Thermo Scientific NanoDrop One Microvolume UV-Vis Spectrophotometers

Intelligent microvolume analysis

Thermo Scientific™ NanoDrop™ One microvolume UV-Vis spectrophotometers quantify and qualify DNA, RNA, and proteins in seconds using only 1–2 µL of sample.

These next-generation NanoDrop instruments are built with Thermo Scientific™ Acclaro™ Sample Intelligence technology that helps you understand the quality of your sample before using it in downstream applications, bringing you one step closer to discovery. With contaminant analysis, sample information alerts and on-demand technical support, the Acclaro technology brings a new level of confidence in results, making NanoDrop One the ideal UV-Vis spectrophotometer for life science researchers.





Pipette. Measure. Know.

Expect NanoDrop reliability and enhanced performance with these NanoDrop One advantages:

Fast and easy evaluation of nucleic acids and proteins with Auto-Measure and pre-programmed applications

Modern standalone design with local control and high-resolution touchscreen interface saves bench space

Accurate measurements up to 27,500 ng/μL (dsDNA) with extended auto-range pathlength technology

No consumables needed— pipette directly onto the pedestal sample-retention system

Enhanced connectivity with data transfer via USB, Ethernet, Bluetooth® and Wi-Fi options; PC software available for data management

Optional cuvette position for measuring dilute solutions and performing temperature sensitive experiments

Know More with Acclaro Sample Intelligence Technology

Make informed decisions on sample suitability for your application. Acclaro technology offers enhanced sample analysis with:

- Contaminant identification and corrected results
- Instant feedback about sample quality with on-demand technical support and guided troubleshooting
- Embedded sensor and digital image analysis that ensures measurement integrity

Add a Cuvette Position

The Thermo Scientific™ NanoDrop™ One^c spectrophotometer adds experimental flexibility and increases the dynamic range. Use cuvettes to measure dilute samples and optical density of bacterial cultures or to perform kinetics experiments. Includes cuvette temperature control and stirring.



Technical Specifications

Instrument Control		Built-in touchscreen
Minimum Sample Volume		1 μL
Limit of Detection	dsDNA	Pedestal: 2.0 ng/μL Cuvette: 0.2 ng/μL
	BSA (IgG)	Pedestal: 0.06 (0.03) mg/mL Cuvette: 0.006 (0.003) mg/mL
Maximum Concentration	dsDNA	Pedestal: 27,500 ng/μL
	BSA (IgG)	Pedestal: 820 (400) mg/mL
Measurement and Data Processing Time		8 seconds
Measurement Repeatability ¹		Typical: 0.002 A (1.0 mm path) or 1%CV, whichever is greater
Wavelength	Range	190-850 nm
	Accuracy	±1 nm
Photometric	Range (10 mm equivalent)	Pedestal: 0-550 A Cuvette: 0-1.5 A
	Accuracy ²	3% at 0.97 A, 302 nm
Resolution (Spectral Bandwidth)		≤1.8 nm (FWHM at Hg 254 nm)
Pathlength		0.030 to 1.0 mm auto-ranging
Light Source		Xenon flash lamp
Detector		2048-element CMOS linear image sensor
Dimensions (W \times D \times H)		$20 \times 25.4 \times 32.3 \text{ cm}$ (8 × 10 × 12.7 in.)
Weight		3.6 kg (7.9 lbs.)
Operating Voltage		12 V (DC)
Power Consumption		Operating: 12–18 W Standby: 5 W
Stirring (cuvette only)		9 speeds
Temperature Control (cuvette only)		37 °C
		- 4000

¹SD of 10 individual measurements at 0.97 A

³ Only available on instruments with Wi-Fi/Bluetooth support



For research use only. Not for diagnostic purposes.

All NanoDrop instruments are approved to CE and UL/CSA.



In the United States:

For customer service, call 1-800-766-7000 To fax an order, use 1-800-926-1166 To order online: www.fishersci.com PS52754_E 10/15M BN0924154

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On-Board Control	Operating System	Android™		
	CPU	Quad Core ARM® Cortex™-A9 Processor		
	Display	7-inch, 1280 × 800 high-definition color display		
	Touchscreen	Multipoint capacitive touch		
	Gesture Recognition	Single point, single point hold, swipe and pinch		
	Glove Compatibility	Compatible with lab gloves		
	Internal Storage	32 GB flash memory		
	Audio	Built-in speaker		
Connectivity	Three USB-A ports, Ethernet, Bluetooth and Wi-Fi ³			
PC Software Requirements	Windows® 7 and 10, 64 bit			
Accessory Support	DYMO® LabelWriter® 450 printer, Bluetooth keyboard, mouse and barcode reader			
Applications Support	Nucleic Acid A260, A260/A280, A260/A230 and Labeled Nucleic Acids; Protein A280 and A205, Protein Pierce 660, Protein Bradford, Protein BCA, Protein Lowry, Labeled Proteins, OD600, Kinetics, UV-Vis, and Custom Methods			
Language Support	Chinese French Germa	an Japanese Korean Polish Spanish English		

Ordering Information

Instruments	Fisher Catalog No.
NanoDrop One spectrophotometer (Pedestal position only)	13400518 ⁴
NanoDrop One ^c spectrophotometer (Pedestal and cuvette positions)	13400519 ⁴
Accessories and Consumables	Fisher Catalog No.
NanoDrop One Productivity kit (Contains: 0.2–2.0 µL pipette, screen wipe, USB device, PR-1 kit, and PV-1 solution)	13400516
NanoDrop One ^c Productivity kit (Contains: 0.2–2.0 µL pipette, screen wipe, USB device, PR-1 kit, PV-1 solution, stir bars, and quartz cuvette)	13400517
DYMO LabelWriter 450 printer with labels	13400520
PR-1 Reconditioning Compound kit	PR1KIT
PV-1 Performance Verification solution	13400515

⁴Wi-Fi model not available in all countries. Please contact your NanoDrop distributor to confirm the correct part number in your region.



 $^{^2\,\}mbox{Absorbance}$ expressed at Abs/mm at 25 °C