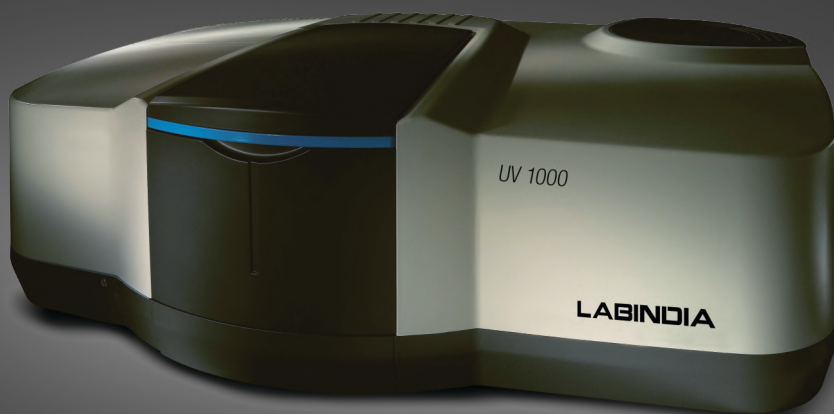


UV-VIS Spectrophotometer with Double Beam  
Double Monochromator

## UV1000



The UV1000 Spectrophotometer incorporates dual monochromator technology making it well suited to even the most demanding of applications in all areas of UV-Visible Spectroscopy including :

- Pharmaceutical
- Material Science
- Metrological Verification
- Biotechnology
- Food Safety
- Research

Wireless instrument control and data acquisition can be achieved from a Tablet PC using Wi-Fi technology allowing the analyst to move freely around the laboratory whilst also keeping track of sample measurements.

The optical design of UV1000 offer extremely low stray light characteristics (0.0001%T NaI,220 nm) which allows for an extensive photometric range (-6.0 – 6.0Abs). Measurements at deep ultra-violet wavelengths can also be achieved with use of Nitrogen purged optics.

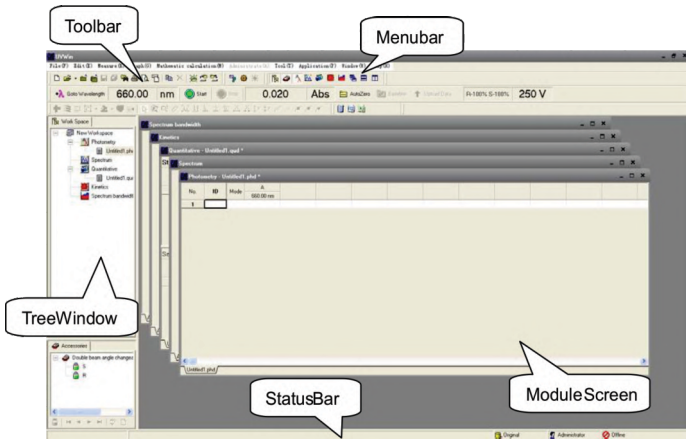
The instrument can be optically configured to suit the needs of the sample by means of a continually adjustable slit for precise control of spectral resolution and beam size adjustment by means of an attenuating wheel.

Precise wavelength accuracy is ensured by the integrated Mercury Emissions Lamp used for automatic correction of spectral deviation.

A whole host of specialised accessories are available to suit the specific requirement of the sample, these include

- Both 60mm and 150mm Integrating Sphere for Diffuse reflectance measurements.
- Absolute, and Specular reflectance measurements accessories.
- Polarizing Optics.
- Thermostatic Cell Holders for temperature control.
- Various long and short path length cell holders.
- Automated cell changers for both sample and Reference beams
- Tablet dissolution accessory for pharmaceutical quality control.

## SOFTWARE FEATURES



## Initialization



## UVWin Main User Interface

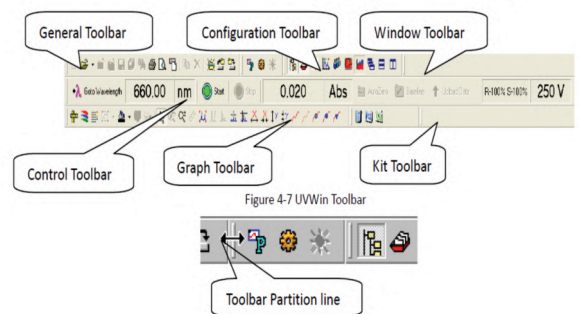
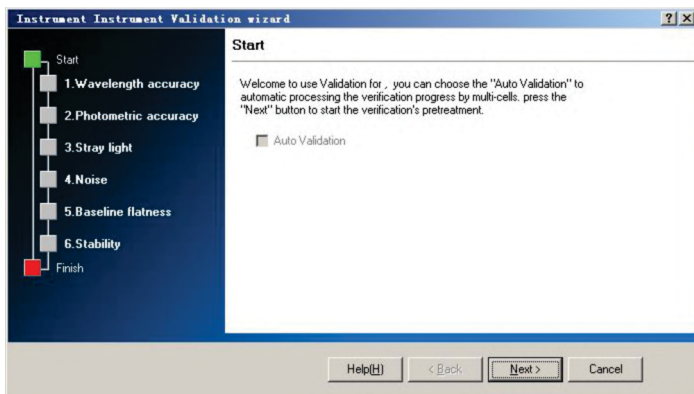
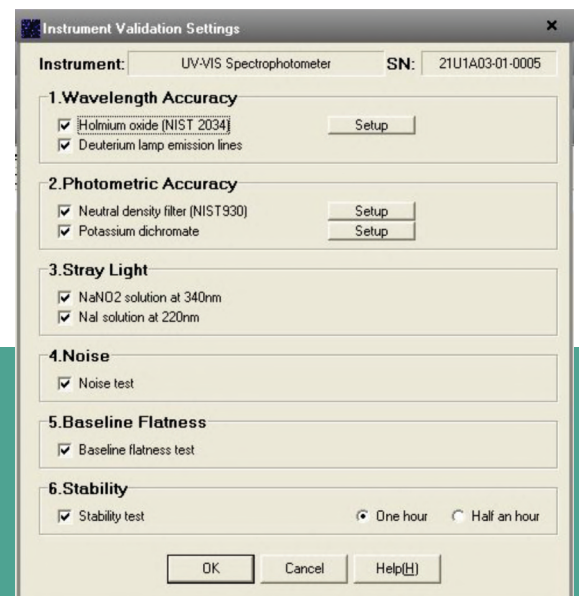


