BioLAB

PRODUCT CATALOG

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER

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DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BFU1H4 BFU1H5

COLOR SCREEN SPECTROPHOTOMETER

1. 7 inches color screen and windows graphic interface.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multiwavelength test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
5. Socket type deuterium and tungsten lamps can make lamps switching without optics debugging and are easy to be replaced.
6. Large sample chamber can accommodate 5-100mm cuvettes of all kinds.

SPECIFICATIONS

Model	BFU1H4	BFU1H5
Optical System	Double Beam, Grating 1200 lines/mm	
Wavelength Range	190-1100 nm	
Spectral Bandwidth	2nm	1nm
Wavelength Accuracy	±0.1nm @656.1nm	
Wavelength Repeatability	<=0.1nm	
Photometric Accuracy	0.2%T(0~100%T), ±0.002A(0-0.5A), ±0.004A(0.5-1A)	
Photometric Repeatability	≤0.15%T (0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)	
Photometric Range	0-200%T, -0.3~3A, 0-9999C	
Stray Light	<=0.03%T@220nm, 360nm	
Stability	±0.0003A/h @500 nm	
Baseline Flatness	±0.001A	±0.002A
Noise	0.0005A@500nm	
Work Mode	T, A, C, E	
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)	
Wavelength Setting	Auto	
Display	7 inches Color Screen	
Light Source	Deuterium & Tungsten lamp	
Detector	Imported Silicon Photodiode	
Cuvette Holder	10mm single hole cell holder	
Output	USB drive, USB host, RS232	
Power	AC 110-220V 50-60Hz	
Shipping Size	880*690*520mm	
Gross Weight	45kg	
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual, PC software	
Alt Name	Color Screen Spectrophotometer	

FEATURES

1. 7 inches color screen and windows graphic interface.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multiwavelength
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7. Extensive accessories are optional, such as auto 8-cell holder, film holder, tube rack, peltier/sipper system, integrating sphere, reflection accessory, 21 CFR compliant software, etc.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BFU1L1 BFU1L2 BFU1L3

DOUBLE BEAM SPECTROPHOTOMETER

1. Large 320*240 dots highlighted LCD.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test,
multi-wavelength test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing,
analysis and storage.
5. Socket type deuterium and tungsten lamps can make lamps switching without optics debugging and are easy to be replaced.
6. Large sample chamber can accommodate 5-100mm cuvettes of all kinds.

SPECIFICATIONS

Model	BFU1L1	BFU1L2	BFU1L3
Optical System	Double Beam, Grating 1200 lines/mm		
Wavelength Range	190-1100 nm		
Spectral Bandwidth	2nm	1nm	0.5/1/2/4/5nm
Wavelength Accuracy	±0.1nm@656.1nm, ±0.3nm@all		
Wavelength Repeatability	<=0.1nm		
Photometric Accuracy	0.2%T(0~100%T), ±0.002A(0-0.5A), ±0.004A(0.5-1A)		
Photometric Repeatability	≤0.15%T (0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)		
Photometric Range	0-200%T, -0.3~3A, 0-9999C		
Stray Light	<=0.03%T@220nm, 360nm		
Stability	0.0005A/h@500nm		
Baseline Flatness	±0.002A		±0.001A
Noise	0.0005A@500nm		
Work Mode	T, A, C, E		
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)		
Wavelength Setting	Auto		
Display	320*240 LCD		
Light Source	Deuterium & Tungsten lamp		

Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB, RS232
Power	AC 110-220V 50-60Hz
Shipping Size	810*660*390mm
Gross Weight	27kg
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual, PC software
Alt Name	Double Beam Spectrophotometer

FEATURES

1. Large 320*240 dots highlighted LCD.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
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7. Extensive accessories are optional, such as auto 8-cell holder, film holder, tube rack, peltier/sipper system, integrating sphere, reflection accessory, 21 CFR compliant software, etc.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BFU1G4 BFU1G5 BFU1G6

COLOR SCREEN SPECTROPHOTOMETER

1. 7 inches color screen and windows graphic interface.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multiwavelength test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
5. Socket type deuterium and tungsten lamps can make lamps switching without optics debugging and are easy to be replaced.
6. Large sample chamber can accommodate 5-100mm cuvettes of all kinds.

