

## Micro-volume UV/VIS Spectrophotometer

### Features:

- \* LCD display.
- \* Microscale sample test, minimum 0.2µl.
- \* Unique design sample holder, could test small amount DNA and protein.
- \* Ultramicro and cuvette dual platform.
- \* More accuracy, no light loss in whole test process.



### Technical Parameters:

Model	BK-CW500
Minimum Sample Capacity	0.2µl
Ultramicro Optical Distance	0.5mm
Detectable Concentration Range	2.5~7500ng/ul(dsDNA)
Min Precise Detect Concentration	10ng/µl (dsDNA)
Max Precise Detect Concentration	5000ng/µl (dsDNA)
DNA reproducibility	< ±1.0 % (dsDNA, @ 1000ng/µl)
Wavelength Range	190~1100nm
Spectral Bandwidth	4nm
Optical System	Single Beam, Grating 1200 lines/mm
Wavelength Accuracy	±0.5nm
Wavelength Repeatability	0.3nm
Max Scanning Speed	3000nm/min
Photometric Accuracy	±0.5%T or ±0.004A @ 1A
Photometric Range	0~200%T, -0.3~0.3A, 0~9999Conc
Stray Light	0.05%T @ 220, 340nm
Stability	±0.0008A/h @ 500nm
Baseline Flatness	±0.002A
Light Source	Halogen & Deuterium lamp
Output	USB Print and data output, Connect PC
Power Supply	AC110/220V±10%, 50/60Hz
Package Size(W*D*H)mm	491*365*180
Gross Weight(kg)	14

## Micro-volume UV/VIS Spectrophotometer

### Application:

Micro-Volume Spectrophotometer is used for quantitative and qualitative research by spectrophotometry. It is usually used in quantitative research of nucleic acid, proteins and bacterial concentration.



### Features:

- \* Microscale sample test, minimum 0.5µl.
- \* Ultramicro and cuvette dual platform (Only for BK-CW2000).
- \* Wide test area, 100 times of the traditional spectrophotometer.
- \* Most samples don't need dilute.
- \* Test directly without warming up, do not need detection container, lower daily consumption.
- \* PC control, more accurate and flexible.

### Technical Parameters:

Model	BK-CW1000	BK-CW2000
Minimum Sample Capacity	0.5µl	
Ultramicro Optical Distance	1mm/0.2mm	1mm/0.2mm/0.05mm
Cuvette Optical Distance	/	10mm/5mm/2mm/1mm
Whole Wavelength	190~1100nm	
Scanning Wavelength	190~850nm	
Wavelength Accuracy	1nm	
Wavelength Resolution	≤0.3nm (FWHM @ Hg 253.7nm)	
Absorbance Accuracy	2% (0.76 @ 257nm)	
Absorbance Resolution	0.002Abs (1mm)	
Absorbance Area	0.02~80 (10mm)	0.005~80 (10mm)
Test Accuracy	0.1~5 Abs ±0.1 Abs	5~80 Abs ±2%
Test Time	5s	0.01~0.5 Abs. ±0.01Abs 0.5~80 Abs. ±2%
Detector	3648 pixel linear CCD array	
Light Source	Mini HID	
Sample Test Platform Material	304 stainless steel and quartz	
Standard Accessories	• Driver software CD 1 pc • Power line 1 pc • Power Adapter 1 pc	
Consumption	24W	
Power Supply	AC110/220V±10%, 50/60Hz	
External Size(W*D*H)mm	200*130*136	
Package Size(W*D*H)mm	310*310*310	
Net Weight(kg)	2.5	
Gross Weight(kg)	5	

