

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.

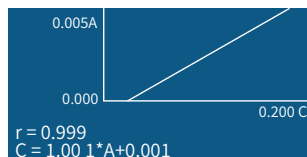
Applications

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.

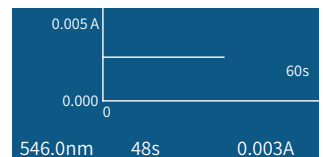
Photometry

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



Kinetics





Model	SP-V1000	SP-UV1000	SP-V1100	SP-UV1100
Optical system	Single Beam	Single Beam	Single Beam	Single Beam
Light source	Tungsten lamp	Tungsten and deuterium lamp	Tungsten lamp	Tungsten and deuterium lamp
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	±0.003A/0.5 A, ±0.006A/1.0A, ±0.5%T/100%T	±0.003A/0.5A, ±0.006A/1.0A, ±0.5%T/100%T	±0.002A/0.5A, ±0.004A/1.0A, ±0.3%T/100%T	±0.002A/0.5 A, ±0.004A/1.0 A, ±0.3%T/100%T
Photometric repeatability	≤0.0015A/0.5A, ≤0.003A/1.0A, ≤0.25%T/100%T	≤0.0015A/0.5A, ≤0.003 A/1.0 A, ≤0.25%T/100%T	≤0.001A/0.5A, ≤0.002A/1.0A, ≤0.15%T/100%T	≤0.001A/0.5A, ≤0.002A/1.0A, ≤0.15%T/100%T
Stability	≤0.002A/h /500 nm (preheat for 2 hours)	≤0.002A/h /500 nm (preheat for 2 hours)	≤0.002A/h /500 nm (preheat for 2 hours)	≤0.002A/h /500nm (preheat for 2 hours)
Stray light	≤0.2%T/360nm	≤0.2%T/360nm	≤0.05%T/360nm	≤0.05%T/(220- 360nm)
Sample room	4-connected cell 10 mm	5-connected cell, 10 mm	4-connected cell 10 mm	5-connected cell 10 mm
Display	LCD	LCD	LCD	LCD
Output	USB port Print port	USB port Print port	USB port Print port	USB port Print port
Power requirements	110/220VAC, 50/60Hz, 80W	110/220VAC, 50/60Hz, 120W	110/220VAC, 50/60Hz, 80W	110/220VAC, 50/60Hz, 120W
Dimensions (L×W×H)	490×360×210mm	490×360×210mm	490×360×210mm	490×360×210mm
Weight	12kg	14kg	12kg	14kg





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



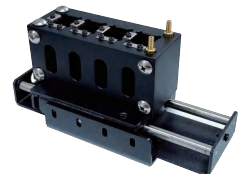
item No. 18204264

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)

SP-UV2101

Touch screen single beam Visible spectrophotometer



Features

- 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and windows graphic interface.
- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan,
- DNA\Protein test, multi-wavelength test, etc
- In-house massive memory is capable of saving up to 1024M for test data & working curves.
- Various optional accessories, like automatic cell holder, thermostatic automatic sampler, adjustable micro cell holder, reflection accessory and integrating sphere, etc. which extend the application range of device and combine the requirements of common samples and special ones.
- Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
- Socket type deuterium and tungsten lamp can make lamps switching without optics debugging and easy to be replaced.
- Follow GLP/GMP standards, user management, logging, data tracking and exporting, etc. are all available.

Specifications	SP-UV2101
Optical System	Single Beam, Grating 1200 lines/mm
Wavelength Range	190-1100 nm
Spectral Bandwidth	1nm
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 (0-9999F)
Stray Light	≤0.03%T@220nm, 360nm
Stability	±0.0003A/h @500 nm
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)
Wavelength Setting	Auto
Display	10.1" TFT Colored Capacitive Touch Screen
Light Source	Imported Deuterium & Tungsten lamp
Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB drive, USB host, RS232
Power	AC 220V/50Hz or AC 110V/60Hz
Shipping Size	810*660*390mm
Gross Weight	26kg
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual, PC software

SP-UV2102

Touch screen single beam UV Vis spectrophotometer



Features

- 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and windows graphic interface.
- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
- In-house massive memory is capable of saving up to 1024M for test data & working curves.
- Various optional accessories, like automatic cell holder, thermostatic automatic sampler, adjustable micro cell holder, reflection accessory and integrating sphere, etc. which extend the application range of device and combine the requirements of common samples and special ones.
- Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
- Socket type deuterium and tungsten lamp can make lamps switching without optics debugging and easy to be replaced.
- Follow GLP/GMP standards, user management, logging, data tracking and exporting, etc. are all available.

Specifications	SP-UV2102
Optical System	Single Beam, Grating 1200 lines/mm
Wavelength Range	190-1100 nm
Spectral Bandwidth	2nm
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 (0-9999F)
Stray Light	≤0.03%T@220nm, 360nm
Stability	±0.0003A/h @500 nm
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)
Wavelength Setting	Auto
Display	10.1" TFT Colored Capacitive Touch Screen
Light Source	Imported Deuterium & Tungsten lamp
Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB drive, USB host, RS232
Power	AC 220V/50Hz or AC 110V/60Hz
Shipping Size	810*660*390mm
Gross Weight	26kg
Standard Accessories	10mm glass cuvette x 4, 10mm quartz cuvette x 2, Power cord, User's Manual, PC software

SP-UV3101

Touch screen double beam UV Vis spectrophotometer



Features

- 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and windows graphic interface.
- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
- In-house massive memory is capable of saving up to 1024M for test data & working curves.
- Various optional accessories, like automatic cell holder, thermostatic automatic sampler, adjustable micro cell holder, reflection accessory and integrating sphere, etc. which extend the application range of device and combine the requirements of common samples and special ones.
- Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
- Socket type deuterium and tungsten lamp can make lamps switching without optics debugging and easy to be replaced.
- Follow GLP/GMP standards, user management, logging, data tracking and exporting, etc. are all available.

