SPECTRO-UV1/UV2/UV3/UV4, Single Beam UV/VIS Spectrophotometers

As a part of Precision Series , SPECTRO-UV SEERIES Single Beam UV/Vis Spectrophotometers are an easy to use instruments with advanced performance. With its stray light less than 0.05%T, it is highly accurate and reliable. It provides several basic functions, such as photometry test, quantitation test and spectrum scanning.

Features:
Fashion: ● Simple ● Elegant ● Aluminum Base
Anticorrosive Holder: ● Easy ● Accurate ●

SPECTRO-UV4

Anticorrosive
USB Interface: ● USB A: Printer ● USB B: Save data
Lamp Room: ● Lamp easy to change
Color Screen: ● Built-in Method.

1. Using the 1200 l / mm holographic grating with low stray light, the optimized optical path design ensures the high accuracy of the instrument;
2. The new wavelength driving mechanism has greatly improved the wavelength accuracy and repeatability, and effectively reduced the noisy;
3. All aluminum die casting base and all moulded shell, make the instrument more sturdy and durable;
4. High resolution TFT color LCD touch screen has excellent display effect and simple operation;
5. Self-calibration system while switching on and preheating countdown;
6. Support USB memory to upgrade firmware directly;
7. It can connect computers through USB, control instrument by software and can enrich and expand applications by software;
8. It also supports USB universal printer and serial micro printer based on PCL3 GUI protocol;
9. Wide sample room, suitable for 5~100 mm sample holder and other accessories;
10. Added Spectrum Scanning function, it's the first time in the same level instrument;
11. Automatic move wavelength to set position, automatic zero correction;
12. It can connect to the printer and output the measurement results directly.

Basic Function Instruction:

Photometry Test
● A / T one key conversion
● Results can be recorded, edited, deleted, saved and printed.

Quantitation Test
● Single and dual wavelength method (dual wavelength difference, dual wavelength ratio) to measure samples;
● 3 methods to establish standard curve (input equation coefficient, measure 2 ~ 10 standard samples or input standard sample absorbance and concentration)
● 3 kinds of fitting methods (linear zero, linear, two order)
● Standard curve can be saved and invoked
● Built-in 19 concentration units and custom input
● The measurement results can be recorded, edited, deleted, saved, and printed.

Spectrum Scanning
● The scanning speed is optional (low, medium, high);
● The scanning interval is optional (0.1, 0.2, 0.5, 1, 2, 5, 10nm);
● A / T display mode can be switched;
● Automatically find the peak;
● Point by point (peak) view;
● Coordinate adaptable and modifiable;
● Curves and data can be deleted, saved and printed.

File Management
● Files can be deleted, renamed, batch import / export, converted to .txt and .csv format.

System Utility
1. system calibration (dark current, wavelength, system baseline) ;
2. Light source management (light source switch, timing) ;
3. Clock management;
4. Memory management (storage status display, formatting) ;
5. Multi language (can be switched) ;
● Wavelength accuracy; Photometric precision;
● Hetero astigmatic light; Wavelength accuracy;
● Photometric precision; Hetero astigmatic light; Noise; Noise;
6. General settings (sound display sample rack and other settings).

Performance Verification
- Wavelength Accuracy;
- Photometric Accuracy;
- Stray light;
- Noisy;
- Dark noisy;
- Stability;
- Spectral bandwidth.

SPECTRO-UV3PC/UV4PC, Software Introduction (optional):
Easy UV 1.0 is an application software based on Windows operating system.

Characteristics
1. Photometric measurement: one key switch A / T / E;
2. Quantitative measurement: establish standard curve;
3. Spectrum scanning: coordinate adaptive;
4. File management: data preservation, editable file name;
5. Performance verification: verifiable performance specifications;
6. System application: Multilingual operating system.

Software Function
1. Photometric measurement;
2. Quantitative measurement;
3. Kinetics measurement;
4. Multi wavelength measurement;
5. Spectrum scanning;
6. DNA / protein measurement.

Through the USB interface, the user can connect with the UV / Vis spectrophotometer very convenient.

At the same time, the application range, data analysis & file management function of instruments are greatly expanded, so that your analysis and measurement work becomes more relaxed and efficient.

Models		SPECTRO-UV1	SPECTRO-UV2	SPECTRO-UV3	SPECTRO-UV4
Optical System		Single Beam			
Light Source		Tungsten Lamp, Deuterium Lamp			
Detector		Silicon Photodiode			
Bandwidth		4nm	2nm	4nm	2nm
Wavelength	Range	195 – 1050nm		190 – 1100nm	
	Accuracy	±0.8nm		±0.5nm	
	Repeatability	≤0.4nm		≤0.2nm	
	Display	0.1nm			
	Gyration speed	10000nm/min			
	Scan speed	–		4200nm/min	
Photometric	Range	–0.301 – 3A, 0 – 200%T, 0 – 9999.9C			
	Accuracy	±0.003A @ 0.5A, ±0.006A @1A, ±0.5%T @ 0 – 100%T			
	Repeatability	±0.0015A @ 0.5A, ±0.003A @1A, ±0.2%T @ 0 – 100%T			
	Noisy	≤0.0005A @ 0A, ≤0.001A @ 1A, ≤0.002A @ 2A (500nm)			
	Stability	≤0.002A/hr (500nm, 2 hours after preheating)			
Stray Light		≤0.2%T		≤0.05%T	
Baseline		–		±0.002A	
Memory		236KB (Built-in), Unlimited (USB memory stick)			
Display		5 inches color screen (480x272)			
Keypad		Resistive touch screen			
Printer		Serial printer, USB printer (in line with HP PCL3 GUI printing language)			
Port		Serial port (printing), USB-A (storage and printing), USB-B (online)			
Holder	Standard	10mm 4-cell holder			
	Optional	10 – 50mm 4-cell holder,10 – 100mm 4-cell holder,10mm 8-cell Automatic Holder, 10 – 100mm 5-cell Automatic Holder, Micro Cell Holder, Peltier/Sipper System, Reflectance Accessories, Solid Sample Holder, Water-Jacked 1 or 4-cell holder, Test Tube Holder			
Function	Photometric	•	•	•	•
	Quantitation	•	•	•	•
	Spectrum			•	•
	File Management	•	•	•	•
	System Management	•	•	•	•
	Performance Verification	•	•	•	•
Language		6 languages (English, German, French, Spanish, Portuguese, simplified Chinese)			
Power		100 – 240V AC, 50/60Hz, 75W			
Dimensions		456(W)×360(D)×185(H)mm			
Weight		10.7kg			