SPECIFICATIONS

Model	BFU1G4	BFU1G5	BFU1G6
Optical System	Double Beam, Grating 1200 lines/mm		
Wavelength Range	190-1100 nm		
Spectral Bandwidth	2nm	1nm	0.5/1/2/4/5nm
Wavelength Accuracy	±0.1nm @656.1nm		±0.3nm @all
Wavelength Repeatability	<=0.1nm		
Photometric Accuracy	0.2%T(0~100%T), ±0.002A(0-0.5A), ±0.004A(0.5-1A)		
Photometric Repeatability	≤0.15%T (0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)		
Photometric Range	0-200%T, -0.3~3A, 0-9999C		
Stray Light	<=0.03%T@220nm, 360nm		

Stability	±0.0003A/h @500 nm		
Baseline Flatness	±0.001A	±0.002A	±0.001A
Noise	0.0005A@500nm		
Work Mode	T, A, C, E		
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)		
Wavelength Setting	Auto		
Display	7 inches Color Screen		
Light Source	Deuterium & Tungsten lamp		
Detector	Imported Silicon Photodiode		
Cuvette Holder	10mm single hole cell holder		
Output	USB drive, USB host, RS232		
Power	AC 110-220V 50-60Hz		
Shipping Size	880*690*520mm		
Gross Weight	45kg		
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual, PC software		
Alt Name	Color Screen Spectrophotometer		

FEATURES

1. 7 inches color screen and windows graphic interface.
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test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
5. Socket type deuterium and tungsten lamps can make lamps switching without optics debugging and are easy to be replaced.
6. Large sample chamber can accommodate 5-100mm cuvettes of all kinds.
7. Extensive accessories are optional, such as auto 8-cell holder, film holder, tube rack, peltier/sipper system, integrating sphere, reflection accessory, built-in printer, 21 CFR compliant software, etc.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BGF1H4 BGF1H5

UV-VIS SPECTROPHOTOMETER

Double Beam UV Visible Spectrophotometer BGF1H4
Double beam optical system.
The Main unit and PC software can independently implement functions of Quantitative;Kinetics;Wavelength Scan; Multi Wavelength; DNA/Protein and Data Printing,PC software can complete the function of data processing.
Suspended posture optical system design, strengthen and thicken the bottom plate to eliminate the vibration or transformation's impact on the optical system.
24-bit high speed and high precision A/D conversion, and improve the sensitivity of the instrument.
The core components are imported from Germany and Japan.
Optical system based on optical system, based on top structure design, top technological requirements and top raw materials.

SPECIFICATIONS

Model	BGF1H4	BGF1H5
Wavelength Range	190-1100 nm	
Bandwidth	1.8 nm	0.5/1/2/4/5 nm
Wavelength Accuracy	±0.1nm (D2 656.1nm); ±0.3nm (Full range)	
Wavelength Reproducibility	≤0.1 nm	
Photometric Accuracy	±0.2 %T	
Photometric Repeatability	≤0.15 %T	
Straylight	≤0.03 %T	
Stability	±0.0004 A/h (at 500 nm)	
Baseline Flatness	±0.001 A	
Noise	±0.0005 A	
Photometric Range	0-200%T, -4.0-4.0A, 0-9999C	
Wavelength setting mode	Automatic	
Scanning speed	High/Middle/Low	
Output	USB Port	
Printer port	Parallel Port	
Display	LCD(320*240)	
Light Source	Deuterium Tungsten Halogen Lamp	
Detector	Silicon Photodiode	
Power	220V AC ±10%/50Hz or 110V AC / 60Hz	
Dimension	625x430x210 mm	
Weight	28 kg	
Alt Name	Double-Beam UV-VIS Spectrophotometer	

BGF1H4

BGF1H5

FEATURES BGF1H4

Double beam optical system.
The Main unit and PC software can independently implement functions of Quantitative;Kinetics;Wavelength Scan; Multi Wavelength; DNA/Protein and Data Printing,PC software can complete the function of data processing.
Suspended posture optical system design, strengthen and thicken the bottom plate to eliminate the vibration or transformation's impact on the optical system.
24-bit high speed and high precision A/D conversion, and improve the sensitivity of the instrument.
The core components are imported from Germany and Japan.
Optical system based on optical system, based on top structure design, top technological requirements and top raw materials.
Standard with PC software.

FEATURES BGF1H5

Double- beam optical system.
The Main unit and PC software can independently implement functions of Quantitative;Kinetics;Wavelength Scan; Multi Wavelength; DNA/Protein and Data Printing,PC software can complete the function of data processing.
Suspended posture optical system design, strengthen and thicken the bottom plate to eliminate the vibration or transformation's impact on the optical system.
24-bit high speed and high precision A/D conversion, and improve the sensitivity of the instrument.
0.5/1.0/2.0/4.0/5.0 bandwidth can be adjusted automatically
The core components are imported with original packaging.
Optical system based on optical system, based on top structure design, top technological requirements and top raw materials.
Standard with PC software.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BFU1B5 BFU1B6 BFU1B7

