lamps
PC Interface	RS232/USB
Optional Accessory	Specular Reflection Accessory, Integrating Sphere 60mm / 100mm Automatic 8 Cell Changer, long path cell holder, Peltier Solid Sample holder etc.
Software Support	UV-Win Software to control complete UV-VIS Spectrophotometer is Latest Windows based, also offering extensive administrative capabilities along with a detailed audit trail & GLP/GMP/GRP Compliance. Built in Performance Verification feature enabling it to comply with various methodologies like ASTM, IS & ISO. for interpretation of measurement results, it is offering Four key workspaces -- Spectral Analysis, Quantitative Analysis, Kinetic Analysis & Photometric Analysis, this features allows the user for complete spectrophotometer control, Data storage, Spectral overlay in 3D Display mode, create customized report templates, Built in User group creation with Audit trail, log history and Password protection. All UV- VIS Data processing parameters and mathematical tools for interpretation like Point pick, Peak/Valley detection, Abs- %T conversion, Normalization, Exponential Convention, Auto calculation of% SD,% RSD and Average, Quantitative workspace to determine the concentration of unknown sample, create a calibration curve using single and multi point calibration, 1st to 4th Order co-relation and derivative spectroscopy, Export measurement data to Word, Excel, CSV and ASCII format.
Power Supply	Switchable 120 - 230VAC 50 - 60Hz
Weight	43 Kg
Dimensions	545mm (W), 580mm (D), 270mm (H)

LABINDIA ANALYTICAL
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www.labindia-analytical.com / For Enquiries: sales.mfd@labindia.com

Labindia Analytical Instruments Pvt. Ltd.

HEAD OFFICE:
Thane: 201, Nand Chambers, LBS Marg, Near Vandana Cinema, Thane (W) - 400 602. **Tel.:** +91-22-2598 6000 / 2598 6110 **E-mail:** sales.mfd@labindia.com

REGIONAL OFFICES:
Delhi: Tel.: +91-11-4330 6001 / 10 **Chennai: Tel.:** +91-44-2434 7008 / 2432 0352 **Kolkatta: Tel.:** +91-33-2466 3362

BRANCH OFFICES:
Bangalore: Tel.: +91 80 4565 6200 **Lucknow: Tel.:** +91-522-2346 535 / 2346 496 **Hyderabad: Tel.:** 040 4444 3530
Vadodara: Tel.: +91-265-2986 005 / 2986 006 **Pune: Tel.:** +91-20-2545 3386 **Chandigarh: Tel.:** +91-172-4090 001-07 / 4090 009

FACTORY 1: Plot No. EL-72, Electronic Zone, TTC Industrial Area, Thane Belapur Road, Navi Mumbai - 400 705.**Tel.:** +91-22-6107 6666

FACTORY 2: Plot No. W-401, TTC, MIDC Industrial Area, Rabale, Thane-Belapur Road, Navi Mumbai 400 701. **Tel.:** +91-22-6107 6555

APPLICATION & TRAINING CENTRE: R-909, TTC Industrial Area, Thane Belapur Road, Rabale, Navi Mumbai - 400 701. **Tel.:** +91-22-6107 6555

Striving to become the best individuals, we endeavour to foster the best team. Performing sensibly, we try to achieve the best efficiency. Working innovatively, we seek to make the best products. Listening patiently, we excel to offer the best service. So, no matter what you needs are, come to us, **GET THE BEST**