

Technical Specification for Nano Spectrometer for quantification of Biomolecules.

Item	Make	Model
Nanospectrometer	Thermo Scientific	NanoDrop 2000C

Description	
Compact UV – VIS spectrometer to quantify undiluted nucleic acids at nanolitre volume (<1 μ L) and other biomolecule analysis using standard volumes.	
Optical system	Absorption single-beam photometer with reference beam
Light Source	Xenon flash lamp
Receiver	CMOS photodiode array
Wavelength range	200 nm to 830 nm
Wavelength Selection	Method-dependent, freely selectable
Spectral bandwidth	≤ 4 nm
Wavelength increment	1 nm
Systematic wavelength error	± 1 nm
Random wavelength error	≤ 0.5 nm
Photometric measuring range	0.0 to 3.0 A at 260 nm
Photometric reading accuracy	$\Delta A = 0.001$
Random photometric error	≤ 0.002 at A = 0, ≤ 0.005 (0.5%) at A = 1
Systematic photometric error	± 1 % at A = 1
Methods	<ul style="list-style-type: none"> • Absorbance with one or more wavelengths, scans • Nucleic acids, Proteins, OD 600, dye labeling • Evaluation via factor, standard and calibration curve • Dual wavelength with subtraction and division evaluation
Display	5.7" VGA TFT display /Not required additional Computer
Interfaces	USB master for USB stick; USB slave for connection to PC; Serial RS-232 for thermal printer
Memory	> 100 method programs on the instrument > 1000 results with data, evaluation results and used parameters
Power supply	100 to 240 V $\pm 10\%$ / 50 to 60 Hz $\pm 5\%$
	Instrument should used for Nano drop application.
Supplied Accessories	Compatible power back up, PC with minimum i5 processor and original windows 10 operating system

