

BOECO NANOLIFE LIFE SCIENCE SPECTROPHOTOMETER

dedicated to Nucleic Acid and Protein Analysis.

- ▶ Easy sample handling
- ▶ Just 2µl sample Volume
- ▶ No carry-over
- ▶ No contamination
- ▶ No cleaning required
- ▶ Re-use sample
- ▶ Budget or RNase free tips
- ▶ Same procedure for all samples

The BOECO NANOLIFE has been developed for the routine laboratory analysis of nucleic acids and proteins. With its specially developed through-the-tip measurement technology, your precious samples will never leave the pipette tip – speeding up analysis and protecting your sample.

Using the latest fibre-optic coupled CCD Array spectrophotometer no sample chamber, pedestal or cover is required. The light source and detector are effectively brought right up to your pipette tip. No other analysis method is quicker or easier.

BOECO Gene pipette tips are made from a polymer that will transmit UV light down to 230nm, making them ideal for DNA and RNA analysis. Their 1mm path length and the small illumination area required by the fibre-optics enable sample volumes as small as 2µl to be measured.

The disposable pipette tips are all that comes into contact with your sample, so there is no need for cleaning and no risk of carry-over or contamination. Where samples need to be retained, RNase free tips should be used; while a standard 10mm cuvette holder can also be fitted when required.

Intuitive Operation

The fast, two second measurement cycle for nucleic acids returns a wavelength scan as well as the sample's purity ratio and its concentration. Measurements are automatically blocked until a Blank has been measured and accepted to ensure errors cannot be made.

Protein measurements using the Direct UV, Bradford and Lowry methodologies are all carried out in a similar manner ensuring user familiarity and a shortened learning curve. The settings can also be modified to work with alternative protein methodologies.

Secure multi-user operation

Free use as a guest is possible or individual users can log on using a password for secure access to their own projects and results. Every sample has an individual ID and can also have a user-entered name for easy identification. All results are stored automatically with this information along with the measurement date and time. A designated administrator can create new users as well as deleting old ones

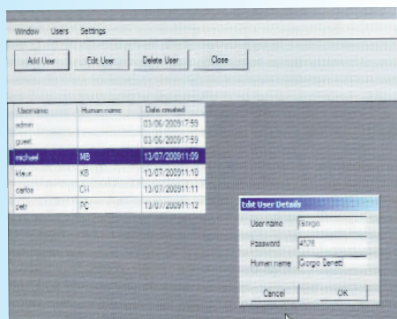
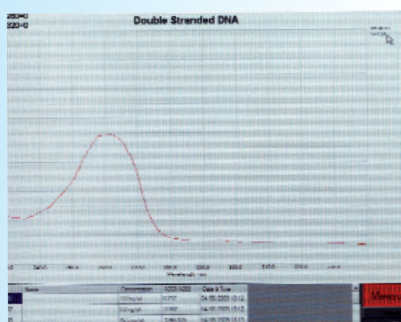
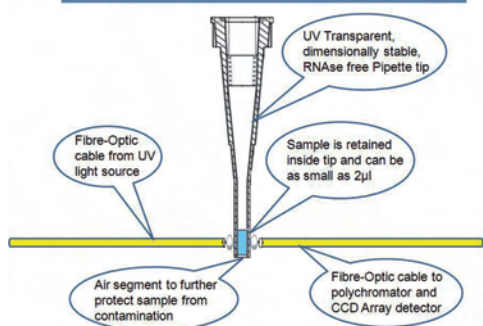
Microarray and General UV/Vis Measurements

The Microarray mode is designed to report the absorbance, dye concentration and ratio of dye to base at two chosen wavelengths. Again, in just a few seconds, a full scan across the wavelengths of interest is displayed along with the results.

BOECO NANOLIFE can also be used as a scanning, UV/Visible spectrophotometer reporting absorbance values across the full wavelength range. The cursor can be used to read specific values from the scan while results can be overlaid to compare different spectra.



Through-the-Tip Measurement Technology



Instrument Specification:

| | |
|------------------------|--|
| Path Length: | 1 mm (or 10 mm with optional cuvette holder) |
| Sample Volume: | Typically 2 μ l |
| Lamp: | Pulsed Xenon (press-to read) |
| Detector Type: | CCD Array |
| Photometric Linearity: | < 1 % |
| Photometric Range: | - 0,2 - 2 A.U. |
| Wavelength Range: | 230 to 850 nm |
| Accuracy: | 1nm |
| Spectral Bandwidth: | 3nm |
| Absorbance Precision: | 0.003 A |
| Detection Limit (DNA): | ~ 3ng/ μ l |
| Detection Limit (BSA): | ~ 0,1mg/ml |
| Read Time: | 2 seconds |
| PC Control: | USB port |
| Software: | PC format |
| Dimension: | 16 x 30 x 12 cm |
| Weight: | 2kg |

**Minimum Computer Requirements:**

Microsoft XP (service pack 2) or Vista
 512 Mb RAM
 200 Mb free Disk space
 2.8 Ghz Pentium 4 preferred or 1.6 Ghz single or Dual core DirectX 9
 Compatible graphics card with 64 Mb of on-board RAM (e.g. Nvidia 5900) One dedicated USB 2 Port (Not a internal or external hub)

| Code | Description |
|-------------|---|
| BOE 8635000 | NANOLIFE Ultraviolet enhanced (UV+) Spectrophotometer, for Life Science applications with integral Xenon flash lamp. PC driven with dedicated software for DNA/RNA and protein analysis supplied with micro-sampling accessory for samples down to 2 μ l. BOECO Electronic pipette 0,2-10 μ l with a box of 96 RNase free disposable tips. USB2 cable and software to run under Windows XP, with external power supply for use on 100 to 240 V, 50/60Hz |

Accessories

| Code | Description |
|-------------|---|
| BOE 8635001 | Cuvette holder 10 mm (1 cm) path length cuvette holder, with 180° path for Absorbance and %T measurements |
| BOE 8635002 | BOECO Gene RNase free UV transmissive Pipette tips, box of 96 |

