

P8 Double Beam UV/Vis Spectrophotometer

ultrassay™ P8 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.



YBO TECHNOLOGIES CO., LTD.

23th Floor, Building A, Future Tower, No. 711 Luzhou Avenue, Hefei, Anhui, China
E-mail: info@ybotech.com Website: www.ybotech.com

Specifications

| Model | P8 Double Beam UV/Vis Spectrophotometer |
|----------------------------------|---|
| Optical system | Double beam |
| Light source | Tungsten lamp, Deuterium lamp |
| Spectral bandwidth | 1 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 chamber | 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 | 17 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 |
|----------|----|---------------------------------|------|
| P8 | 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 | Dust cover | 1pc |