SPECTROPHOTOMETER

1. 11-inch Touch Screen
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, Multiwavelength test, etc
3. Equipped with GLP/GMP functions, including user management, audit tracking, log inquiry, etc.
4. Support real-time sending of data via email and mobile SMS.
5. Adopts 3.0 Bluetooth protocol, with stable transmission and free interconnection within 10 meters.
6. Can be directly connected to laser printers via WiFi and thermal printers via Bluetooth.
7. Extensive accessories are optional, such as auto 5-cell/8-cell holder, film h

SPECIFICATIONS

Model	BFU1B5	BFU1B6	BFU1B7
Optical System	Double Beam, Grating 1200 lines/mm		
Wavelength Range	190-1100 nm		
Spectral Bandwidth	2nm	1nm	0.1/0.2/0.5/1/2/4/5nm
Wavelength Accuracy	±0.1nm@656.1nm, ±0.3nm@all		
Wavelength Repeatability	<=0.1nm		
Photometric Accuracy	±0.2%T(0~100%T), ±0.0005A(0-0.5A), ±0.0008A(0.5-1A)		
Photometric Repeatability	≤0.15%T (0-100%T), 0.0004A(0-0.5A), 0.0006A(0.5-1A)		
Photometric Range	0-400%T, -4~4A		
Resolution	0.00001Abs		

Stray Light	<=0.03%T@220nm, 360nm	
Stability	±0.0001A	
Baseline Flatness	±0.0004A	
Noise	0.0005A@500nm	
Work Mode	T, A, C, E	
Scanning Speed	Hi, Med, Low (Max. 6000nm/min)	
Display	11-inch Touch Screen	
Light Source	Deuterium & Tungsten lamp	
Detector	Imported Silicon Photodiode	
Cuvette Holder	10mm 4-cell holder	10mm single hole cell holder
Output	Cloud connectivity/Email/SMS/Bluetooth/WiFi	
Power	AC 110-220V 50-60Hz	
Shipping Size	810*660*390mm	880*690*520mm
Gross Weight	27kg	45kg
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual	
Alt Name	Double Beam UV Visible Spectrophotometer	

FEATURES

1. 11-inch Touch Screen
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, Multiwavelength
test, etc
3. Equipped with GLP/GMP functions, including user management, audit tracking, log inquiry, etc.
4. Support real-time sending of data via email and mobile SMS.
5. Adopts 3.0 Bluetooth protocol, with stable transmission and free interconnection within 10 meters.
6. Can be directly connected to laser printers via WiFi and thermal printers via Bluetooth.
7. Extensive accessories are optional, such as auto 5-cell/8-cell holder, film holder, tube rack, integrating sphere, reflection accessory, peltier/sipper system, 21 CFR compliant software, etc.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BFU1F4 BFU1F5 BFU1F6

TOUCH SCREEN SPECTROPHOTOMETER

1. 10.1 inches color touch screen and windows graphic interface.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multiwavelength
test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing,
analysis and storage.
5. Socket type deuterium and tungsten lamps can make lamps switching without optics debugging and are easy to be replaced.
6. Large sample chamber can accommodate 5-100mm cuvettes of all kinds.

SPECIFICATIONS

Model	BFU1F4	BFU1F5	BFU1F6
Optical System	Double Beam, Grating 1200 lines/mm		
Wavelength Range	190-1100 nm		

Spectral Bandwidth	2nm	1nm	0.5/1/2/4/5nm
Wavelength Accuracy	±0.1nm@656.1nm, ±0.3nm@all		
Wavelength Repeatability	<=0.1nm		
Photometric Accuracy	0.2%T(0~100%T), ±0.002A(0-0.5A), ±0.004A(0.5-1A)		
Photometric Repeatability	≤0.15%T (0-100%T), 0.001A(0-0.5A), 0.002A(0.5-1A)		
Photometric Range	0-200%T, -0.3~3A, 0-9999C		
Stray Light	<=0.03%T@220nm, 360 nm		
Stability	±0.0003A/h @500 nm		
Baseline Flatness	±0.002A	±0.001A	
Noise	0.0005A@500nm		
Work Mode	T, A, C, E		
Scanning Speed	Hi, Med, Low (Max. 3000 nm/min)		
Wavelength Setting	Auto		
Display	10.1 inches Color Touch Screen		
Light Source	Deuterium & Tungsten lamp		
Detector	Imported Silicon Photodiode		
Cuvette Holder	10mm single hole cell holder		
Output	USB drive, USB host, RS232		
Power	AC 110-220V 50-60Hz		
Shipping Size	810*660*390mm		880*690*520mm
Gross Weight	45kg		
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual , PC software		
Alt Name	Touch Screen Spectrophotometer		