## Spectrophotometer

### UV/VIS Spectrophotometer

#### Basic Functions:

Model	Optical System	Wavelength Range	Bandwidth	Photo-metry	QTY	MULT	KINS	Scanning	Bio
BK-V1000	Single Beam	325-1020nm	4nm	•					
BK-UV1000	Single Beam	200-1020nm	4nm	•					
BK-V1200	Single Beam	325-1020nm	4nm	•	•				
BK-UV1200	Single Beam	200-1020nm	4nm	•	•				
BK-V1600	Single Beam	320-1100nm	4nm	•	•	•	•		
BK-UV1600	Single Beam	190-1100nm	4nm	•	•	•	•		
BK-V1800	Single Beam	320-1100nm	2nm	•	•	•	•		
BK-UV1800	Single Beam	190-1100nm	2nm	•	•	•	•		
BK-V1900	Single Beam	190-1100nm	2nm	•	•	•	•	•	•
BK-UV1900	Single Beam	190-1100nm	2nm	•	•	•	•	•	•
BK-S360	Single Beam	190-1100nm	1.8nm	•	•	•	•	•	•
BK-S380	Single Beam	190-1100nm	1nm	•	•	•	•	•	•
BK-S390	Single Beam	190-1100nm	0.5, 1, 2, 4, 5nm	•	•	•	•	•	•
BK-D560	Double Beam	190-1100nm	1.8nm	•	•	•	•	•	•
BK-D580	Double Beam	190-1100nm	1nm	•	•	•	•	•	•
BK-D590	Double Beam	190-1100nm	0.5, 1, 2, 4, 5nm	•	•	•	•	•	•

## UV/VIS Spectrophotometer



#### Features:

- \* Large LCD screen (128\*64 Dots).
- \* Pre-aligned design ensures the user can change lamps conveniently.
- \* With SiO<sub>2</sub> coating optical mirror, reducing the pollution from outside fully.
- \* Environmental Deuterium lamp, preventing from Ozone inhalation.
- \* High-class grating, wholly hermetic light path design, ensures the super low stray light.
- \* Real-time monitoring the lifetime of Deuterium lamp and Tungsten lamp with advanced system.
- \* Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically.
- \* Optional PC Software to expand the applications to Quantitative, Multi-Wavelength and Kinetics.
- \* Widely used for Organic chemistry, Inorganic chemistry, Life sciences, food, Medicine and health, Agriculture, Geology, Metallurgy and Environment etc. fields.

#### Basic Functions:

- \* Photometry  
Test Abs, Transmittance by fixed wavelength, **Photometry Mode** **Con. Test C=K\*A+B**
- \* Quantitative  
a. C Mode: Establish C=K\*A curve, test sample concentration.  
b. F Mode: Establish A=K1\*C+K0, test sample concentration.  
c. Display and save curve, test data (BK-V1200).

WL:	546.0		
T:	100.0		
A	T	C	F

WL:	546.0		
C:	100		
A	T	C	F

#### Technical Parameters:

Model	BK-UV1000	BK-V1000	BK-UV1200	BK-V1200
Optical System	Single Beam, Grating 1200 lines/mm			
Wavelength Range	200~1020nm	325~1000nm	200~1020nm	320~1020nm
Spectral Bandwidth	4nm			
Wavelength Accuracy	±2nm			
Wavelength Repeatability	1nm		0.8nm	
Photometric Accuracy	±0.002A (0~0.5Abs), ±0.004A (0.5~1.0Abs), ±0.5% T (0~100% T)			
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.2% T (0~100% T)			
Stray Light	≤ 0.2 % T @ 360nm; 220nm		≤ 0.2% T @ 360nm; 220nm	
Stability	± 0.004A/h@500nm		±0.002A/h@500nm	
Noise	±0.001A			
Display	128*64 Dots LCD			
Photometric Mode	T, A, C, E			
Photometric Range	0~200%T, -0.301~3.0A			
Detector	Silicon Photodiode			
Light Source	Deuterium Lamp, Tungsten Lamp			
Input	Membrane Keypad			
Standard Accessories	10mm glass cuvette*4 units 10mm quartz cuvette*2 units	10mm glass uvette*4 units	10mm glass cuvette*4 units 10mm quartz cuvette*2 units	10mm glass uvette*4 units
Optional Accessories	4-place Cell holder, Printer, Test tube holder, Deuterium lamp, Halogen lamp			
Power Supply	110/220V±10%, 60/50Hz			
Package Size(W*D*H) mm	560*430*320	560*430*320	560*430*320	560*430*320
Gross Weight(kg)	12	11.5	12	11.5

