



The power of small

1ul SAMPLES

Patented Retention System

8 SAMPLES in 20 SECONDS

Fast Measurement Cycle

NO CUVETTES

Easy Preparation

NO DILUTIONS for DNA/RNA

2 ng/ul - 3700 ng/ul (dsDNA)

NO DILUTIONS for PROTEINS

0.1 mg/ml - 100 mg/ml (BSA)

FULL UV/VIS SPECTRUM

220nm – 750nm

NOVEL TECHNOLOGY

The NanoDrop 8000 Spectrophotometer reads eight 1ul samples in less than 20 seconds, allowing measurement of a 96-well plate of samples in less than 6 minutes. An eight channel pipettor is used to quickly dispense eight samples onto the optical surfaces. Using a patented retention system, sample columns are drawn between the optical fiber surfaces to establish the measurement path. A sample position illuminator makes it easy to keep track of the samples to be measured by lighting up the appropriate wells under a standard microtiter plate. Cleanup simply requires wiping the upper and lower pedestals with an ordinary laboratory wipe.

APPLICATIONS

Nucleic Acids: Concentration and quality measurements without dilution (DNA, RNA, oligos, PCR product, and hybridization probe).

Microarray: Measures nucleic acid probe and dye concentration to determine labeling efficiency (Cy3, Cy5, and Alexa Fluor dyes).

Proteins: Concentration and quality measurements of labeled and unlabeled proteins without dilution. Bradford, BCA, and Lowry assays.

Spectrophotometry: Performs full-spectrum UV/Vis spectrophotometry.

Cell Density: Determines cell density of microbial cultures in suspension.



SPECIFICATIONS

Sample Size: 1 microliter per sample (8 samples)	Measurement Cycle Time: 20 seconds (8samples)
Sample Number: Up to 8 Footprint: 24 cm x 32 cm	Footprint: 24 cm x 32 cm
Path Length: 1 mm (with auto-ranging to 0.2 mm)	Weight 3.4 kg
Light Source: Xenon flash lamp	Sample Pedestal Material of Construction:
Detector Type: 2048-element linear silicon CCD array	303 Stainless steel and quartz fiber:
Wavelength Range: 220-750 nm	Operating Voltage : 12 vdc
Wavelength Accuracy: 1 nm	Operating Power Consumption: 30 W
Wavelength Resolution: 3 nm (FWHM at Hg 546 nm)	Standby Power Consumption: 6W
Absorbance Precision: 0.003 absorbance (1 mm path)	
Absorbance Accuracy: 2% (at 0.76 absorbance at 257 nm)	
Absorbance Range: 0.02-75 (10 mm equivalent absorbance)	
Detection Limit: 2 ng/microliter (dsDNA)	
Maximum Concentration: 3700 ng/microliter (dsDNA)Sample	

