Double Beam Spectrophotometer - UV-Vis Analyzer - 190-1100 nm - 8-inch Touchscreen

Model **MSSP-IUV7SWISS** | Brand **Master Science**





The Master Science Double Beam Spectrophotometer combines a Czerny-Turner double-beam optical system with a large 8-inch color touchscreen, giving laboratories a practical instrument for qualitative scans and quantitative measurements across 190 to 1100 nm.

KEY HIGHLIGHTS

- Simple operation
- Dependable precision
- Fast start-up
- Easy reporting
- Protected data

AT A GLANCE

190 to 1100 nm WAVELENGTH RANGE	**1.8 nm** SPECTRAL BANDWIDTH
0 to 200 %T; -0.301 to 4.000 A; 0 to 9999 C PHOTOMETRIC RANGE	**±0.5 nm** WAVELENGTH ACCURACY

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

support@themsci.com
www.themsci.com

Scan to view online

Overview

Zero and full-scale adjustment and wavelength setting are automatic, and internal memory keeps results, scans, regression curves and correction data ready after each start-up.

> For methods that need adjustable resolution, see the Master Science variable bandwidth double beam UV-Vis spectrophotometer.

Key Benefits

Simple operation
the 8-inch touchscreen guides users through scans, kinetics and concentration readings.

Dependable precision
double-beam optics and low stray light keep photometric results consistent.

Fast start-up
the Master Science Double Beam Spectrophotometer stores correction data in memory, so initialisation is quick.

Easy reporting
results, scans and regression curves print directly or transfer to a PC over USB.

Protected data
a power protection system safeguards stored measurements.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSSP-IUV7SWISS
SKU	MSSP-IUV7SWISS
Drift	≤ 0.0009 Abs/30 min (250 and 500 nm, after 2 h warm-up)
Noise	≤ 0.15 %T at 100 %T; ≤ 0.1 %T at 0 %T
Grating	1200 lines/mm
Power Supply	AC 220 V ±22 V, 50 Hz, 200 W

OPTICAL PERFORMANCE

Optical System	Double beam with blazed holographic grating
Monochromator	Czerny-Turner
Wavelength Range	**190 to 1100 nm**
Wavelength Accuracy	**±0.5 nm**
Wavelength Repeatability	**≤ 0.2 nm**
Spectral Bandwidth	1.8 nm
Photometric Accuracy	**±0.3 %T; ±0.002 Abs (0 to 0.5 A); ±0.004 Abs (0.5 to 1 A)**
Photometric Repeatability	≤ 0.15 %T; 0.001 Abs (0 to 0.5 A); 0.002 Abs (0.5 to 1 A)
Photometric Range	**0 to 200 %T; -0.301 to 4.000 A; 0 to 9999 C**
Stray Light	≤ 0.03 %T (220 nm NaI, 360 nm $NaNO_2$)
Baseline Flatness	≤ ±0.002 A (200 to 1090 nm)
Scan Speed	Fast, medium, slow
Detector	Silicon photocell

DISPLAY & DATA

Display	8-inch color touchscreen
Interface	USB to PC; printer output

DIMENSIONS & WEIGHT

Package Size	710 × 590 × 505 mm, 36 kg

COMMON LABORATORY PROBLEMS AND HOW THIS SPECTROPHOTOMETER HELPS

Common Laboratory Problems and How This Spectrophotometer Helps	Typical issues the Master Science Double Beam Spectrophotometer helps to solve:
Long training time for new staff	the touchscreen interface keeps routine tests straightforward.
Repeating calibration after every restart	stored correction data shortens start-up.
Manual calculation of results	regression and direct concentration reading are built in.
Lost results	internal memory and USB transfer keep data safe.
Drifting readings	double-beam optics compensate for source changes.

Applications

The Master Science Double Beam Spectrophotometer fits
Pharmaceutical quality control Food and beverage testing Water and environmental monitoring Chemical analysis University teaching and research labs

Measurement Functions

- Full-spectrum and detailed spectrum scanning
- Linear regression and direct concentration reading
- Time-based kinetics
- Peak and valley detection
- GOTO λ and multi-wavelength measurement

Instrument Design

- Double-beam optics with blazed holographic grating
- Automatic zero, full-scale and wavelength setting
- High-capacity internal memory

Connectivity

- USB port for PC control and extra storage
- Dedicated printer output for results and curves

Standard Accessories Included

- Operation manual – 1
- 1 cm glass cuvettes – 4 pcs
- 1 cm quartz cuvettes – 2 pcs
- Power cable – 1
- Fuses – 2 pcs
- Spectrum data processing software