## UV/VIS Spectrophotometer

### Features:

- \* With SiO<sub>2</sub> coating optical mirror, reducing the pollution from outside fully
- \* Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically
- \* With GLP self-check function, check the wavelength accuracy and Photometry accuracy
- \* PC Software to expand the applications to Quantitative, Multi-Wavelength and Kinetics, Spectrum Scanning, DNA/Protein test for PC Series



### Basic Functions:

- \* **Photometry**  
Test Abs., Transmittance and Energy by fixed wavelength.
- \* **Kinetics**  
Used for time course scanning or reaction rate calculations.  $\Delta A/t$ , can search all data.
- \* **Multi-Wavelength**  
Can test Transmittance and Abs. with 8 different wavelengths at most
- \* **Quantitative**  
Linear fit and Linear fit through zero two modes
  - Coefficient, Standard Sample input and Standard Sample read three modes to establish standard curve.
  - Establish  $A=K1 \cdot C + K0$ , can search original data, graph curve, parameters settings
  - Can save 240 group curves, can test 240 data in each curve.
  - Double wavelength, Triple wavelength test functions.

### Technical Parameters:

Model	BK-UV1800 BK-UV1800PC	BK-UV1600 BK-UV1600PC	BK-V1800 BK-V1800PC	BK-V1600 BK-V1600PC
Optical System	Single Beam, Grating 1200 lines/mm			
Wavelength Range	190~1100nm		320~1100nm	
Spectral Bandwidth	2nm	4nm	2nm	4nm
Wavelength Accuracy	±0.5nm			
Wavelength Repeatability	≤0.3nm			
Photometric Accuracy	±0.002A (0~0.5Abs), 0.004A (0.5~1.0Abs), ±0.5% T (0~100% T)			
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.2% T (0~100% T)			
Stray Light	≤0.05% T @ 360nm; 220nm		≤0.05% T @ 360nm; 220nm	
Stability	±0.001A/h @ 500nm			
Baseline Flatness	±0.002A			
Noise	±0.0005A			
Display	480*272 65 thousand true color TFT LCD			
Photometric Mode	T, A, C, E			
Photometric Range	0~200% T, -0.301~3.0A			
Detector	Silicon Photodiode			
Light Source	Deuterium Lamp, Tungsten Lamp			
Input	Membrane Keypad			
Output	USB Print and data output, Connect PC			
Standard Accessories	10mm glass cuvette*4 units 10mm quartz cuvette*2 units		10mm glass uvette*4 units	
Optional Accessories	Single cell holder, General cell holder, Test tube holder, Solid sample holder, Deuterium lamp, Halogen lamp, 4-place Cell holder, Printer, Water-jacketed cell holder, Reflection accessory 5°, Auto 8-cell changer, Micro cell holder, Water-jacketed cell holder, Constant-temperature system		4-place Cell holder, Printer, Test tube holder, Deuterium lamp, Halogen lamp	
Power Supply	AC110/220V±10%, 60/50Hz			
Package Size(W*D*H)mm	620*500*370	620*500*370	620*500*370	620*500*370
Gross Weight(kg)	18	18	16.5	16.5

## Scanning UV/VIS Spectrophotometer

### Features:

- \* With SiO<sub>2</sub> coating optical mirror, reducing the pollution from outside fully
- \* Adopted high-class grating with wholly hermetic light path design, to ensure the instrument has the super low stray light
- \* With GLP self-check function, check the wavelength accuracy and Photometry accuracy
- \* Real-time monitoring the lifetime of Deuterium lamp and Tungsten lamp with advanced system
- \* Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically



### Basic Functions:

- \* **Photometry**  
Test Abs., Transmittance and Energy by fixed wavelength.
- \* **Quantitative**  
Linear fit and Linear fit through zero two modes
  - Coefficient, Standard Sample input and Standard Sample read three modes to establish standard curve.
  - Establish  $A=K1 \cdot C + K0$ , can search original data, graph curve, parameters settings.
  - Can save 240 group curves, can test 240 data in each curve.
  - Double wavelength, Triple wavelength test functions.
- \* **Kinetics**  
Used for time course scanning or reaction rate calculations.  $\Delta A/t$ , can search all data.
- \* **Multi-Wavelength**  
Can test Transmittance and Abs. with 8 different wavelengths at most.
- \* **Scanning**  
User can set the scan range from 190nm to 1100nm to test the max. Abs. peak value, can do derivation, arithmetical operations to the graph.
- \* **Biology**  
6 methods: DNA/Protein, UV, Lowry, BCA, CBB and Biuret.