FEATURES

1. 10.1 inches color touch screen and windows graphic interface.
2. Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multiwavelength
test, etc
3. In-house massive memory is capable of saving up to 1024M for test data & working curves.
4. Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
5. Socket type deuterium and tungsten lamps can make lamps switching without optics debugging and are easy to be replaced.
6. Large sample chamber can accommodate 5-100mm cuvettes of all kinds.
7. Extensive accessories are optional, such as auto 8-cell holder, film holder, tube rack, peltier/sipper system, integrating sphere, reflection accessory, built-in printer, 21 CFR compliant software, etc.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BEY1G1 BEY1G2 BEY1G3

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER

• Dual Beam Light Path
Less circuit fluctuation and stray light, higher stability.
• Powerful Stand-alone Operation System
Spectrum scanning, Standard curve, Kinetics, Multi wavelength, DNA/Protein test can be operated
directly on device without PC software.
• Unique Long Light Path Design
520mm long light path greatly improved the wavelength resolution.
• Rigid Structure, 16mm-thick Optical Base
All optical components are fixed on a 16mm thick rigid die-cast aluminum board to promise higher stability and reliability.
• One-button Automatic Calibration System

SPECIFICATIONS

Model	BEY1G1	BEY1G2	BEY1G3
Old Model	BSDBU-202	BSDBU-202-A	BSDBU-202-B
Optical System	Double Beam (1200 Lines/mm Grating)		
Wavelength Range	190-1100 nm		
Bandwidth	1.8 nm	1 nm	0.5 / 1 / 2 / 4 nm
Wavelength Accuracy	±0.1 nm at D2 656.1 nm, ±0.3 nm at all range		
Wavelength Repeatability	0.1 nm		
Photometric Accuracy	±0.2%T (0-100%T)		
Photometric Repeatability	≤0.1%T (0-100%T)		
Photometric Range	-0.3-3A, 0-200%T, 0-9999C		
Stability	≤0.0005A/h at 250 nm, 500 nm		
Stray Light	≤0.03%T at 220 nm, 360 nm		
Output	USB port & Parallel Port		
Display	320*240 Dots LCD		
Light Source	W Lamp & D2 Lamp		
Power Requirements	AC110/220V, 50/60Hz		
Alt Name	Double Beam UV Visible Spectrophotometer		

ACCESSORIES FOR PURCHASE

No	Name	Description	Quantity	Unit
1	1	Spectrophotometer	1	unit
2	2	PC software	1	set
3	3	1cm Glass cuvette	4	pcs
4	4	1cm Quartz cuvette	2	pcs
5	5	Power cord	1	pcs
6	6	User's manual	1	pcs
7	7	Dust cover	1	pcs

FEATURES

• Dual Beam Light Path
Less circuit fluctuation and stray light, higher stability.
• Powerful Stand-alone Operation System
Spectrum scanning, Standard curve, Kinetics, Multi wavelength, DNA/Protein test can be operated directly on device without PC software.
• Unique Long Light Path Design
520mm long light path greatly improved the wavelength resolution.
• Rigid Structure, 16mm-thick Optical Base
All optical components are fixed on a 16mm thick rigid die-cast aluminum board to promise higher stability and reliability.
• One-button Automatic Calibration System
One button auto calibration for baseline, wavelength and dark current to keep device in a good condition.
• 6 inches High-Definition Large LCD Display
Large LCD display, all data and graphs can be shown directly and clearly.
• Easy Data Output by USB/Parallel Port
USB Port: Connect to computer and operate through PC software. (PC software is standard.)
Parallel Port: Connect to Micro Thermo printer to print test data. (Micro Printer is optional.)
• Powerful Software Functions
Spectrum scanning, Standard curves, Kinetics, Multi wavelength scanning, DNA/Protein test can be operated directly on computer.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BHV1E1 BHV1E2 BHV1E3

SPECTROPHOTOMETER
It is an advanced double beam design consisting of 3 models.
The two detectors measure sample and reference respectively and simultaneously for optimizing measurement accuracy.
They provide excellent performance for measurements in the range of 190 to 1100 nm, the memory is 32K. They are suitable for pharmaceutical, biochemical and clinical lab applications as well as routine applications such as quantitative analysis, kinetics, wavelength scan, multiple components and DNA/Protein. PC Windows application software makes these instruments versatile. All instruments provide excellent performance for measurements.

