NanoDrop Micro-UV/VIS Spectrophotometer

Band: Thermo Scientific

Model: NanoDrop ONE

Custodian: Sirapope Wongniam

Location: K647 Room, 6th Floor, Chaloemprakiet Building, Phyathai Campus

Description:

Thermo Scientific™ NanoDrop™ One Microvolume UV-Vis spectrophotometers quantify and qualify DNA, RNA, and proteins with only 1-2 **μl** in seconds. 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.

Application:

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

Technical Specification:

Instrument Control		Built-in touchscreen
Minimum Sample Volume		1 µL
Limit of Detection	dsDNA	Pedestal: 2.0 ng/µL
	BSA (IgG)	Pedestal: 0.06 (0.03) 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
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 × D × H)		20 × 25.4 × 32.3 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
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
	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® 8.1 and 10, 64 bit

[1] SD of 10 individual measurements at 0.97 A

[2] Absorbance expressed at Abs/mm at 25 °C

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