



ESBK-UV series

UV/VIS Spectrophotometer



LABORATORY



Features

1. Adopted high-class grating with wholly hermetic light path design, to ensure the instrument has the super low stray light.
2. Real-time monitoring the lifetime of Deuterium lamp and Tungsten lamp with advanced system.
3. With GLP self-check function, check the wavelength accuracy and Photometry accuracy.
4. Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically.
5. With SiO₂ coating optical mirror, reducing the pollution from outside fully

Basic Functions

1 Photometry

Test Abs., Transmittance and Energy by fixed wavelength

2 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

3 Kinetics

Used for time course scanning or reaction rate calculations $\Delta A/t$, can search all data.

4 Multi-Wavelength

Can test Transmittance and Abs. with 8 different wavelengths at most

Model	ESBK-UV1900 ESBK-UV100PC	ESBK-UV1600 ESBK-UV1600PC	ESBK-V1800 ESBK-V1800PC	ESBK-V1600 ESBK-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	
Stability	± 0.001A / h @ 500nm			
Baseline Flatness	± 0.002A			
Noise	± 0.0005A			
Display	480*272mm 65000 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-A*2 Print and data output, USB-B Connect PC			
Standard Accessories	1 cm glass cuvette*4 1 cm quartz cuvette*2 1 cm quadruple cuvette holder*1 Scanning software (only for PC type)		1 cm glass cuvette*4 1 cm quadruple cuvette holder*1 Scanning software (only for PC type)	
Optional Accessories	1 cm standard single slot cuvette holder - Long optical path cuvette holder - Cuvette Micro cuvette - Test tube type absorber rack - Solid sample holder - Deuterium lamp (only for UV series) - Tungsten lamp - Quadruple cuvette holder - Printer - Four-slot water bath type constant temperature absorption pool - X-Y Adjustable micro absorption Pool - Single bath type constant temperature absorption pool - Program-controlled thermostatic absorption pool seat - 8 racks - Reflection accessories - General application software or scanning software (not for PC type)			
Power Supply	AC110V/220±10% ,60/50Hz			
Packing Size(mm)	620*500*370	620*500*370	620*500*370	620*500*370
Gross Weight (kg)	18	18	16.5	16.5



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Scanning UV/VIS
Spectrophotometer



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5 Scanning

User can set the scan range from 190nm to 1100nm to test max. Abs. peak value, can do derivation, arithmetical operations to the graph.

6 Biology

6 methods: DNA/Protein, UV, Lowry, BCA, CBB and Biuret

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Wavelength Repeatability	≤ 0.2nm	
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	≤ 0.04% T @ 360nm; 220nm	
Stability	± 0.001A / h @ 500nm	
Baseline Flatness	± 0.002A	
Noise	± 0.0005° @ 500nm	
Display	480*272mm 65000 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	
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Gross Weight (kg)	18	16,5



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