### Technical Parameters:

Model	BK-UV1900 BK-UV1900PC	BK-V1900 BK-V1900PC
Optical System	Single Beam, Grating 1200 lines/mm	
Wavelength Range	190~1100nm	320~1100nm
Spectral Bandwidth	2nm	
Wavelength Accuracy	±0.5nm	
Wavelength Repeatability	≤0.3nm	
Photometric Accuracy	±0.002A (0~0.5Abs), ±0.004A (0.5~1.0Abs), ±0.5% T (0~100% T)	
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.2% T (0~100% T)	
Stray Light	≤0.05% T @ 360nm; 220nm	
Stability	±0.0008A / h @ 500nm	
Baseline Flatness	±0.002A	
Noise	0.0005Abs @ 500nm	
Display	480*272 65 thousand true color TFT LCD	
Photometric Mode	T, A, C, E	
Photometric Range	0~200% T, -0.301~3.0A	
Detector	Silicon Photodiode	
Light Source	Deuterium Lamp, Tungsten Lamp	
Input	Membrane Keypad	
Output	USB Print and data output, Connect PC	
Standard Accessories	10mm glass cuvette*4 units 10mm quartz cuvette*2 units	10mm glass uvette*4 units
Optional Accessories	Single cell holder, General cell holder, Test tube holder, Solid sample holder, Deuterium lamp, Halogen lamp, 4-place Cell holder, Printer, Water-jacketed cell holder, Reflection accessory 5°, Auto 8-cell changer, Micro cell holder, Water-jacketed cell holder, Constant-temperature system	
Power Supply	AC110V/220±10%, 60/50Hz	
Package Size(W*D*H)mm	620*500*370	
Gross Weight(kg)	18	16.5

## Scanning UV/VIS Spectrophotometer

### Features:

- \* Environmental Deuterium lamp, preventing from Ozone inhalation
- \* Socket-Type Deuterium lamp and Tungsten lamp
- \* SiO<sub>2</sub> coating optical mirror, reduces the influence from outside
- \* GLP self-check function: check the wavelength accuracy and Photometry accuracy, provide test report and power-off protection
- \* Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically



### Basic Functions:

- \* **Photometry**  
Test Abs., Transmittance and Energy by fixed wavelength.
- \* **Quantitative**  
Linear fit and Linear fit through zero two modes  
a. Coefficient, Standard Sample input and Standard Sample read three modes to establish standard curve.  
b. Establish A=K1\*C+K0, can search original data, graph curve, parameters settings.  
c. Can save 240 group curves, can test 240 data in each curve.  
d. Double wavelength, Triple wavelength test functions.
- \* **Kinetics**  
Used for time course scanning or reaction rate calculations  $\Delta A/t$ , can search all data.
- \* **Multi-Wavelength**  
Can test Transmittance and Abs. with 8 different wavelengths at most.
- \* **Scanning**  
User can set the scan range from 190nm to 1100nm to test the max. Abs. peak value, can do derivation, arithmetical operations to the graph.
- \* **Biology**  
DNA/Protein, (Optional: UV, Lowry, BCA, CBB and Biuret)

Website: [www.biobase.cc](http://www.biobase.cc) / [www.meihuatrade.com](http://www.meihuatrade.com)

