UV-visible spectrophotometer

SP-V1000/SP-UV1000/ SP-V1100/ SP-UV1100

Features

- The shape is professional, concise, friendly and mellow, and the appearance design conforms to ergonomics. The use of high-quality materials, fine craftsmanship, soft texture, showing a good user experience
- Attention to human-device experience, friendly interactive interface, easy for users to operate and detect
- Up to 128 sets of standard curves and 4000 test data can be saved
- Test data is saved in real time to avoid data loss in case of sudden power failure.
- Automatic wavelength calibration and dark current correction
- It can automatically switch the light source and turn off the corresponding light source, so as to prolong the service life of the light source to the greatest extent.
- The instrument has rich functions and can realize various functional operations, and the host can independently complete photometric measurement and quantitative test, kinetics measurement and other functions
- Can be used with automatic cell holder, film holder, tube rack, constant temperature cell holder, reflectivity accessory, variable optical path sample holder, variable angle solid sample holder and other special accessories
- The computer software is designed with single interface and multiple functions, which has friendly interface, simple operation, rich and powerful functions, and fast response speed. Real-time monitoring data change. The unique shortcut toolbar makes the experimental process clear at a glance, which greatly facilitates the use. And can be extended more application functions, such as wavelength scanning, time scanning (kinetics), multi-wavelength scanning, and DNA/protein detection analysis.
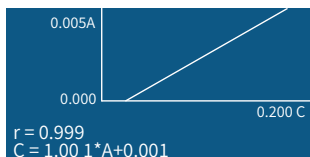
Applications

The spectrophotometer produced by our company refers to the absorbance or transmittance of a substance at a specific wavelength or within a certain wavelength range, carry out qualitative or quantitative analysis on that substance, as well as kinetic experiments, protein or DNA detection, DNA and RNA quantitative analysis, protein quantitative analysis and other applications. It can be widely used in medicine and health, clinical testing, biochemistry, petrochemical industry, environmental protection testing, food hygiene and quality control. It can also be used as a teaching demonstration and experimental instrument for related courses in colleges and universities.
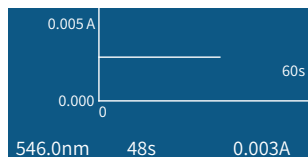
Photometry		
546.0nm		0.001A
No.	WL.	Abs.
1	230.0	0.001
2	340.0	0.000
3	450.0	0.002
4	540.0	0.000
5	620.0	0.003

Quantitation

0.005A

0.000   0.200 C

r = 0.999
C = 1.00 1*A+0.001

Kinetics

0.005 A

60s

0.000   0

546.0nm   48s   0.003A

Model	SP-V1000	SP-UV1000	SP-V1100	SP-UV1100
Optical System	Single Beam	Single Beam	Single Beam	Single Beam
Light Source	Tungsten Lamp (Japan HYBEC)	Tungsten Lamp (Japan HYBEC) | Deuterium Lamp(Milaras)	Tungsten Lamp (Japan HYBEC)	Tungsten Lamp (Japan HYBEC) | Deuterium Lamp(Milaras)
Spectral Bandwidth	4.0nm	4.0nm	2.0nm	2.0nm
Wavelength Range	325-1000nm	200-1000nm	320-1100nm	190-1100nm
Wavelength Accuracy	±2nm	±2nm	±0.5nm	±0.5nm
Wavelength Repeatability	≤1nm	≤1nm	≤0.3nm	≤0.3nm
Photometric Range	-0.3 - 3.0 A, 0 - 200%T	-0.3 - 3.0 A, 0 - 200%T	-0.3 - 3.0 A, 0 - 200%T	-0.3 - 3.0 A, 0 - 200%T
Photometric Accuracy	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5%T @ 100%T	±0.003 A @ 0.5 A, ±0.006 A @ 1.0 A, ±0.5%T @ 100%T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3%T @ 100%T	±0.002 A @ 0.5 A, ±0.004 A @ 1.0 A, ±0.3%T @ 100%T
Photometric Repeatability	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25%T @ 100%T	≤0.0015 A @ 0.5 A, ≤0.003 A @ 1.0 A, ≤0.25%T @ 100%T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15%T @ 100%T	≤0.001 A @ 0.5 A, ≤0.002 A @ 1.0 A, ≤0.15%T @ 100%T
Stability	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)	≤0.002 A/h @ 500 nm (after preheat 2 hours)
Stray Light	≤0.2%T @ 360nm	≤0.2%T @ 360nm	≤0.05%T @ 360nm	≤0.05%T @ 220 & 360nm
Sample Compartment	Manual 4-position 1cm holder (standard for single beam)	Manual 4-position 1cm holder (standard for single beam)	Manual 4-position 1cm holder (standard for single beam)	Manual 4-position 1cm holder (standard for single beam)
Display	Dot Matrix LCD	Dot Matrix LCD	Dot Matrix LCD	Dot Matrix LCD
Output	USB Port & Parallel Port (Printer)	USB Port & Parallel Port (Printer)	USB Port & Parallel Port (Printer)	USB Port & Parallel Port (Printer)
Power Requirements	110/220VAC, 50/60Hz, 80W	110/220VAC, 50/60Hz, 120W	110/220VAC, 50/60Hz, 80W	110/220VAC, 50/60Hz, 120W
Dimension[L×W×H]	475×360×225mm	475×360×225mm	475×360×225mm	475×360×225mm
Weight	11kg	14.6kg	11kg	14.6kg

item No.	18204261

micro-volume cell holder

item No.	18204257

4 position cell holder(100mm)

item No.	18204255

4 position cell holder(10mm)

item No.	18204256

4 position cell holder(10-50mm)

item No.	18204262

Tube rack(ø8-ø22mm)

item No.	18204268 glass 18204277 quartz

Cuvette glass/quartz

item No.	18204265

Tungsten lamp

item No.	18204266

Deuterium lamp

item No.	18204263

Solid Specimen Holder

item No.	1820434

Bluetooth thermal printer

item No.	18901116

4 position cell holder(10mm)

item No.	18204258

cylindrical cell holder(ø16mm)
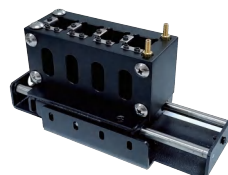
item No.	18204260

10mm water-jacketed 4-cell holder
(for SP-V1100 &SP-UV1100)