Fixed or variable slits (Bandwidths).
For stand-alone models, all software methods are included as built-in standard; this eliminates the need of software.
Online software upgrading via the internet helps to keep it updated.
Data Download-to-PC software expands the data storage to unlimited.
The stand-alone model has a 5-inch screen and the PC model has UV-Vis Analyst software.
Data can be saved by a USB memory device directly.
Stand-alone models of UV-6 Series have the same functions as UV-3 series; see next page for details.
Brief Introduction:
All methods are included as built-in standard; this eliminates the need for soft

SPECIFICATIONS

Model	BHV1E1	BHV1E2	BHV1E3
Old Model	BSDBU-301	BSDBU-302	
Wavelength Range	190-1100 nm		
Spectral Bandwidth	1.8 nm	1 nm	0.5/1/2/4/5 nm
Optical System	Double Beam, Grating 1200 lines/mm		
Wavelength Accuracy	±0.3 nm		
Wavelength Repeatability	0.2 nm		
Scan Speed	Hi, MED., LOW., MAX. 3000 nm/min		
Photometric Accuracy	±0.3 %T or ±0.003A @1A		

Photometric Range	0-200%T,-0.3-3A
Stray Light	0.04%T @220 nm, 360 nm
Stability	0.0003 A/h @500 nm
Display	5 inches LCD (320x240 dots)
Baseline Flatness	±0.0005 A
Standard Cell Holder	Standard 10 mm single cell holder (2 pcs)
Sample Compartment	Standard 10 mm pathlength cuvette
Light Source	Tungsten & Deuterium lamp (Pre-aligned)
USB Type A Port	USB Type A for USB memory device (Right side)
USB Type B Port	USB Type B for optional computer connectivity (Back)
Output Parallel Port	Parallel port for printer
Power Requirement	AC 110/220 V 50/60 Hz
Dimensions (LxWxH)	589x428x200 mm
Weight	22 kg
Alt Name	Double Beam 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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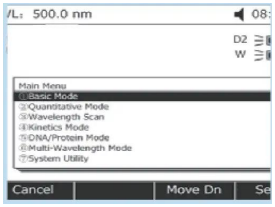
FEATURES

Fixed or variable slits (Bandwidths).
For stand-alone models, all software methods are included as built-in standard; this eliminates the need of software.
Online software upgrading via the internet helps to keep it updated.
Data Download-to-PC software expands the data storage to unlimited.
The stand-alone model has a 5-inch screen and the PC model has UV-Vis Analyst software.
Data can be saved by a USB memory device directly.
Stand-alone models of UV-6 Series have the same functions as UV-3 series; see next page for details.

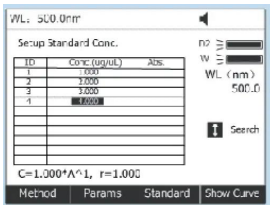
Brief Introduction:
All methods are included as built-in standard; this eliminates the need for software. Online software update via the internet.
The local control software includes functions such as: Photometry, Quantitative, Wavelength Scan, Kinetics, DNA/Protein, Multi-

wavelength Test and System Utilities.



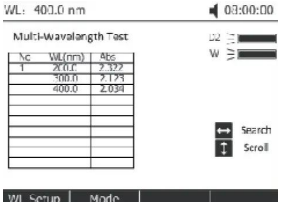
Standard Curve:

Up to 10 standard solutions may be used to establish a calibration equation curve. There is a choice of four methods for fitting curves through the calibration points: Linear fit, Linear fit through zero, square fit and cubic fit.



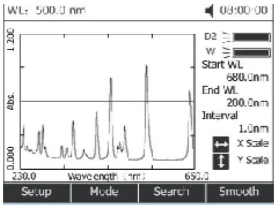
Multi-Wavelength:

Up to 10 wavelengths may be entered, allowing the measurement of multiple wavelengths on a series of samples.



Wavelength Scan:

The Wavelength Scan intervals are 0.1, 0.2, 0.5, 1, 2, 5 nm, and High, Medium and Low scan speeds are available. Scan speeds vary from 100 to 3000 nm/min. Wavelengths are scanned from high to low so that the instrument stands-by at high wavelength. This minimizes the degradation of UV sensitive samples. Precise control of filter and lamp changes means that their effects are not seen on the final scan. Post-run manipulation includes re-scaling axes, curve tracking and peak picking.

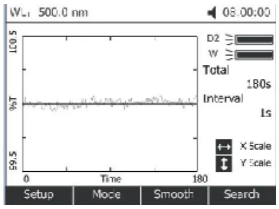


Kinetics:

This mode may be used for scanning time courses or reacting rate calculations. Abs. VS Time graphs are displayed on the screen in real time.

Wait time and measurement time up to 12 hours may be entered with time intervals of 0.5, 1, 2, 5, 10, 30 seconds and 1 min.

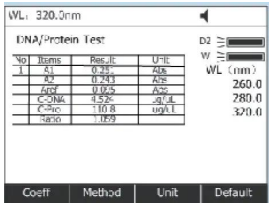
Post-run manipulation includes re-scaling, curve tracking and selection of the part of the curve required for the rate calculation. Rate is calculated using a linear regression algorithm before multiplying by the entered factor.



