P9 Double Beam UV/Vis Spectrophotometer

ultrassay™ P9 UV/Vis spectrophotometer is a high-end product of P Series. Double beam design, large color touch screen based on Windows OS, user-friendly interfaces. It's the right choice for scientific research, biology, pharmacy, food, environmental protection and other applications.

Specifications

Model	P9 Double Beam UV/Vis spectrophotometer
Optical system	Double beam
Light source	Tungsten lamp, Deuterium lamp
Spectral bandwidth	0.5, 1, 2, 4, 5 nm
Wavelength range	190 ~ 1100 nm
Wavelength accuracy	±0.3 nm
Wavelength repeatability	≤0.2 nm
Wavelength display	0.1 nm
Slew rate	6000 nm/min
Scanning speed	20 ~ 3200 nm/min
Photometric range	-4 ~ 4 A, 0 ~ 400%T, 0 ~ 9999.9T
Photometric accuracy	±0.002 A @ 0.0 ~ 0.5 A, ±0.004 A @ 0.5 ~ 1 A, ±0.3 %T @ 0 ~ 100 %T
Photometric repeatability	≤0.001 A @ 0.0 ~ 0.5 A, ≤0.002 A @ 0.5 ~ 1 A, ≤0.15 %T @ 0 ~ 100 %T
Noise	≤0.0002 A @ 0.0 A, 500 nm, ≤0.0004 A @ 1 A, 500 nm，≤0.0008 A @ 2 A, 500 nm
Drift	≤0.0005A/h @ 500 nm, After warm up 1 hour
Baseline flatness	≤0.0005 A
Stray light	≤0.03 %T@ 220, 360 nm
Measurement mode	A，%T，C
Detector	Dual Silicon Photodiodes
Sample charger	10 mm （Single）
Display	10.1 Inch IPS color LCD with touch screen（1280×800）
Storage	64GB (built-in), unlimited expansion (USB memory, SD card, network storage device)
Interface	USB-A (expandable, connect to printer, memory, mouse, keyboard and other peripherals) × 3, USB-B × 1, RJ-45 (Ethernet) × 1, VGA × 1, HDMI × 1, Extensible Bluetooth, WIFI
Power requirement	100 ~ 240 V AC，50/60 Hz，140 W
Dimensions	580（W）×420（D）×235（H） mm
Weight	18 kg

Features

Double Beam Design

The double beam design makes it possible to monitor the sample and the reference at the same time and record the measurement results accurately, minimizing measurement errors.

Built-in Computer

Built-in computer based on Windows OS. Users can connect universal printers, memory cards, mice, keyboards and so on conveniently through various data interfaces, such as USB, WIFI, Bluetooth, HDMI, etc.

Color Touch Screen

The 10.1 inches high resolution capacitive color touch screen supports 10-point touch. Combined with the friendly interfaces, it provides a good user experience.

GLP/GMP

The instrument design follows GLP/GMP completely, with built-in user management, data storage, traceability and other functions.

Extensive accessories

A wide range of accessories such as 8-cell automatic holders, peltier/sipper systems, reflection accessories and so on, can be used for the instrument.

Quality Assurance

The base is made of aerial material by one-time die casting and the shell is made of high strength material to ensure accuracy, reliability and durability.

Functions

Photometry

- A /% T conversion
- Custom coefficients

Multi Wavelength

- Up to 20 wavelengths at one time

- Custom formula for data calculation
- The number of single-point measurement times can be customized (1-50 times)
- Parameters can be saved and loaded
- Measurement results can be recorded, renamed, deleted, saved, printed and exported (in Excel, Word and PDF formats)
- Custom print report format

Time-scanning

- Unlimited scanning time
- Scan interval can be customized
- View, mark, and select point by point
- Adaptive coordinates and a variety of ways to modify coordinates
- Curves and data can be deleted, saved, printed and exported (in Excel, Word and PDF formats)
- Curves can be automatically saved and printed

Kinetics

- Unlimited scanning time
- Delay time and scan interval can be customized
- Kinetic rates calculated automatically
- View, mark, and select point by point
- Adaptive coordinates and a variety of ways to modify coordinates
- Curves and data can be deleted, saved, printed and exported (in Excel, Word and PDF formats)
- Curves and results can be automatically saved and printed

Quantitation

- Single wavelength, dual wavelength method (dual wavelength difference, dual wavelength ratio), three-wavelength and custom methods to measure samples
- 3 ways to establish a standard curve (entering the equation coefficients, measuring 2 to 20 standard samples or entering the standard sample absorbance and concentration values)
- 4 ways to fit (linear to zero, linear, quadratic, cubic)
- Parameters can be saved and loaded
- Standard curves can be saved and loaded
- Built-in common concentration units, and custom input
- Distribution of measured values is displayed and the result is determined automatically
- Measurement results can be recorded, renamed, deleted, saved, printed and exported (in Excel, Word and PDF formats)
- Custom print report format

DNA/Protein

- Built-in 7 measurement methods (260/280/260/230, Lowery method, UV method, BCA method, CBB method, Biuret) and custom method
- Number of single point measurement times can be customized (1-50 times)
- Parameters can be saved and loaded
- Distribution of measured values is displayed and the result is determined automatically
- Measurement results can be recorded, renamed, deleted, saved, printed and exported (in Excel, Word and PDF formats)
- Custom print report format

Spectrum Scanning

- User-selectable scanning speed (low, medium and high)
- User-selectable scanning interval (0.1, 0.2, 0.5, 1, 2, 5, 10 nm)
- A /% T display mode can be switched
- Automatic peak search
- View, mark and select point by point
- Rich map processing functions (four arithmetic, derivation, area and three-dimensional map)
- Adaptive coordinates and a variety of ways to modify coordinates
- Curves and data can be deleted, saved, printed and exported (in Excel, Word and PDF formats)

Packing List

Part No.	SN	Description	Qty
P9	1	Instrument	1set
	2	User's manual	1pc
	3	Cuvette quartz, 10mm	2pcs
	4	Cuvette glass,10mm	4pcs
	5	Power cable (national standard)	1pc
	6	Dustcover	1pc