BioLAB

PRODUCT CATALOG

SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER
BSSBV-304

CE ISO9001 CERTIFIED

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SINGLE BEAM UV VISIBLE SPECTROPHOTOMETER BSSBV-304

SPECTROPHOTOMETER

Simple-to-use instruments with advanced performance, its stray light is only 0.05%T. The local stand-alone software provides functions of Photometry, Quantitative Test, Kinetics and System Utilities functions.

Large LCD screen (128*64 Dots).
The system can also save the test results, a total of 200 groups of data and 200 standard curves can be saved in the RAM. Convenient for check and reload.
Data can be restored after a sudden power cut.
Auto setting wavelength.
Tungsten lamp & Deuterium lamp can be turned on/off individually to extend lifetime.
The optional application software M. Wave Professional provides complete control of the spectrophotometer from a computer through the built-in USB port. It can expand to the following functions: Quantitative, Kinetics, Wavelength Scan, Multi-wavelength & DNA/Protein Test.
Pre-aligned design makes it convenient to change lamps.

SPECIFICATIONS

Model	BSSBV-304
Wavelength Range	320-1100 nm
Spectral Bandwidth	2 nm
Optical System	Single Beam, Grating 1200 lines/mm
Wavelength Accuracy	±0.5 nm
Wavelength Repeatability	0.3 nm
Photometric Accuracy	±0.5%T or ±0.004A @ 1A
Photometric Range	0-200%T,-0.3-3 A, 0-9999 Conc
Stray Light	0.05%T @ 360 nm
Stability	±0.001 A/h @ 500 nm
Display	Graphic LCD (128*64 dots)
Keyboard	22 Membrane keypad
Standard Cell Holder	Standard 10 mm pathlength cuvette
Sample Compartment	4-position 10 mm cell changer
Light Source	Tungsten lamp
Output	USB Port & Parallel Port (Printer)
Power Requirement	AC 110/220 V 50/60 Hz
Dimensions (LxWxH)	470x373x187 mm
Weight	12 kg
Alt Name	Spectrophotometer

ACCESSORIES FOR PURCHASE

No	Name
1	Micro Cell Holder (Beam height: 15mm)
2	8-Position Auto Cell Changer
3	4-Cell Holder for 10mm SQU.cuvette
4	4-Cell Holder for 50mm SQU.cuvette
5	4-Cell Holder for 100mm SQU.cuvette
6	Square Cuvettes Glass :10 mm

7	20 mm
8	30 mm
9	50 mm
10	100 mm
11	Square cuvettes Quartz:10 mm
12	20 mm
13	30 mm
14	50 mm
15	100 mm
16	Micro cell, Quartz (Beam height: 15mm) 100UL
17	200UL
18	500UL
19	Sipper System
20	Constant-Temperature System
21	Constant-Temperature Sipper System
22	Test Tube Holder
23	Cylindrical Cell Holder
24	Solid Sample Holder (Single Cell)
25	Water-Jacketed Cell Holder
26	10mm Water-Jacketed 4-Cell Holder
27	Milas Deuterium Lamp
28	Halogen Lamp(Philips)
29	Halogen Lamp(Philips)
30	Halogen Lamp(Osram)
31	Self Masking Cont. Flowthrough G.Cell (Beam height: 15mm) 5mm
32	10mm
33	20mm
34	30mm
35	Self Masking Cont. Flowthrough Q. Cell (Beam height: 15mm) 5mm
36	10mm
37	20mm
38	30mm
39	Thermal Printer


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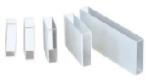
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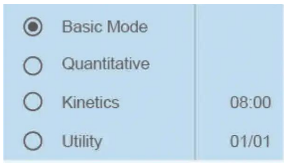
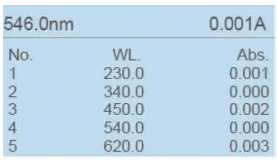
FEATURES

Large LCD screen (128*64 Dots).
The system can also save the test results, a total of 200 groups of data and 200 standard curves can be saved in the RAM.
Convenient for check and reload.
Data can be restored after a sudden power cut.
Auto setting wavelength.
Tungsten lamp & Deuterium lamp can be turned on/off individually to extend lifetime.
The optional application software M. Wave Professional provides complete control of the spectrophotometer from a computer through the built-in USB port. It can expand to the following functions: Quantitative, Kinetics, Wavelength Scan, Multi-wavelength & DNA/Protein Test.
Pre-aligned design makes it convenient to change lamps.
Large sample compartment; it can accommodate 5-100 mm path length cuvettes with optional holders. A variety of optional accessories are available.