DNA/Protein Test:

Concentration and DNA purity are calculated by Absorbance ratios 260 nm/280 nm or 260 nm/230 nm with optional subtracted

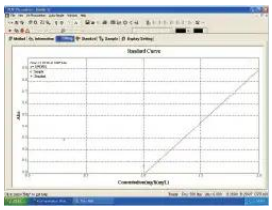
absorbance at 320 nm.
DNA Concentration = 62.9A260 - 36.0A280 or 49.1A260 - 3.48A230
Protein Concentration = 1552A260 - 757.3A280 or 183A220 - 75.8A230
Other wavelengths and factors may be entered.



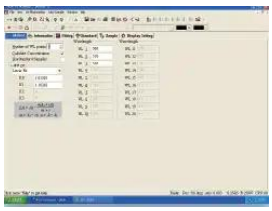
UV Analyst PC-Control Software:

The PC application software offers:
Photometric Mode
Quantitative test (Standard curve)
Wavelength Scan
Kinetics
DNA/Protein
Multi-Wavelength
System Utility
The PC application software UV-Vis Analyst takes the best features of the stand-alone version plus more powerful data processing, expanded data collecting, and storage capability. It comes standard with UV3/6 series PC models and is optional to stand-alone models.

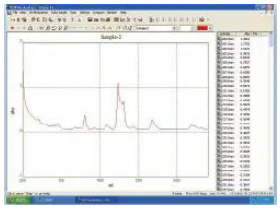
Quantitative Test (Standard curve):
Use up to 20 standards to establish a standard curve. Four methods for fitting a curve:
Linear fit.
Linear through zero.
Square fit.
Cubic fit.



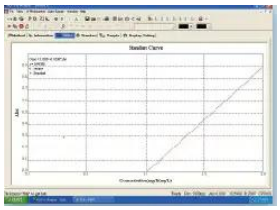
Multi-wavelength:
Up to 20 wavelengths can be selected and multiple samples can be measured. (Auto cell changer is required to run multiple samples automatically)



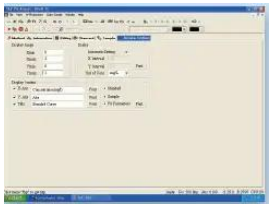
Wavelength Scan:
Automatically record peaks and valleys. The quantity of channels is unlimited; you can simultaneously store as many as desired.
Post-run manipulation and processing includes:
Re-scaling axes, curve.
1 to 4 derivative.
Smoothing, combination, zooming, overlap.



Kinetics (Abs. VS Time):
The Kinetics mode may be used for scanning time courses or reacting rate calculations. Abs. VS Time graphs are displayed on the screen in real time. Wait time, measurement time and time intervals may be entered.
Post-run manipulation includes re-scaling, curve tracking and selection of the part of the curve required for the rate calculation. Rate is calculated using a linear regression algorithm before multiplying by the entered factor.



DNA/Protein:
Concentration and DNA purity are quickly and easily calculated:
Absorbance ratios 260 nm/280 nm with optional subtracted absorbance at 320 nm.
DNA Concentration = 62.9A260 - 36.0A280
Protein Concentration = 1552A260 - 757.3A280
Other wavelengths and factors may be entered.



DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BFJ1B1 TO BFJ1B4

MICRO-SPECTROPHOTOMETERS

1. 7-inch capacitive TFT screen, multi-touch, intuitive interface, simple operation.
2. It has its own automatic detection function, which significantly improves the detection
Efficiency.
3. With high-precision motor drive, the accuracy of the optical path reaches 0.001mm, and the absorbance detection repeatability is high.
4. The sample volume required for the test is only 0.5 to 2ul, and it can be recovered after the measurement.
5. It has dual-channel fluorescence detection function, high sensitivity and good linearity.
6. OD600 function with stirring and heating function can detect the growth of ba

