avantor™

VWR®
Nano Spectrophotometer

01. **RAPID RESULTS FROM A SAMPLE DROPLET**

02. **EXTENDED LIFE XENON LAMP**

03. **FULL SPECTRAL SCANNING**

04. **BUILT-IN PRINTER AND CUVETTE PORT**

VWR®

VWR® Nano Spectrophotometer

FOR MORE INFO: VWR.COM

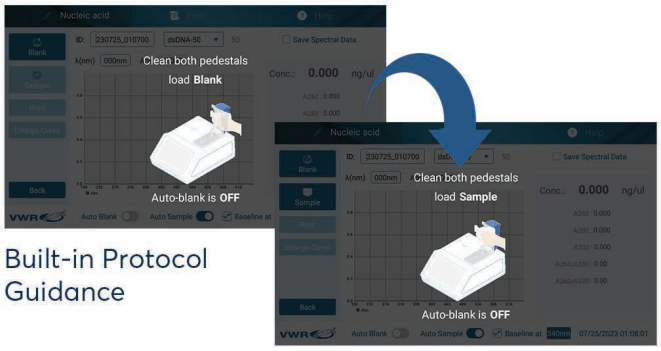
- Rapid calculation of 260/280 and 260/230 absorbance ratios from a sample droplet
- Extended-life Xenon lamp and silicon CCD array for full spectral scanning
- Built-in printer and cuvette port
- Detects up to 4,500 ng/uL of undiluted dsDNA

The VWR® Nano Spectrophotometer allows for the swift and accurate quantification of nucleic acids and proteins with as little as 0.5 µL of sample. This stand-alone device operates through a full-color, 7" touchscreen with preset programs for nucleic acids and protein sample evaluation, colorimetric assays (BCA, Bradford, Lowry, etc.), UV-Vis spectral scanning, and OD600 measurements to determine bacteria culture growth.
The on-board software includes a useful "Protocol Guidance" feature to guide the user through each step of the process.

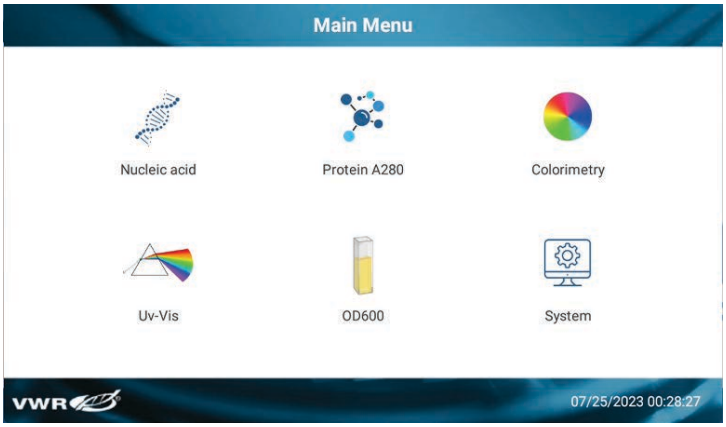
At the heart of the device is a long-life xenon lamp which provides a wide wavelength range from 200 to 800 nm. The xenon lamp system does not require any warm-up time; the instrument can be used immediately upon power-up. A highly sensitive, high-speed silicon CCD detector ensures fast and accurate results.

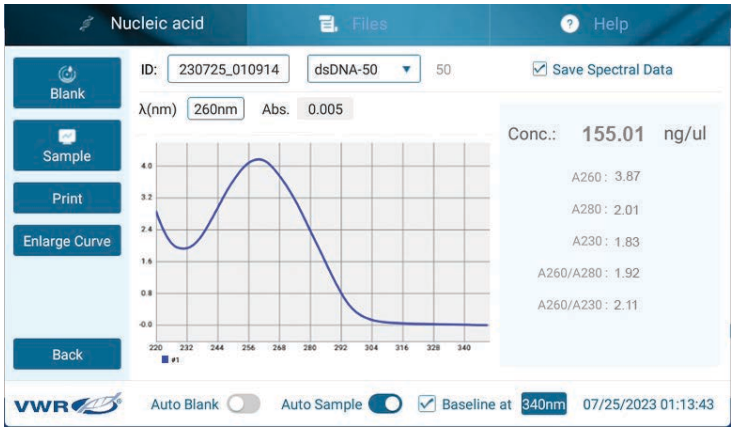
After pipetting a sample droplet onto the quartz pedestal, the instrument's upper arm is lowered to extend the droplet into a liquid column. The pathlength auto-adjusts from 0.2 mm to 1 mm, and the absorbance values are evaluated at each to determine the ideal pathlength for optimal concentration calculations. This instrument can rapidly compute DNA, RNA, and protein concentrations as well as purity levels, displaying results within seconds. Users have the option to print the results directly from the instrument's built-in printer, save to the device's internal memory, or export the data via USB in an Excel-compatible format.

A cuvette port, located behind the quartz pedestal, is used for optical density (OD600) readings such as bacteria concentration measurements. Two glass cuvettes are included.



Built-in Protocol Guidance





Specifications:

Minimum sample size	0.5 µL - 2 µL
Path length	0.2 mm, 1 mm
Light source / Life	Xenon flash lamp / > 10⁹ Flashes
Detector type	2048 element linear silicon CCD array
Wavelength range	200 nm - 800 nm
Wavelength accuracy	± 1 nm
Spectral resolution	≤ 3 nm (FWHM@Hg 253.7 nm)
Absorbance precision	0.003A (1mm path length)
Absorbance accuracy	± 1% (7.332Abs, at 260nm wavelength)
Absorbance range	0.04 - 90 (at 260 nm, 10 mm equivalent)
Detection concentration range	2 ng/µL dsDNA ~ 4,500 ng/µL dsDNA

Detection time	< 5 seconds	
OD600	Abs Range:	0~4.000 Abs
	Abs Stability:	0 to 3 Abs: ≤0.5% / 3.001 to 4 Abs: ≤2%
	Abs Repeatability:	0 to 3 Abs: ≤0.5% / 3.001 to 4 Abs: ≤2%
	Abs Precision:	0 to 2 Abs: ≤0.005A / 2.001 to 3 Abs: ≤1% / 3.001 to 4 Abs: ≤2%
Voltage input	DC 24V, 2A	
Power	25 W	
Dimensions (W×D×H)	20.8 × 28.0 × 18.6 cm / 8.2 x 11.0 x 7.3 in.	
Weight	3.6 kg / 7.9 lbs	

Ordering information:

Description	Cat. No.
VWR® Nano Spectrophotometer, 200-800 nm wavelength, 115V	**76777-150**
VWR® Nano Spectrophotometer, 200-800 nm wavelength, 230V (EU, UK Cords included)	**76777-152**
VWR® Glass Cuvettes for Nano Spectrophotometer, pack of 2	**76777-146**
VWR® Extra Printer Paper Nano Spectrophotometer, pack of 3	**76777-148**

For more information visit: vwr.com

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