Nano UV-Vis Spectrophotometer - Microvolume DNA and Protein Analyzer - 190-910 nm

Model **MSSP-YUV100SWISS** | Brand **Master Science**





The Master Science Nano UV-Vis Spectrophotometer quantifies DNA, RNA and proteins from just 0.5 to 2 µL of sample, placed directly on a stainless steel and quartz-fibre pedestal. Three automatic path lengths extend the range so most samples can be read without dilution, and the drop can be recovered afterwards.

KEY HIGHLIGHTS

- Saves precious samples
- No dilution
- Bacterial growth checks too
- Stand-alone
- Long lamp life

AT A GLANCE

190 to 910 nm; OD600 cuvette 600 ±8 nm WAVELENGTH RANGE	**±1 nm / ±0.2 nm** WAVELENGTH ACCURACY / PRECISION
0.04 to 300 A (10 mm equivalent); OD600 0 to 4 A ABSORBANCE RANGE	**±1 % (7.332 Abs at 260 nm)** ABSORBANCE ACCURACY

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

support@themsci.com
www.themsci.com

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Overview

A cuvette slot reads OD600 for bacterial and microbial cultures. Everything runs from a 7-inch Android touch screen with on-board storage, so no computer is needed.

Key Benefits

Saves precious samples
the Master Science Nano UV-Vis Spectrophotometer needs only 0.5 µL.

No dilution
wide range from three path lengths.

Bacterial growth checks too
OD600 cuvette slot.

Stand-alone
touch screen with on-board storage.

Long lamp life
xenon flash source.

For fluorescence and heated OD600, see the Master Science micro-volume spectrophotometer.

Technical Specifications

GENERAL

Brand	Master Science
Model Number	MSSP-YUV100SWISS
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Sample Volume	0.5 to 2 µL
Path Lengths	0.05, 0.2, 1 mm
Nucleic Acid Range	**dsDNA 2 to 15000 ng/µL; ssDNA 1.32 to 9900 ng/µL; RNA 1.6 to 12000 ng/µL**
Protein Range	**A280 0.04 to 750 mg/mL; BSA 0.06 to 1119 mg/mL; IgG 0.03 to 547 mg/mL**
Measurement Time	< 6 s
Pedestal	304 stainless steel and quartz fibre
Power	DC 12 V, 4 A; 48 W working, < 6.5 W standby

OPTICAL PERFORMANCE

Light Source	Xenon flash lamp (> 10^9 flashes)
Detector	2048-element CMOS array
Wavelength Range	**190 to 910 nm; OD600 cuvette 600 ±8 nm**
Wavelength Accuracy / Precision	**±1 nm / ±0.2 nm**
Spectral Resolution	≤ 1.5 nm (FWHM, Hg 253.7 nm)
Absorbance Precision	0.002 Abs
Absorbance Accuracy	**±1 % (7.332 Abs at 260 nm)**
Absorbance Range	**0.04 to 300 A (10 mm equivalent); OD600 0 to 4 A**

DISPLAY & DATA

Display	7-inch capacitive touch screen, Android
Data Output	USB, images and Excel tables

DIMENSIONS & WEIGHT

Dimensions (W × D × H)	270 × 210 × 196 mm
Weight	3.4 kg

COMMON LABORATORY PROBLEMS AND HOW THIS INSTRUMENT HELPS

Common Laboratory Problems and How This Instrument Helps	How the Master Science Nano UV-Vis Spectrophotometer simplifies quantification:
Losing sample volume in cuvettes	0.5 µL drops, recoverable.
Time spent diluting	automatic path lengths.
Needing a PC for every reading	stand-alone Android system.
Separate instrument for OD600	built-in cuvette slot.

Applications

The Master Science Nano UV-Vis Spectrophotometer is used for: DNA and RNA quantification Protein A280 for BSA, IgG and lysozyme Bacterial culture OD600 Molecular biology and genomics labs Quality control of nucleic acid preparations

Measurement

- 190 to 910 nm
- 0.5 to 2 µL samples
- Results in under 6 s

Range

- Path lengths 0.05, 0.2 and 1 mm
- dsDNA up to 15000 ng/µL
- OD600 cuvette slot

Operation

- Android 7-inch touch screen
- USB export of images and tables
- External printer optional

Optional Accessories

- External printer