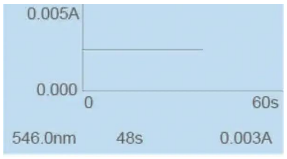
Main Menu:
Move the cursor on the function menu you want, then press ENTER key to go into the corresponding interface.



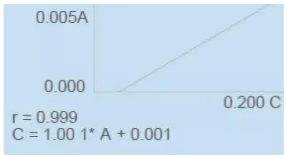
Basic Mode:
Absorbance, Transmittance or Concentration measurements.
It can display and save 200 groups of data, 5 groups per screen.



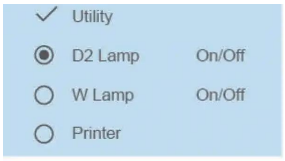
Kinetics:
This mode may be used for time course scanning or reaction rate calculations. Abs. VS Time graphs are displayed on the screen in real time. It can record 1000 data.



Quantitative:
Standard Curve
At most, 9 standard samples can be used to establish a standard curve. The curve and its equation will be displayed on the screen simultaneously. You can measure your unknown concentration solutions by the curve. Total 200 curves can be saved in the RAM.
Coefficient Method
If you have known the coefficient K*a + b is known, you can input them directly by the button, and then test your unknown solutions.



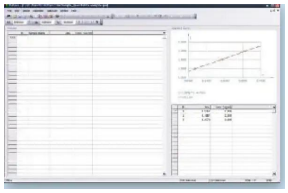
System Utilities:
Lamp management, time & date set, obtain dark current, calibrate wavelength, default system, and some other system functions.



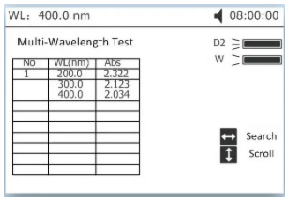
M. Wave Professional PC-Control Software:

Brief Introduction:
M. Wave Professional application software is based Microsoft Windows, the instrument can be controlled by PC software through the built-in USB communication port, which makes the UV/Vis Series with more functions and easy to control.

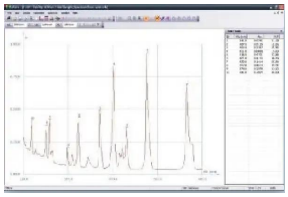
Quantitative:
Use up to 20 standards to establish a standard curve. Three methods for fitting a curve:
Linear fit.
Linear through zero.
Square fit.



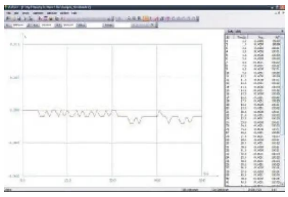
Multi-wavelength Test:
You can set up to 20 wavelengths to measure a sample.



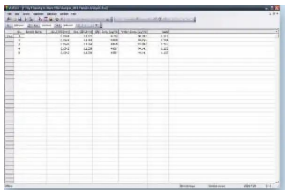
Wavelength Scan:
Automatically records peaks and valleys.
The quantity of the curves stored is unlimited.
Post-run manipulation and processing includes:
Re-scaling axes, curve.
Smoothing, combination, zooming, overlap.1 to 4 derivatives.



Kinetics:
The Kinetics mode may be used for scanning time courses or reacting rate calculations. Abs. Vs. Time graphs are displayed.



DNA/Protein Test:
Optional two formulas:
DNA Concentration = 62.9A260 - 36.0A280 or 49.1A260 - 75.8A230
You can also enter other wavelengths and factors to calculate.



Functions:
Photometry
Absorbance, Transmittance or Energy measurements. It can display and save 200 groups of data, 5 groups per screen.
Quantitative
Standard Curve
At most, 9 standard samples can be used to establish a standard curve. The curve and its equation will be displayed on the screen simultaneously. You can measure your unknown concentration solutions by the curve.
A total of 200 curves can be saved in the Memory.
Coefficient Method
If the coefficient k & b in the formula C = k*a + b is known, you can input them directly by the button, and then test your unknown solutions.
Kinetics
This mode may be used for time course scanning or reaction rate calculations. Abs. VS Time graphs are displayed on the screen in real time. It can record 1000 data.
System Utilities
Lamp management, time & date set, obtain dark current, calibrate wavelength, default system, and some other system functions.

Biolab Scientific Ltd.
Trillium Executive Center, East Tower, 675 Cochrane Dr, Markham, Ontario L3R 0B8, Canada
Email: info@biolabscientific.com | Website: www.biolabscientific.com