SPECIFICATIONS

Model	BFJ1B1	BFJ1B2	BFJ1B3	BFJ1B4
Volume	0.5ul-2ul			

Dimension	318x210x188mm (LxWxH)			
Weight	4.85kg	4.7kg		4.5kg
Optical Path	0.03mm, 0.05mm, 0.1mm, 0.2mm, 1mm			
Light Source	Xenon flash lamp/number of flashes			
Detector Type	2048 pixel linear array CCD			
Wavelength Range	190nm-850nm			
Accuracy	±1nm			
Spectral Resolution	≤3nm (FWHM@Hg253.7nm)			
Absorption Accuracy	0.002Abs (1mm optical path)			
Absorption Accuracy (260nm)	±1%(7.332Abs absorbance @ 260nm)			
Absorbance Range	0.04-750(at 260nm wavelength, equivalent to 10mm optical path)			
Concentration Range	2ng/ul dsDNA-37500ng/ul dsDNA			
Detection Time	<6s			
OD600 Light Source	Single color LED	/	Single color LED	/
OD600 Absorbance Range	0-4.000Abs	/	0-4.000Abs	/
OD600 Absorbance Stability	(0.3)±0.5%, (3.4)±1.5%	/	(0.3)±0.5%, (3.4)±1.5%	/
OD600 Repeatability	(0.3)≤0.5%, (3.4)≤1.5%	/	(0.3)≤0.5%, (3.4)≤1.5%	/
OD600 Absorption Accuracy	(0.2)±0.005A, (2.3)±1%, (3.4)±2%	/	(0.2)±0.005A, (2.3)±1%, (3.4)±2%	/
Heating Temperature	37°C±0.5°C	/	37°C±0.5°C	/
Stirring Speed	12 adjustable speeds, 100-1200rpm	/	12 adjustable speeds, 100-1200rpm	/
Fluorescence Sample Volume	≥50ul (0.5ml PCR Tube)		/	
Fluorescence Detection Time	4s		/	
Detection Channel	2 channel		/	
Reproducibility	<1.5%		/	
Stability	<1.5%		/	
Linearity	R^2 ≥0.995		/	
Light Source (Fluorescence)	Single color LED		/	
Excitation Wavelength	470nm, 624nm		/	
Emission Wavelength	525nm, 682nm		/	
Printing	Built-in thermal printer			
Communication	USB2.0 x2			
Data Export Formats	xls, csv, txt, jpg, png			
Experimental Data	>10,000			
Input Voltage	DC12V 5A			
Power Supply	60W			
Alt Name	Micro-Spectrophotometers			

FEATURES

1. 7-inch capacitive TFT screen, multi-touch, intuitive interface, simple operation.
2. It has its own automatic detection function, which significantly improves the detection Efficiency.
3. With high-precision motor drive, the accuracy of the optical path reaches 0.001mm, and the absorbance detection repeatability is high.
4. The sample volume required for the test is only 0.5 to 2ul, and it can be recovered after the measurement.
5. It has dual-channel fluorescence detection function, high sensitivity and good linearity.
6. OD600 function with stirring and heating function can detect the growth of bacteria, microorganisms, etc

Adopting Android operating system, 7-inch capacitive touch screen, no need for computer online, stand-alone can be detected

Rapid and accurate detection of nucleic acids, proteins and cellular solutions with only 0.5-2ul of sample.

Equipped with OD600 optical path detection system, fluorometer function, convenient for bacteria, microorganisms and other culture solution concentration detection.

APPLICATIONS

Rapid testing
Easy operation

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BEY1H2 BEY1H3 BEY1H4

SPECTROPHOTOMETER

• Large HD Smart Touch Screen
High sensitivity and user-friendly UI for easy operation.
• Stand-Alone System with Multi Functions
Spectrum scanning, Standard curve, Kinetics, Multi wavelength, DNA/Protein test can be operated
directly on device without PC software.
• Automatic 8-position Cell Holder
Higher efficiency of experiment to save time.
• Easy Printing
Available to connect with general office printer directly (HP DeskJet 1111/1112/2723).
• USB Port, Fast Data Output

SPECIFICATIONS

Model	BEY1H2	BEY1H3	BEY1H4
Old Model	BSDBU-204-A	BSDBU-204-B	BSDBU-204-C
Optical System	Double Beam		
Light Source	W Lamp & D2 Lamp		
Wavelength Range	190-1100nm		
Bandwidth	1.8nm	1nm	0.5/1/2/4 nm

Display	10-inch Touch Screen
Wavelength Accuracy	±0.1nm at D2 656.1nm, ±0.3nm at full range
Wavelength Repeatability	≤0.1nm
Photometric Accuracy	±0.3%T (0-100%T); ±0.002Abs (0-0.5Abs); ±0.004Abs (0.5-1.0Abs)
Photometric Repeatability	≤0.1%T (0-100%T); ≤0.001Abs (0-0.5Abs); ≤0.002Abs (0.5-1.0Abs)
Stability	≤0.001A/h@250nm & 500nm, 2hrs warm-up
Photometric Range	-0.3-3A, 0-200%T, 0-9999C
Stray Light	≤0.05%T at 220nm & 360nm
Control Mode	Stand-alone System or PC Software (Optional)
Data Output	USB Port or Bluetooth (Optional)
Power Requirement	AC 110/220V, 50/60Hz
Alt Name	Double Beam UV Visible Spectrophotometer