Specifications	SP-UV3101
Optical System	Double Beam, Grating 1200 lines/mm
Wavelength Range	190-1100 nm
Spectral Bandwidth	1nm
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 (0-9999F)
Stray Light	<=0.03%T@220nm, 360nm
Stability	±0.0003A/h @500 nm
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)
Wavelength Setting	Auto
Display	10.1" TFT Colored Capacitive Touch Screen
Light Source	Imported Deuterium & Tungsten lamp
Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB drive, USB host, RS232
Power	AC 220V/50Hz or AC 110V/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

SP-UV3102

Touch screen double beam UV Vis spectrophotometer



Features

- 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and windows graphic interface.
- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
- In-house massive memory is capable of saving up to 1024M for test data & working curves.
- Various optional accessories, like automatic cell holder, thermostatic automatic sampler, adjustable micro cell holder, reflection accessory and integrating sphere, etc. which extend the application range of device and combine the requirements of common samples and special ones.
- Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
- Socket type deuterium and tungsten lamp can make lamps switching without optics debugging and easy to be replaced.
- Follow GLP/GMP standards, user management, logging, data tracking and exporting, etc. are all available.

Specifications	SP-UV3102
Optical System	Double Beam, Grating 1200 lines/mm
Wavelength Range	190-1100 nm
Spectral Bandwidth	2nm
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(0-9999F)
Stray Light	<=0.03%T@220nm, 360nm
Stability	±0.0003A/h@500 nm
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)
Wavelength Setting	Auto
Display	10.1" TFT Colored Capacitive Touch Screen
Light Source	Imported Deuterium & Tungsten lamp
Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB drive, USB host, RS232
Power	AC 220V/50Hz or AC 110V/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

SP-XUV5101

Touch screen xenon lamp double beam UV Vis spectrophotometer

Features

- 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and windows graphic interface.
- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
- In-house massive memory is capable of saving up to 1024M for test data & working curves.
- Various optional accessories, like automatic cell holder, thermostatic automatic sampler, adjustable micro cell holder, reflection accessory and integrating sphere, etc. which extend the application range of device and combine the requirements of common samples and special ones.
- Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
- Socket type deuterium and tungsten lamp can make lamps switching without optics debugging and easy to be replaced.
- Xenon lamp light source with extra-long service life saves you the trouble of changing lamps;
- Follow GLP/GMP standards, user management, logging, data tracking and exporting, etc. are all available.



Specifications	SP-XUV5101
Optical System	Double Beam, Grating 1200 lines/mm
Wavelength Range	190-1100 nm
Spectral Bandwidth	1nm
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, 0-9999CF (0-9999F)
Stray Light	<=0.03%T@220nm, 360nm
Stability	±0.0003A/h @500 nm
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)
Wavelength Setting	Auto
Display	10.1" TFT Colored Capacitive Touch Screen
Light Source	Xenon lamp light
Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB drive, USB host, RS232
Power	AC 220V/50Hz or AC 110V/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

SP-XUV5102

Touch screen xenon lamp double beam UV Vis spectrophotometer



Features

- 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and windows graphic interface.
- Powerful functions like Photometric measurement, Quantitative measurement, Kinetics, Spectrum scan, DNA\Protein test, multi-wavelength test, etc
- In-house massive memory is capable of saving up to 1024M for test data & working curves.
- Various optional accessories, like automatic cell holder, thermostatic automatic sampler, adjustable micro cell holder, reflection accessory and integrating sphere, etc. which extend the application range of device and combine the requirements of common samples and special ones.
- Supports USB storage. The USB port can be used for data transfer, which is easily exported to Excel for further processing, analysis and storage.
- Socket type deuterium and tungsten lamp can make lamps switching without optics debugging and easy to be replaced.
- Xenon lamp light source with extra-long service life saves you the trouble of changing lamps;
- Follow GLP/GMP standards, user management, logging, data tracking and exporting, etc. are all available.

Specifications	SP-XUV5102
Optical System	Double Beam, Grating 1200 lines/mm
Wavelength Range	190-1100 nm
Spectral Bandwidth	2nm
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 (0-9999F)
Stray Light	≤0.03%T@220nm, 360nm
Stability	±0.0003A/h @500 nm
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	Hi, Med, Low (Max. 3000nm/min)
Wavelength Setting	Auto
Display	10.1" TFT Colored Capacitive Touch Screen
Light Source	Xenon lamp light
Detector	Imported Silicon Photodiode
Cuvette Holder	10mm manual 4-cell holder
Output	USB drive, USB host, RS232
Power	AC 220V/50Hz or AC 110V/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



item No. 18901008

Film holder for double beam models
1mm(H)*10mm(W)*30mm(L)



item No. 18901009

Cuvette holder for double beam
1-5cm



item No. 18901010

Film holder for double beam models
1mm(H)*10mm(W)*30mm(L)



item No. 18204256

Cuvette holder for double beam
1-5cm



item No. 18901011

Xenon lamp (A510KU) 10V



item No. 18901012

Integrating Sphere
95mm(L)*101mm(W)*99mm(H)



item No. 18901013

Automatic 8-position cell holder
1cm



item No. 18901014

Automatic 5-position cell holder
1cm-5cm