



T95

UV-VIS SPECTROPHOTOMETER

The T95 is a high performance double beam spectrophotometer with a variable spectral bandwidth from 0.1-5nm, selected in intervals of 0.1nm.

The Czerny-Turner monochromator with a holographic grating keeps stray light to a minimum and offers excellent optical resolution. The use of a photo-multiplier tube as a detector offers exceptional sensitivity.

The T95 has true double beam optical system coupled with an efficient and well proven electronic control system which ensures high stability and low background noise.



FEATURES & FUNCTIONS

- Photomultiplier tube detection provides exceptional sensitivity.
- Low stray light 0.005%T.
- High-quality Deuterium lamp, Tungsten lamp and Mercury lamp.
- Unique C-T optical system with ultra low stray light
- Premium coated lens and mirrors for high analysis repeatability.
- Real-time automatic calibration of wavelength .
- Robust modular design with a small footprint.
- Continually Adjustable Spectral Bandwidth from 0.1nm to 5.0nm in steps of 0.1nm.
- Sample compartment design enables use of a wide range of optional accessories
- User friendly windows based software as standard which complies with GLP/GMP standards and contains user management, logging and data tracking.

SOFTWARE FEATURES

UV Control software is a powerful, intuitive software product used for connectivity to the PG Instruments T95 benchtop UV-Vis Spectrometer. UV Control offers complete instrument control along with data acquisition and a whole host of mathematical tools for interpretation of measurement results. GLP offers extensive administrative capabilities along with a detailed audit trail. The UV Control software is separated into six key workspaces:

- Photometric Analysis.
- Spectral Analysis.
- Quantitative Analysis.
- Kinetic Analysis.
- Multi-Wavelength Analysis.
- DNA-Protein Analysis.
- Data printing by connection of general inkjet or laser printer.
- Data can be saved to a specified area of the hard drive or external memory drive.
- Data sharing and exporting by Excel, Txt data transfer and Windows clipboard.
- Easy switch sample position by automatic motorised 8 cell holder.
- Three levels of scan speeds and six levels of intervals are available to optimise the scanning requirement.

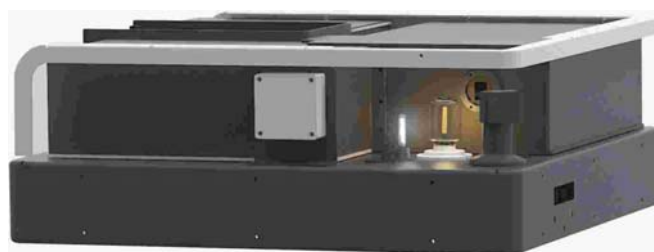
OPTICAL SYSTEM & COMPONENTS

The T95 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 in steps of 0.1nm.

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.

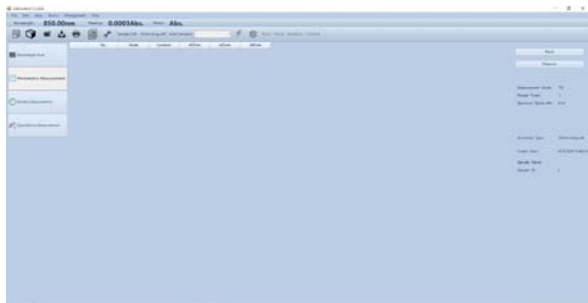
The user friendly design of the lamp compartment allows easy replacement and simplified routine maintenance of the Deuterium and Tungsten lamps.



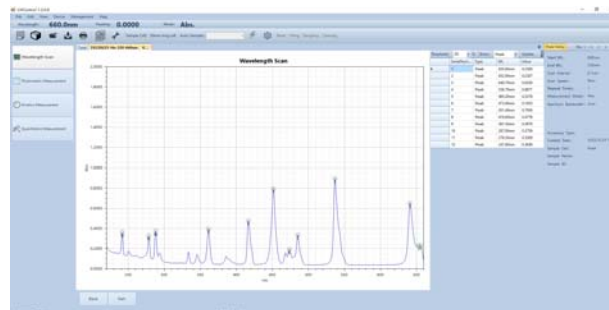
ADMINISTRATION

UV Control Software offers all of the features and functions required for use in compliance with the guidance specified in the 21CFR part11-Electronic Records.