ACCESSORIES FOR PURCHASE

No	Name	Description	Quantity	Unit
1	1	Spectrophotometer	1	unit
2	2	1cm Glass cuvette	4	pcs
3	3	1cm Quartz cuvette	2	pcs
4	4	Power cord	1	pcs
5	5	User's manual	1	pcs
6	6	Dust cover	1	pcs

FEATURES

• Large HD Smart Touch Screen
High sensitivity and user-friendly UI for easy operation.
• Stand-Alone System with Multi Functions
Spectrum scanning, Standard curve, Kinetics, Multi wavelength, DNA/Protein test can be operated directly on device without PC software.
• Automatic 8-position Cell Holder
Higher efficiency of experiment to save time.
• Easy Printing
Available to connect with general office printer directly (HP DeskJet 1111/1112/2723).
• USB Port, Fast Data Output
All test data can be exported to USB disk directly.
• Optional Bluetooth Module and PC software.
Bluetooth function and PC software are optional to meet different applications.
• Large Sample Chamber, Multi Options of Accessories
1-10cm universal cell holder, test tube holder, film holder, integrating sphere, specular reflectance accessory, peltier/sipper system, etc.
• High-quality Grating with High Performance
Lower stray light, higher stability and reliability.
• 16mm-thick Optical Base, Rigid Structure
All optical components are fixed on a 16mm thick rigid die-cast aluminum board to promise higher stability and reliability.

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER BEY1I1

DOUBLE BEAM UV VISIBLE SPECTROPHOTOMETER

• Sensitive Detection
High-quality Photomultiplier, fast response and high sensitivity.
Especially suitable for weak radiation energy detection.
• Adjustable Bandwidth
Continuous adjustable spectral bandwidth from 0.1 to 5.0nm.
0.1nm interval, suitable for various applications, especially suitable for samples with sharp absorption peaks, like penicillin sodium, penicillin potassium, etc.
• High Stability and Reliability
An extra mercury lamp equipped, one-key calibration for wavelength accuracy.
High-quality deuterium lamp and tungsten lamp, longer service time and higher stability.

SPECIFICATIONS

Model	BEY1I1
Old Model	BSDBU-205
Optical System	Double Beam
Detector	Photomultiplier (PMT)
Wavelength Range	190-900 nm
Bandwidth	Continuously adjustable from 0.1 nm to 5 nm, 0.1 nm interval
Light Source	W Lamp & D2 Lamp & Mercury Lamp
Control Mode	PC Software Controlled
Wavelength Accuracy	±0.3 nm
Wavelength Repeatability	≤0.1 nm
Photometric Accuracy	±0.3%T
Stability	≤0.0001 A/h
Stray Light	≤0.005%T at 220 nm & 360 nm
Power Requirements	AC110/220V, 50/60Hz
Alt Name	Double Beam UV Visible Spectrophotometer

ACCESSORIES FOR PURCHASE

No	Name	Description	Quantity	Unit
1	1	Spectrophotometer	1	unit
2	2	PC software	1	set
3	3	1cm Glass cuvette	4	pcs
4	4	1cm Quartz cuvette	2	pcs
5	5	Power cord	1	pcs
6	6	User's manual	1	pcs
7	7	Dust cover	1	pcs

No	Name
1	Holder for film(angle adjustable)
2	Reflection accessory
3	Holder for glass/film(angel fixed)
4	Holder for test tube
5	Holder for micro cuvette
6	Holder for water bath
7	5cm cuvette

8	10cm cuvette
9	Peltier/Sipper system


1


2


3


4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9

FEATURES

• Sensitive Detection
High-quality Photomultiplier, fast response and high sensitivity.
Especially suitable for weak radiation energy detection.
• Adjustable Bandwidth
Continuous adjustable spectral bandwidth from 0.1 to 5.0nm.
0.1nm interval, suitable for various applications, especially suitable for samples with sharp absorption peaks, like penicillin sodium, penicillin potassium, etc.
• High Stability and Reliability
An extra mercury lamp equipped, one-key calibration for wavelength accuracy.
High-quality deuterium lamp and tungsten lamp, longer service time and higher stability.
Premium lens and lens coating, higher repeatability.
Real-time automatic calibration of dark current.
• Larger Sample Chamber, Multi Functions
Various optional accessories: auto 8-position cell holder, autosampler, thermostatic cell holder, integrating sphere and specular reflection accessory, etc.
• PC Software Controlled
User-friendly UI, simple operation and clear display.
• Easy Maintain and Lower Cost
Independent modular design, lower maintenance cost.
Socket type of lamps, easy to replace and no need to adjust optical path.

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