UV-Vis Spectrophotometer – Double Beam – DNA and protein testing

Model **MSSPMUV8000TSSWISS** | Brand **Master Science** | Unit **Pc**



The MSSPMUV8000TSSWISS UV-Vis Spectrophotometer is a high-performance analytical instrument designed to meet the rigorous demands of laboratory environments, specifically suited for DNA and protein analysis among other spectrophotometric applications. This precision-engineered device is equipped with advanced technology, ensuring reliable, accurate results across a wide array of research and clinical applications.

KEY HIGHLIGHTS

- Additional Information

Request a Quotation
Contact us for pricing, configuration options and delivery details.

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Key Features

Enables UV and visible (VIS) light absorption, supporting versatile analysis across diverse samples.

DOUBLE BEAM, DUAL OPTICAL PATH SYSTEM

Dual detectors provide simultaneous sample and reference measurement for enhanced accuracy and stability.

ADVANCED GRATING TECHNOLOGY

Uses high-quality gratings that minimize stray light, improving measurement reliability and precision.

10-INCH TOUCH SCREEN INTERFACE

A large, user-friendly display with built-in memory, Bluetooth, and USB connectivity for easy operation and seamless data integration.

COMPREHENSIVE DATA ANALYSIS FUNCTIONS

Includes modes for photometric and quantitative analysis, spectral scanning, DNA/protein testing, multi-wavelength analysis, and customizable calibration curves.

Mounted on a robust aluminum base, this design isolates the system from external vibrations, enhancing optical stability.

EXTENSIVE DATA STORAGE AND EXPORT OPTIONS

USB and printer ports allow for convenient data storage, export, and A4 format output, streamlining documentation and analysis workflows.

AUTO-CALIBRATION AND POSITIONING

Automated startup calibration and positioning ensure consistent accuracy over extended use, ideal for both routine and advanced applications.

Additional Information

Tungsten and Deuterium lamps are preferred for DNA/protein analysis due to their stable, continuous spectrum across UV and visible ranges, supporting precise biomolecular measurements.

Technical Specifications

PARAMETER	SPECIFICATION
Wavelength Range	190-1100 nm
Spectral Bandwidth	0.5, 1.0, 2.0, 4.0 nm
Wavelength Accuracy	±0.1 nm (D2 656.1 nm), ±0.3 nm (full range)
Stray Light	0.03% T @ 220 nm, 360 nm
Photometric Accuracy	±0.2 T (0-100% T), ±0.002 Abs (0-0.5 Abs), ±0.004 Abs (0.5-1.0 Abs)
Stability	±0.0004 A/h @ 500 nm
Photometric Range	0-200% T, -0.3-3.0 A, 0-9999 C
Display	10-inch 800 x 480 touch screen
Data Output	USB and USB print ports for seamless connectivity
Light Source Options	Tungsten & Deuterium Lamps or Xenon Lamp
Detector	High-sensitivity Silicon Photodiode
Display and Data Output	
Light Source and Detector	

Standard Accessories Included

- For optimal performance, connect the MSSPMUV8000TSSWISS to a PC with the following specifications:
- Processor: Intel Core i5 or better
- Memory: 16 GB RAM
- Operating System: Windows 10
- USB Ports: 2 USB interfaces
- Drive: CD-ROM
- Hard Disk Space: 1 GB
- Calibration and Measurement Functions
- The spectrophotometer offers a suite of software-integrated calibration and measurement options:
- Calibration Control: Includes baseline, dark current, blank, and wavelength calibration.
- Measurement Functions: Supports photometric measurement, quantitative analysis, kinetics, wavelength scanning, multi-wavelength, and DNA/protein measurement.
- For DNA/protein measurement, three calculation methods (Method 1, Method 2, and Custom) allow for tailored concentration and purity analysis, providing flexible options for specific research needs.
- MSSPMUV8000TSSWISS Unit
- 1 cm Glass Cuvettes (4 pcs)
- Power Cord
- User Manual
- 1 cm Quartz Cuvettes (2 pcs)
- With its robust feature set and precision performance, the MSSPMUV8000TSSWISS UV-Vis Spectrophotometer is essential for laboratories conducting high-accuracy DNA/protein analysis and various scientific applications, offering an efficient and user-friendly solution for complex analytical tasks.