

Genova Nano - 3 in 1 spectrophotometer

Micro-volume, Life Science & Standard Spectrophotometer in one package



This highly anticipated spectrophotometer incorporates Jenway's Microvolume accessory with the dedicated life science measurement modes of the Genova Plus - along with those of a standard spectrophotometer. This makes the Genova Nano Jenway's first 3 in 1 spectrophotometer.

The Genova Nano microvolume spectrophotometer measures small sample volumes as low as 0.5µl with a high degree of accuracy, reproducibility and speed. It has the ability to measure small sample volumes, conserves precious samples, reduces the need for dilutions and eliminates the requirement for cuvettes. Cleaning is quick and simple; wiping the read heads with a microfibre cloth removes all trace of the sample, allowing faster change over between samples and therefore increasing sample throughput.

Key Features

- 3 in 1 spectrophotometer
- Ideal for DNA, RNA and Protein measurements
- Only 0.5µl sample volume required
- Easy and quick to clean
- Detects DNA concentrations as low as 2ng/µl
- Method and result saving to USB memory stick
- 3 year warranty including Xenon lamp

The Accuracy and Precision of the Genova Nano

The Genova Nano is Jenway's first micro-volume spectrophotometer. It has all the features of a life science spectrophotometer including the ability to insert a full variety of accessories, along with micro-volume capability all at a low price point.

Two very important features of micro-volume spectrophotometers are reproducibility and accuracy of results. Jenway have produced an application note to demonstrate how the Genova Nano meets these important requirements.

To summarise a range of tests were performed on eight separate units, the first to demonstrate absorbance accuracy, the second to show absorbance precision and the final to show concentration reproducibility.

In brief the results from these experiments are shown below:

- Absorbance accuracy was shown to be well within the +/-2% accuracy stated on our specification making the Genova Nano more accurate than many market leading competitors who state 3% absorbance accuracy. Additionally there was less than 2% variation between separate Nano units.
- The second test to show the precision of results gained by the Genova Nano show that when taking ten consecutive sample readings the results were highly reproducible with a range of ≤ 0.005 Abs.
- The concentration reproducibility of the Genova Nano is again excellent, showing less than 2 μ g/ml variation when taking ten consecutive readings.

Technical Specification

Parameter	Genova Nano
Wavelength Range	198 to 1000nm
Wavelength Accuracy	± 2 nm
Spectral Bandwidth	5nm
Path Length	0.2 or 0.5mm (auto-ranging)
Absorbance Range	15 to 125A (10mm equivalent)
Absorbance Accuracy	$\pm 2\%$ at 260nm
Absorbance Precision	< 0.005 A between 0 and 1A (at 260nm and 0.5mm)
Maximum Concentration	6,000 ng/ μ l (dsDNA) (at 0.2mm)
Detection Limit	2.0ng/ μ l (dsDNA) (at 0.5mm)
Measurement Time	< 6.5 seconds
Minimum sample Size	0.5 μ l (at 0.2mm), 1.0 μ l (at 0.5mm)
Maximum sample size	5.0 μ l
DNA measurement modes	dsDNA, ssDNA, RNA, Oligonucleotides, 260/ 280, 260/ 230, Variable ratio
Protein measurement modes	Pierce 660, BCA, Bradford, Lowry, Biuret, Direct UV
Sample Pedestal Material	Quartz stainless steel
Light Source	Press to read Xenon lamp
Size (w x d x h), mm	275 x 400 x 220
Weight, kg	7.7