GeneQuant 100 Spectrophotometer

GeneQuant™ 100 (Fig 1) is designed to measure the concentration and purity of nucleic acid and protein samples; and the density of bacterial cell cultures at a broad range of sample volumes. It can be used with a wide variety of cuvettes for sample volumes from 3 µl to 2 ml.

GeneQuant 100 is preprogrammed with a range of preset methods for the convenient quantitation of proteins, nucleic acids, and bacterial cell cultures. In addition, absorbance and concentration measurements can be made at any wavelength providing flexibility for future applications.

GeneQuant 100 Spectrophotometer delivers:

- **Convenience and ease of use:** Calibration curves or ratio measurements are displayed at the touch of a button on the large, easy-to-use graphical display
- **Flexible analytical performance:** You can save up to nine custom methods in a dedicated folder with an option for password protection. Visual inspection of a nucleic acid scan can quickly alert you to the presence of impurities—this is especially useful with RNA samples
- **Fast results:** CCD array optics provide DNA scans in ~ 8 s and typical concentration measurements in < 5 s
- **Choice of data output:** You can print to an integrated printer (optional) or to any suitable PC via a USB cable with Print via Computer (PVC) software (ordered separately)
- **Reliability and robust instrumentation:** Press-to-read feature reduces the amount of time the lamp stays switched on. Optics with no moving parts reduces the incidence of optical misalignment



Fig 1. GeneQuant 100 has a large, easy-to-read display which enables all your results to be viewed simultaneously.

The key features of GeneQuant 100 are summarized in Table 1 below.

Table 1. GeneQuant 100 key features

Feature	Specification
Wavelength range	190-900 nm
Wavelength calibration	Automatic upon switch on
Stored methods	9
Spectral bandwidth	5 nm
Wavelength accuracy	± 2 nm
Wavelength reproducibility	± 0.5 nm
Light source	Long-life stabilized Xenon
Detector	CCD Array
Dimensions	260 × 390 × 100 mm
Weight	4.5 kg
Power requirements	100–240 VAC ± 10%, 50/60 Hz, 50 VA

Applications

Nucleic acids (Fig 2B)

- Concentration and purity of nucleic acids
- Choice of units: µg/ml, ng/µl, µg/µl, pmol/µl, and pmol
- Correct for different cell pathlengths and dilution factors
- UV spectrum (220 to 330 nm) analysis for hybridization, PCR, and sequencing studies or for quantitation of minipreps after isolation by chromatography

Bacterial cell cultures

- Measure OD_{600} prior to harvesting or induction

Proteins (Fig 2C)

- Methods include: Bradford, BCA , Lowry, Biuret, and direct UV measurement
- Choice of line fit
- Run up to 27 standards (including replicates)

Concentration measurements

- Concentration may be measured using a factor or single-point calibration at any wavelength

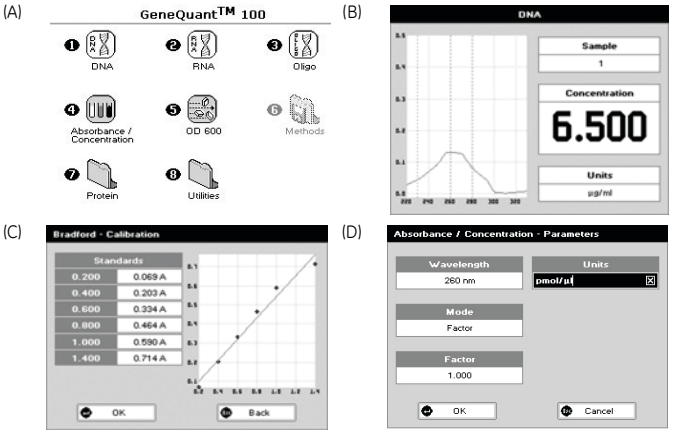


Fig 2. GeneQuant 100 screenshots showing; (A) Simple interface for easy selection of applications; (B) A spectral scan of a nucleic acid sample; (C) Bradford calibration and (D) absorbance parameters

Ordering information

Product	Code
GeneQuant 100 Classic	28-9182-04
GeneQuant 100 Classic with printer	28-9182-05
Accessories	
PVC software for GeneQuant 100	28-9231-88
Quartz cells; Standard rectangular with lid; 2000-2500 µl working volume	80-2002-58
Quartz cells; Semi micro with lid; > 750 µl working volume	80-2002-77
Quartz cells; Ultra-microcell 10 mm pathlength; > 70 µl working volume	80-2103-69
Quartz cells; Ultra-microcell 5 mm pathlength (fill volume 7µl)	80-2103-68
Capillary Cell; Capillary cell with 100 capillaries; > 3 µl working volume	80-2120-19
Capillary Cell; Spare capillaries (100); > 3 µl working volume	80-2104-67

For contact information for your local office, please visit, www.gelifesciences.com/contact

www.gelifesciences.com/spectros

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