Model	BK-S360	BK-S380	BK-S390
Optical System	Single Beam, Grating 1200 lines/mm		
Wavelength Range	190~1100nm		
Spectral Bandwidth	1.8nm	1nm	0.5, 1, 2, 4, 5nm
Wavelength Accuracy	±0.3nm		
Wavelength Repeatability	±0.2nm		
Photometric Accuracy	±0.002A (0~0.5Abs), ±0.004A (0.5~1.0Abs), ±0.3% T (0~100% T)		
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.1% T (0~100% T)		
Stray Light	≤0.04% T @ 360nm; 220nm		
Stability	±0.001A/h @ 500nm		
Baseline Flatness	±0.0015A		
Noise	±0.0004Abs		
Display	65 thousand true color 7 inch TFT LCD (480*800)		
Photometric Mode	T, A, C, E		
Photometric Range	0~200% T, -0.301~3.0A		
Detector	Silicon Photodiode		
Light Source	Deuterium Lamp, Tungsten Lamp		
Input	Membrane Keypad		
Output	USB Print and data output, Connect PC		
Standard Accessories	10mm glass cuvette *4 units 10mm quartz cuvette *2 units, software		
Optional Accessories	Single cell holder, General cell holder, Test tube holder, Solid sample holder, Deuterium lamp, Halogen lamp, 4-place Cell holder, Printer, Water-jacketed cell holder, Reflection accessory 5°, Auto 8-cell changer, Micro cell holder, Water-jacketed cell holder, Constant-temperature system		
Power Supply	AC110V/220±10%, 60/50Hz		
Package Size(W*D*H) mm	740*570*440		
Gross Weight(kg)	25		

## Double Beam Scanning UV/VIS Spectrophotometer

### Features:

- \* Environmental Deuterium lamp, preventing from Ozone inhalation
- \* Real-time monitoring the lifetime of Deuterium lamp and Tungsten lamp
- \* Socket-Type Deuterium lamp and Tungsten lamp
- \* GLP self-check function: check the wavelength accuracy and Photometry accuracy, provide test report and power-off protection
- \* Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically
- \* SiO<sub>2</sub> coating optical mirror, reduces the influence from outside



### Basic Functions:

- \* **Photometry**  
Test Abs., Transmittance and Energy by fixed wavelength.
- \* **Quantitative**  
Linear fit and Linear fit through zero two modes  
a. Coefficient, Standard Sample input and Standard Sample read three modes to establish standard curve.  
b. Establish A=K1\*C+K0, can search original data, graph curve, parameters setting  
c. Can save 240 group curves, can test 240 data in each curve.  
d. Double wavelength, Triple wavelength test functions.
- \* **Kinetics**  
Used for time course scanning or reaction rate calculations  $\Delta A/t$ , can search all data.
- \* **Multi-Wavelength**  
Can test Transmittance and Abs. with 8 different wavelengths at most.
- \* **Scanning**  
User can set the scan range from 190nm to 1100nm to test the max. Abs. peak value, can do derivation, arithmetical operations to the graph.
- \* **Biology**  
6 methods: DNA/Protein, UV, Lowry, BCA, CBB and Biuret.

Website: [www.biobase.cc](http://www.biobase.cc) / [www.meihuatrade.com](http://www.meihuatrade.com)

Model	BK-D560	BK-D580	BK-D590
Optical System	Double Beam, Grating 1200 lines/mm		
Wavelength Range	190~1100nm		
Spectral Bandwidth	1.8nm	1nm	0.5, 1, 2, 4, 5nm
Wavelength Accuracy	±0.3nm		
Wavelength Repeatability	±0.2nm		
Photometric Accuracy	±0.002A (0~0.5Abs), ±0.004A (0.5~1.0Abs), ±0.3% T (0~100% T)		
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.2% T (0~100% T)		
Stray Light	≤0.04 T @ 360nm; 220nm		
Stability	±0.0003A/h @ 500nm		
Baseline Flatness	±0.0005A		
Noise	±0.0002Abs		
Display	65 thousand true color 7 inch TFT LCD(480 *800)		
Photometric Mode	T, A, C, E		
Photometric Range	0~200% T, -0.301~3.0A		
Detector	Silicon Photodiode		
Light Source	Deuterium Lamp, Tungsten Lamp		
Input	Membrane Keypad		
Output	USB Print and data output, Connect PC		
Standard Accessories	10mm glass cuvette *4 units 10mm quartz cuvette *2 units, software		
Optional Accessories	Single cell holder, General cell holder, Test tube holder, Solid sample holder, Deuterium lamp, Halogen lamp, 4-place Cell holder, Printer, Water-jacketed cell holder, Reflection accessory 5°, Auto 8-cell changer, Micro cell holder, Water-jacketed cell holder, Constant-temperature system		
Power Supply	AC110V/220±10%, 60/50Hz		
Package Size(W*D*H) mm	740*570*440		
Gross Weight(kg)	25		