



# SCANNING UV VISIBLE SPECTROPHOTOMETER BSSNU-103

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We combine ease of use with reliability for your routine analysis and research applications. Our product offers the measurement range of 190-1100nm at bandwidth of 1.8nm/4nm which provides better performance and increases lab productivity. Its affordable price and availability of optional accessories make it a versatile addition to your lab. Used in Ideal for life science, QA, pharmaceuticals, clinical, environmental and general quality control applications..

## BSSNU-103 SCANNING UV VISIBLE SPECTROPHOTOMETER



Wavelength range: 190nm-1100nm

Optical System: Double beam optical system

Czerny-Turner diffraction monochromator having 1200 lines/mm grating

Bandwidth: 1.8nm/4nm

Detector: Silicon Photodiode

Wide Measurement Range with ultra-low Stray Light at highest Resolution: With its ultra-low stray light ( $\leq 0.05\%T$  (220nm, 340nm)) is achieved at wavelength range of 190 - 1100 nm

Multi-wavelength pinpoint test for simultaneous testing of up to 30 wavelengths

Flexibility with various sample size: A wide range of standard cuvettes can be use based on the sensitivity or sample volume requirements.

Sophisticated and simplified sample analysis software: The Sample analysis software deliver scanning, fixed wavelength analysis, quantitative analysis, data collection, storage, export, and reporting.

With additional feature of an easy access USB port available in the unit, which enables results to be stored directly to a USB memory stick for easy transfer of data.

USB data interface with online PC software ensures powerful function and data processing capabilities

Automatic 4-position cell holder and optional 7-position or 16-position cell holder

Variety of optional accessories suitable for different applications including reflection sample holder, solid sample holder, water bath and auto sampler

## SPECIFICATIONS

| Model                    | BSSNU-103                           |
|--------------------------|-------------------------------------|
| Wavelength Range         | 190-1100 nm                         |
| Wavelength Accuracy      | $\pm 0.3$ nm                        |
| Wavelength Repeatability | 0.2 nm                              |
| Spectral Bandwidth       | 1.8 nm                              |
| Photometric Range        | 0-200 %T, -0.3 - 3.0 A, 0-9999 C    |
| Photometric Accuracy     | $\pm 0.3\%T$ or $\pm 0.003 A$ @ 1A  |
| Stability                | $\pm 0.0008 A/h$ @ 500 nm           |
| Baseline Flatness        | $\pm 0.0015 A$                      |
| Scan Speed               | Hi, Med., Low, Max 3000 nm/min      |
| Stray Light              | 0.05 %T @ 220 nm, 360 nm            |
| Light Source             | Tungsten and Deuterium Lamp         |
| Optical System           | Single Beam , Grating 1200 lines/mm |
| Software                 | PC Software                         |
| Gross Dimension (W/D/H)  | 579x428x198 mm                      |
| Display                  | 5 inches LCD (320*240 dots)         |
| Weight (Net/Gross)       | 20 kg                               |

|              |                       |
|--------------|-----------------------|
| Power Supply | AC110V/220V 50Hz/60Hz |
|--------------|-----------------------|

