

Xenon Double Beam UV-Vis Spectrophotometer



TL-2000UVX

TOPLAB INDIA'S Model TL-2000UVX Xenon Lamp UV-Vis Spectrophotometer is Large Touch Screen Double Beam UV-Vis Spectrophotometer. It is equipped with Advanced Xenon Lamp Source which makes the instrument more stable and reliable. It adopts Double Beam long path design to ensure the accuracy, stability and durability.

TL-2000UVX is Successful Implementation of the stringent requirements of high accuracy and reliability measurement to meet the requirements of various applications that can be used in Biological research, Bio-industry, Pharmaceutical Analysis, Pharmaceutical, Teaching and Research, Environmental Protection, Food Hygiene, Clinical Research, Health and Pandemic Prevention and other fields.

Features



• Light path design: double beam

TL-2000UVXS has Xenon Lamp Light Source and Double Beam optical path design can prevent circuit fluctuations and stray light to ensure stability of instrument.

• Powerful software functions

Multi Functions like Spectrum Scanning, Standard Curve, Kinetics, Multi-Wavelength Scanning; DNA/Protein testing can be operated directly on Display and PC.

• Long light path design

TL-2000UVX has long life Xenon Lamp which can work Upto 5000 Hours or which service life can be over 07 years, lower much cost and energy on maintenance. It has Automatic Wavelength setting function.

• Multi functions

Multi-Function operated directly on the spectrophotometer and displays the Test Results, Curve and Data: Wavelength Scanning, Standard Curve, Kinetics, Multi-Wavelength Scanning, DNA/Protein test.

• 6 inches LCD display

TL-2000UVX has 7" inches Touch screens LCD Display to show results and curve directly on screen. It is easy and convenient to operate spectrophotometer without computer. It has advanced 32-bit Processor with the clock speed 120MHz. It can store 5000 test of data and 500 data curves.

• 16mm optical base

TL-2000UVX uses Silicon Photodiode guarantee the instrument is highly sensitive and stable. It has High Efficiency Blazed Holographic Grating Monochromator with 1200 lines/mm and Ultra low stray light.

• Perfect calibration system

All parameters like Baseline, Wavelength and Dark Current can be calibrated automatically to keep spectrophotometer good running condition

• Data output

TL-2000UVX has standard 8GB memory can store huge test data and Equipped with RS232, USB port. It can be connecting with a PC to control through windows based software; the software doesn't come as standard supply, Software is Optional. Can be connected to the printer directly with USB interface.



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Technical Specification ... >>>

Model No.	TL-2000UVX	TL-2000UVX-A	TL-2000UVX-S
Optical System	Double Beam Optical System (1200 Lines/mm grating)		
Wavelength Range	190~1100nm		
Bandwidth	2nm	1nm	0.5,1,2,4,5nm
Wavelength Accuracy	±0.1nm		
Wavelength Repeatability	≤0.5nm		
Photometric Accuracy	±0.2% T (0-100%T) , ±0.002A(0 ~ 0.5A), ±0.003A(0.5A ~ 1A)		
Photometric Repeatability	0.1% T (0-100%T) , ±0.001A(0 ~ 0.5A), ±0.0015A(0.5A ~ 1A)		
Photometric Range	-4~ 4A , 0 ~ 400%T, 0 ~ 9999C		
Stray Light	≤0.03%T (220nm NaI , 340nm NaNO ₂)		
Stability	≤0.0003A/h @500nm		
Noise	±0.00001A @500nm		
Baseline Flatness	± 0.0003A/h		
Baseline Stability	0.0002 A/h		
Wavelength Setting	Automatic Selection		
Detector	Silicon Photodiode / Photomultiplier Tube (PMT - Optional)		
Monochromator	Czerny-Turner Blazed Holographic Grating		
Photometric Mode	T,A,C,E (Transmittance, Absorbance, Concentration, Reflectance)		
Wavelength Scan Speed	Up to 3000 nm/min (Variable)		
Wavelength Slew Speed	Up to 6000 nm/min		
Output /Interface	RS232/USB (For Data Transfer/Storage,PC & Printer Connectivity)		
Light Source (Lamps)	Xenon Lamp		
Power Requirement	AC 220V/50Hz		
Dimensions (W*D*H)	780*650*350mm		
Weight	40 Kg		

Optional Accessories

Reflectance Attachment: Integrating sphere is highly reflective inner surface of the hollow sphere. It is mainly used to detect in the ball inside or outside the ball in and near a window sample scattered or reflected light, the light or the light source itself an efficient devices are collected. Can be used to the optical reflection and transmission properties of the material, light irradiance, brightness and chromaticity do some precise measurement.

The outer surface of the integral ball generally made of metal or hard plastic cover, have one or more holes on the surface, can be used as entrance or exit window. After monochromator spectral characteristic of optical radiation through the reflection of attachments, sample reflected signal detector receive, so as to realize the reflection measurement of the sample.

Basic parameters and measurement conditions:

Boundary dimension (LxWxH) : 95mm × 101mm × 99mm

Integrating sphere diameter · · 60mm

Spectral range:220nm -1100nm

Spectral bandwidth: 2nm

Cuvette holder : Manual four cuvette holder with stand, manual Eighth cuvette holder, automatic Eighth cuvette holder.

Rectangular long-path cell holder:Holds two long path cells (light path 5-100mm)

Solid sample holder:Used for transmittance/absorbance measurement of a solid sheet sample Sample