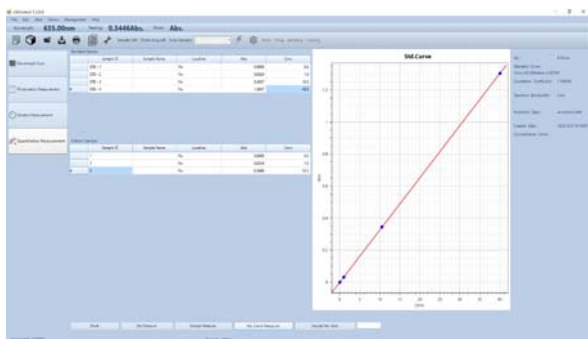
- Administrative settings can be made where Analysts may require conformity to GLP/GMP.
- Create user groups specifying exactly what actions they are able to perform.
- Add New Users to custom User Groups to determine their privilege settings.
- Automatically log software activity in an Audit Trail.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



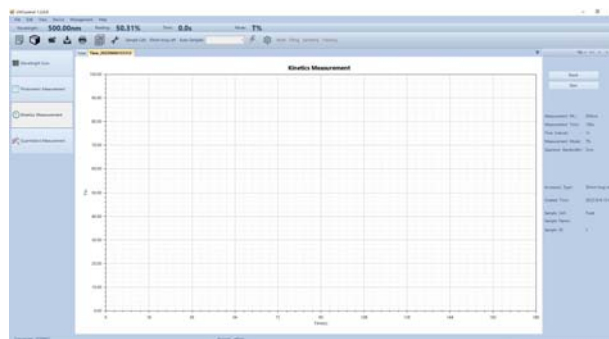
Photometric Workspace



Wavelength Scan Workspace



Quantitative Workspace



KineticWorkspace

INSTRUMENT ACCESSORIES

A number of optional accessories are available to extend the application range of the instrument. The following are just some of the available accessories: Automatic 8 - Position Cell Holder, 5 - Position Variable Cell Holder, Thermostatic Cell Holder, Adjustable Micro Cell Holder, Reflection Accessory, Integrating Sphere, Film Sample Holder and Auto-sampler.



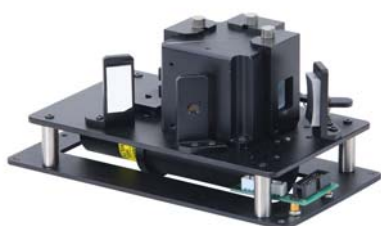
Automatic 8 Cell Holder.



5 Cell Holder.



Film Sample Holder



Integrating Sphere



Auto-Sampler



Reflectance Accessory

Specifications

Specifications	T95
Optical System	Double beam
Scan Speed	Selectable
Wavelength Range	190 - 900nm
Wavelength Accuracy	± 0.3nm
Wavelength Reproducibility	≤ 0.1nm
Spectral Bandwidth	Continuous slit 0.1 - 5.0nm with 0.1nm interval
Photometric Mode	Transmittance, Absorbance, Energy, Concentration, All Using Software
Photometric Range	-4.0 - 6.0Abs, 0-1000000T
Photometric Accuracy	± 0.3%
Photometric Reproducibility	≤ 0.1%T
Photometric Noise	0.00004A (500nm) 30min warm-up
Baseline Flatness	0.00005A (190nm - 850nm) 2hr warm-up
Baseline Stability	0.00001A/h (500nm, 0Abs) 2hr warm-up
Stray light	≤ 0.005%(@220nm&360nm)
Standard Functionality	No stand alone function
Cell Holder	8 Position Automatic Sample Cell Holder, Fixed Reference cell holder
Photo multiplier tube	PMT
Light Source	Tungsten Halogen and Deuterium arc lamps and Mercury lamp
Display	No display
Printer	Not available
PC Interface	USB
Software Support	UV Control Software
Power Supply	220VAC / 120VAC 50 - 60Hz 500W
Weight	36Kg
Dimensions (Width, Depth, Height)	550mm, 500mm, 260mm

