

- ▶ **Pre-programmed for DNA Analysis**
- ▶ **DNA Purity Scan**
- ▶ **Established Protein Methods Pre-Loaded**
- ▶ **Standard UV/vis Spectrophotometer Functions**

The BOECO S-30 has been designed specifically for the scientist whose primary interest is the study of DNA and Proteins. Optimised for low volume analysis, the BOECO S-30 is capable of determining DNA levels as low as 70ng with samples as low as 50ul using special cuvettes and the micro-cuvette holder.

All routinely used DNA calculations are pre-programmed into BOECO S-30. It will automatically calculate purity ratios at 260/280nm or 260/230nm both with an optional background correction wavelength (default at 320nm).

Concentrations of ssDNA, dsDNA, RNA and Oligonucleotides are clearly displayed on the large multi-function LCD display. In addition a 100nm purity scan may be run to clearly show the status of any samples.

The on-board software enables all the common protein measurement methodologies to be run directly with the minimum set-up time. Included are the Bradford, Biuret, BCA, Lowry, Bicinchononic and direct UV methods, standard settings can be used immediately or modified and stored for future use.

Where BOECO S-30 is used in a multi-user or unskilled user environment a Supervisor Security mode can be activated which looks all the set-up options without the entry of a pin code.

As well as these general life science applications BOECO S-30 can also be used as a standard UV/Vis spectrophotometer with Absorbance and Transmission readings being given across the wavelength range from 198 to 1000nm.

#### Instrument Specifications:

##### Transmittance

|                       |                         |
|-----------------------|-------------------------|
| Range:                | 0 to 199.9%             |
| Resolution:           | 0.1%                    |
| Stray light           | <0.5% @ 340nm and 220nm |
| Photometric accuracy: | ±1%                     |

##### Absorbance

|                        |                                    |
|------------------------|------------------------------------|
| Range:-                | 0.300 to 1.999A                    |
| Resolution:            | 0.001A                             |
| Photometric stability: | <0.002A Hr after 30 minute warm up |
| Photometric noise:     | <0.001A @ 0A @ 400nm               |

##### Concentration

|             |   |
|-------------|---|
| Range:      | -300 to 9999  |
| Resolution: | 1, 0.1, 0.01 or 0.001   |
| Units:      | ppm, mg/l, g/l, M, %, µg/l, µg/ml, mg/ml, ng/ml or blank(mode specific) |

##### Wavelength

|                        |   |
|------------------------|---|
| Range:                 | 198 to 1000nm   |
| Resolution:            | 1nm   |
| Accuracy:              | ±2nm  |
| Repeatability:         | ±0.5nm  |
| Bandwidth:             | 5nm typical @ 270nm<br>(8nm over full wavelength range) |
| Factor:                | 0 to 199.9, 1000 to 9999                                |
| Readout:Custom         | LCD Graphics  |
| Outputs:               | Analogue (0 to 1.999V d.c.) / RS232 serial port         |
| Light source:          | Xenon flash lamp module                                 |
| Operating Temperature: | 5°C to 40°C   |
| Maximum                | RH:80%  |
| Input voltage:         | 115/230V a.c. -20% +10% 50/60Hz                         |
| Input power:           | <50W  |
| Size:                  | 365(w)x272(d)x160(h) mm                                 |
| Weight:                | 6kg   |



| Code        | Description  |
|-------------|--|
| BOE 8636001 | Model S-30 dedicated Spectrophotometer, for DNA/RNA oligonucleotide and protein analysis, supplied with mains lead, 8 x 300µl UV plastic cuvetes, cell holder and instruction manual, for use on 230 V, 50/60 Hz |
| BOE 8636031 | Model S-30 dedicated Spectrophotometer, for DNA/RNA oligonucleotide and protein analysis, supplied with mains lead, 8 x 300µl UV plastic cuvetes, cell holder and instruction manual, for use on 110 V / 60 Hz   |