Figure 4-7 UVWin Toolbar



## Instrument Validation Wizard

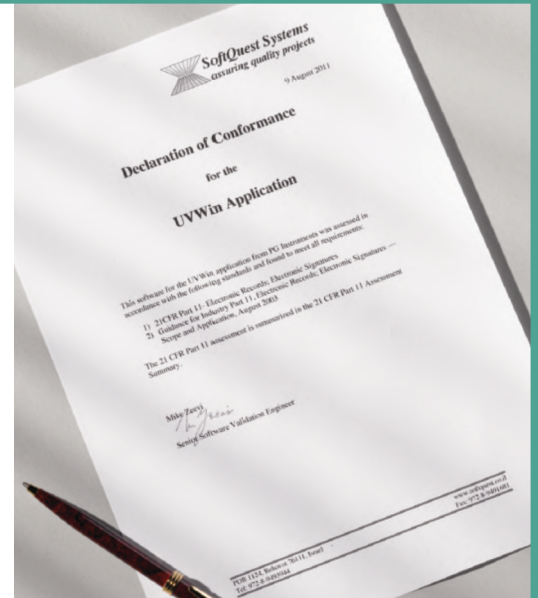


## Instrument Validation Window

## 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



## 14 KINDS OF ACCESSORIES MEET ALL YOUR ANALYSIS



### Integrating Sphere

- Types: Diameter 150mm and 60mm
- Range of Application: Solid sample, power sample, liquid sample, glasses
- Measurement Methods: Diffuse reflectance, total reflectance, diffuse transmission and 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

### Specifications

Type	DIS150-1	DIS60- 1
WL Range	200-850nm	
Detector	PMT	
Diameter	150mm	60mm
Coating	Spectrafect	
Reflectance		
Open Diameter	25mm	17mm
Transmission		
Open Diameter	20mm	12mm
Open Percentage	80.17%	10.00%
Noise	100T% : <0.3% (800nm) <0.1% (500nm) <0.2% (250nm) 0T% : <0.02% (800nm) <0.01% (500nm) <0.02% (250nm)	
Size	675mm*330mm*265mm	513mm*330mm*265mm
Drift	<0.1% (500nm)	

## SPECIFICATIONS

Principle	: True Double beam, double monochromator, UV Visible Spectrophotometer Sealed and Quartz coated Czerny-Turner with microcomputer electronics controlled by DELL PC or compatible personal computer
Optical system	: All reflecting optical system with holographic grating
Detector	: High Energy Photo Multiplier tube
Wavelength Scanning Speed	: Wavelength Slew Rate -14500 nm/min Scan Rate -About 4500 to 0.5 nm/min
Wavelength Range	: 185 - 900 nm
Source	: D2 Lamp - UV Region W Lamp - Visible Region Hg Lamp - Wavelength Correction Automatic selectable light source lamp switching
Bandwidth	: Variable bandwidth, 0.1 - 5.0 nm continuously adjustable
UV/VIS Resolution	: 0.01nm
Straylight	: At 198nm for KCL 0.05%T At 220nm NaI ASTM Method 0.00004%T At 340nm NaNo2 0.00005%T
Wavelength Accuracy	: $\pm 0.1$ nm
Wavelength Reproducibility	: 0.05nm Deuterium Lamp
Photometric Accuracy	: $\pm 0.004A$ @2.0 A $\pm 0.003A$ @1.0A $\pm 0.002A$ @0.5 A $\pm 0.3\%$
Baseline Flatness	: $\pm 0.0008Abs$ Range : 190-900nm
Baseline Stability	: 0.0005Abs (500nm, 0Abs), 2hours warm-up
Photometric Range	: -6.0Abs - +6.0Abs
Communication Port	: RS 232C, USB, WiFi
Software/Data Processing	: UV-Win Software to control complete UV-VIS Spectrophotometer is Latest Windows based, also offering extensive administrative capabilities along with a detailed audit trail & 21CFR Part 11, 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, multi component analysis, multilevel calibration, baseline correction, 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 derivative co-relation and derivative spectroscopy, Export measurement data to Word, Excel, CSV and ASCII format.
Optional Accessory	: Specular Reflection Accessory, Integrating Sphere 60mm / 100mm Automatic 8 Cell Changer, long path cell holder, Peltier Solid Sample holder etc.
Power Supply	: Switchable 120 - 230VAC 50 - 60Hz

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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**

LABINDIA reserve the right to change specification without notice as part of its continuous programme of product development.