Each Unit is supplied with the following as standard:

1 x Certificate of conformity	1 x USB cable
1 x 8 position Automatic cell holder (sample and fixed reference)	1 x Power cord
1 x Pair Quartz cells	1 x Instruction manual
4 x Glass cells	1 x Dust cover
1 x UV Control software memory stick	1 x Packing list



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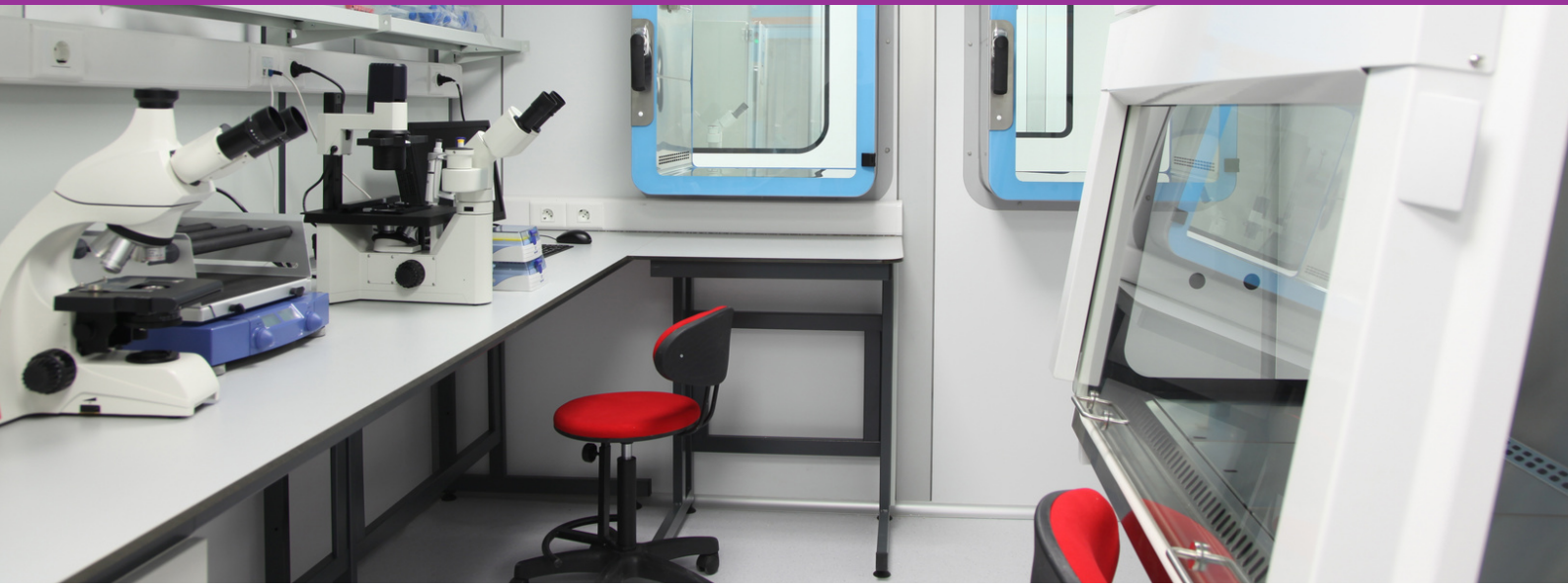
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