## OPTIONAL ACCESSORIES

| Accessory Code | Name               | Description                                                                            | Unit  | Light Path (mm) |
|----------------|--------------------|----------------------------------------------------------------------------------------|-------|-----------------|
| 3000806007     | Holder             | 4-cell holder for up to 50mm square cuvette                                            |       |                 |
| 3000806008     | Holder             | 4-cell holder for up to 100mm square cuvette                                           |       |                 |
| 3000806009     | Holder             | Long path single cell holder for 100mm                                                 |       |                 |
| 3000806010     | Holder             | Single cell holder for 10mm square Cuvette                                             |       |                 |
| 3000806011     | Holder             | Cylindrical cell holder(Φ16mm)                                                         |       |                 |
| 3000806019     | Other              | 5° reflectance meachment attachment (minimum sample:20x20mm ;central beam height:50mm) | /1pc  |                 |
| 3000806020     | Lamp               | 6v10w halogen lamp                                                                     | /1pc  |                 |
| 3000806021     | Lamp               | 12v20w halogen lamp (phillips)                                                         |       |                 |
| 3000806022     | Lamp               | 12v20w halogen lamp (osram)                                                            |       |                 |
| 3000806023     | Lamp               | Milas deuterium lamp; 10v;300ma; 30w                                                   |       |                 |
| 3000806024     | Lamp               | Deuterium lamp                                                                         | /1pc  |                 |
| 3000806025     | Thermo printer     |                                                                                        |       |                 |
| 3000806026     | Stylus printer     |                                                                                        |       |                 |
| 3000806027     | Cuvettes           | Square cuvettes; glass 10mm                                                            | /4pcs |                 |
| 3000806028     | Cuvettes           | Square cuvettes; glass 20mm                                                            | /4pcs |                 |
| 3000806029     | Cuvettes           | Square cuvettes; glass 30mm                                                            | /4pcs |                 |
| 3000806030     | Cuvettes           | Square cuvettes; glass 50mm                                                            | /4pcs |                 |
| 3000806031     | Cuvettes           | Square cuvettes; glass 100mm                                                           | /4pcs |                 |
| 3000806032     | Cuvettes           | Square cuvettes; quartz 10mm                                                           | /2pcs |                 |
| 3000806033     | Cuvettes           | Square cuvettes; quartz 20mm                                                           | /2pcs |                 |
| 3000806034     | Cuvettes           | 500ul micro cell ; central-beam height:8.5mm;15mm; 2x10x45mm; quartz                   | /1pc  |                 |
| 3000806035     | Cuvettes           | 1000ul micro cell; central-beam height:8.5mm;15mm; 3x10x45mm; quartz                   | /1pc  |                 |
| 3000806036     | Software           | Dongles for 31.61 application software ; (UV analyst software)                         | /1set |                 |
| 3000806037     | Software           | Software (m.wave basic)                                                                | /1set |                 |
| 3000806038     | Software           | Software                                                                               | /1set |                 |
| 3000806039     | Software           | Advanced PC window software (m.wave professional)                                      | /1set |                 |
| 3000806040     | Software           | Software (m.wave basic)                                                                | /1set |                 |
| 3000806041     | Holder             | Cell holder for micro cells; Central beam height: 15mm                                 |       |                 |
| 3000806042     | USB connector line | USB connector line (only for m.wave basic)                                             | /1pc  |                 |
| 3000806043     | Quartz Cuvette     | Cell; 100ul; 1pcs; central beam height: 15mm                                           |       | 10              |
| 3000806044     | Quartz Cuvette     | Cell; 200ul; 1pcs;central beam height:15mm                                             |       | 10              |
| 3000806045     | Cuvette            | Flow cell; 5 mm; optical glass; 1pcs;central beam height:15mm; I5xw2xh5mm              |       |                 |
| 3000806046     | Cuvette            | Flow cell; 10 mm; optical glass; 1pcs;central beam height:15mm; I10xw2xh5mm            |       |                 |
| 3000806047     | Cuvette            | Flow cell; 20 mm; optical glass; 1pcs;central beam height:15mm;I20xw2xh5mm             |       |                 |
| 3000806048     | Cuvette            | Flow cell; 30 mm; optical glass; 1pcs;central beam height:15mm; I30xw2xh5mm            |       |                 |
| 3000806049     | Cuvette            | Flow cell; 5 mm; quartz; 1pcs; central beam height:15mm; I5xw2xh5mm                    |       |                 |
| 3000806050     | Cuvette            | Flow cell; 20 mm; quartz; 1pcs; central beam height:15mm; I20xw2xh5mm                  |       |                 |

|            |                 |                                                                                          |       |   |
|------------|-----------------|------------------------------------------------------------------------------------------|-------|---|
| 3001807006 | Other           | A-102 peltier system; constant-temperature system; holder beam height:15mm               |       |   |
| 3000806052 | Other           | A-100 peltier/sipper system; constant-temperature sipper system; holder beam height:15mm |       |   |
| 3001808008 | Holder          | 4-cell holder for 10mm to 50mm square cuvette                                            |       |   |
| 3001806009 | Holder          | 4-cell holder for up to 100mm square cuvette                                             |       |   |
| 3000806054 | Holder          | 10mm water-jacketed 4-cell holder                                                        |       |   |
| 3000806055 | Holder          | Test tube holder( $\Phi$ 8- $\Phi$ 22mm)                                                 |       |   |
| 3000806056 | Holder          | Solid sample holder( $\delta$ 1.5mm-3mm; 1-position)                                     |       |   |
| 3000806057 | Silicon tube    | Silicon tube; 1bag=1pair(1m+1m)                                                          | /1bag |   |
| 3000806060 | Glass cuvettes  | Square cuvettes; volume:900ul                                                            |       | 2 |
| 3000806061 | Glass cuvettes  | Square cuvettes; volume:450ul                                                            |       | 1 |
| 3000806062 | Quartz cuvettes | Square cuvettes; volume:1800ul                                                           | /2pcs | 5 |



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