



T75

UV-VIS Spectrophotometer

NEW

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The T75 is a high performance dual beam spectrophotometer available with a fixed (2nm) or variable (0.5, 1, 2, 5nm) spectral bandwidth, which is innovative in terms of instrument application, mechanical and optical design, electronic control and software whilst retaining features that are well established and accepted through the industry.

The T75 series of UV-Visible Spectrometers are directly controlled by an embedded PC touch screen interface which has a Windows 8 operating system. Our latest UV-Win 6 software is pre-loaded and offers many features. These include three dimensional spectrum, kinetic measurements, Photometric analysis using multiple wavelengths, method and data storage, exportation of data in multiple formats and GLP administration.

The T75 range consists of two models:

T75 UV-Vis instrument offers a fixed bandwidth of 2nm.

T75+ UV-Vis instrument offers a variable bandwidth of 0.5, 1, 2, 5nm

Features & Functions

- ▶ High performance fixed (2nm) or variable (0.5, 1, 2, 5nm) spectral bandwidth.
- ▶ Wavelength accuracy +/- 0.3nm.
- ▶ Supplied with a motorised 8 cell changer and pre-aligned Tungsten and Deuterium lamps.
- ▶ Holographic blazed grating 1200 lines /mm.
- ▶ High degree of automation requiring minimal key depressions to start analysis.
- ▶ A Large Sample Compartment allows the easy interface of optional accessories.
- ▶ Embedded PC touch screen with Windows 8 operating system.
- ▶ Cell Storage for up to 8 x 10cm Cuvettes is incorporated into the design.
- ▶ Pre-installed UV-Win 6 offering analysis for Photometric Measurement, Spectrum Scans, Quantitative Determination and Kinetics. Additional features include 3D spectrum analysis and GLP protocol.
- ▶ Simple mechanical structure and modular electronics make routine maintenance very easy.

Optical System & Components

High quality optical components ensure reliable analytical data with low stray light achieved using very low noise electronic circuits.

The dual beam optics ensure good optical stability.

Pre-aligned Deuterium and Tungsten light sources deliver superior stability across the full wavelength range. Both types of lamps are inexpensive and easy to replace when required.

The modular design allows easy access to all optical surfaces which can be easily cleaned to maintain optimum reflectivity over the lifetime of the instrument.



Specifications

Instrument Type	T75	T75+
Optical System	Dual Beam	Dual Beam
Scan Speed	Selectable	Selectable
Wavelength Range	190 - 1100nm	190 - 1100nm
Wavelength Accuracy	± 0.3nm	± 0.3nm
Wavelength Reproducibility	≤ 0.2nm	≤ 0.2nm
Spectral Bandwidth	2nm	0.5, 1.0, 2.0, 5.0nm
Photometric Mode	Transmittance, Absorbance, Energy Concentration	Transmittance, Absorbance, Energy Concentration
Photometric Range	-0.3 - 3.0Abs	-0.3 - 3.0Abs
Photometric Accuracy	0.002A (0 - 0.5A), 0.004A (0.5 - 1.0A), 0.3%T (0-100%T)	0.002A (0 - 0.5A), 0.004A (0.5 - 1.0A), 0.3%T (0-100%T)
Photometric Noise	0.001A (500nm) 30min warm-up	0.001A (500nm) 30min warm-up
Baseline Flatness	0.0015A (200 - 1000nm)	0.0015A (200 - 1000nm)
Baseline Stability	0.0008A/h (500nm, 0Abs), 2hr warm-up	0.0008A/h (500nm, 0Abs), 2hr warm-up
Stray Light	<0.05%T at 220nm NaI (Conforms to British, European & US Pharmacopoeia Specifications)	<0.05%T at 220nm NaI (Conforms to British, European & US Pharmacopoeia Specifications)
Standard Functionality	Photometric, Quantitative, Spectrum and Kinetic measurements	Photometric, Quantitative, Spectrum and Kinetic measurements
Cell Holder	Automatic 8 cell changer	Automatic 8 cell changer
Detector	Silicon photo diode	Silicon photo diode
Light Source	Tungsten Halogen and Deuterium arc lamps	Tungsten Halogen and Deuterium arc lamps
Instrument Control	Embedded PC touch screen. Windows 8 operating system	Embedded PC touch screen. Windows 8
System Printer	Any USB printer	Any USB printer
Analysis Software	UVWin 6	UVWin 6
Power Supply	Switchable 120 - 230VAC 50 - 60Hz	Switchable 120 - 230VAC 50 - 60Hz
Weight	25Kg	25Kg
Dimensions	W520mm x D420mm x H230mm	W520mm x D420mm x H230mm

Each Unit is supplied with the following as standard:

- 1 x Certificate of Conformity
- 1 x Fuse (2A)
- 1 x 8 position 10mm path length motorised cell holder
- 1 x Power cord
- 1 Pair 10mm Quartz cells
- 1 x Instruction manual
- 1 x Black block for dark current correction
- 1 x Packing list

The highly qualified and long experienced team at PG Instruments Ltd are recognised experts in Spectroscopy, Electrochemistry and Relevant Technologies. They have been developing and manufacturing analytical instruments for science for over a decade and have a worldwide recognised reputation for excellence in their field.

We reserve the right to modify, revise/upgrade, suspend or discontinue any Product in whole or in part, either temporarily or permanently, with or without notice.

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