

# AE-S80-TS AE-S90-TD

## Color Touch UV-VIS Spectrophotometer



### Features and Functions:

1. 800x480 touch screen display which shows clear graphs;
2. Stand-alone system which can realize spectrum measurement, quantitative, wavelength scanning, kinetics, system setting directly on the instrument.
3. The instrument uses a rigid 8mm die-case aluminum base as its optical mount to ensure instrument stability and reliability.
4. Automatic system calibration and positioning to recover deviation after long-time use.
5. Imported main optical spare parts to ensure low stray light, stability and reliability.
6. With powerful memory, can print data and graphs in A4 format directly by connecting to a printer.
7. Data can export to USB directly.

### Advantages:

- # Intelligent alarm function.
- # Display several groups of data at the same time for direct reading.
- # New panel with touch screen.
- # System encryption function.
- # Module design for easy operation.

### Ordering Information:

Order Code	Description
AE-S80-TS	Single beam UV-VIS Spectrophotometer, wavelength range 190-1100nm, bandwidth: 2nm.
AE-S90-TD	Double beam UV-VIS Spectrophotometer, wavelength range 190-1100nm, bandwidth: 2nm.

### Key Technical Specifications:

Wavelength		Photometric	
Wavelength	190-1100nm	Photometric range	0-200%T, -0.4~4.0A, 0-9999C
Wavelength accuracy	±0.5nm	Photometric accuracy	±0.2%T (0-100%T)
Wavelength repeatability	≤0.2nm		±0.002Abs (0-0.5Abs)
Bandwidth	2nm		±0.004Abs (0.5-1.0Abs)
Others		Photometric repeatability	≤0.15%T (0-100%T)
Data output port	USB		0.001Abs (0-0.5Abs)
Printer port	USB port		0.002Abs (0.5-1.0Abs)
Display	800x480 touch screen	Stability	±0.001A/h (@500nm)
Lamps	Imported D2 lamp & W lamp	Baseline Flatness	±0.001A
Detector	Silicon photodiode	Noise	±0.0005A
Power requirements	AC220V/50Hz or 110V/60Hz	Stray light	≤0.05%T@220nm, 360nm
Dimension & weight	460x380x180mm/20kg		

# AE-S90 Series UV VIS Spectrophotometer



## Key Features:

- \* Double beam spectrophotometer with highly stable optics.
- \* Extremely versatile with full functionality from 190 to 1100nm.
- \* Variable spectral bandwidth 0.5, 1, 2, 4,5nm.
- \* 2 or 8 cell holder available.
- \* 6 inches LCD display & integrated user interface.
- \* USB port for data storage.
- \* ISO/CE Certificate passed.
- \* A & E Lab PC software included as standard.
- \* Extensive range of accessories available.

## Applications:

AE-S90 Series are wide screen double beam spectrophotometer. Its integrated design assures long term stability and durability. The highly stable optics and two detectors measure the sample and reference simultaneously optimising measurement accuracy. It has measurement modes for photometrics, concentration, multi-wavelength, spectrum scanning, kinetics, quantitation, DNA and protein analysis. The PC software is supplied as standard and offers additional functionality with preloaded methods for DNA and protein analysis, as well as extensive post-measurement tools, unlimited results saving and easy export of data.

The precisely aligned detector and quality deuterium and halogen lamps enhance the precision across the uv/vis spectrum starting from 190nm and into the near-infrared 1100nm. It is ideal for quality control, general research, pharmaceutical, biochemical and clinical laboratory applications.

## Ordering Information:

Order Code	Description
AE-S90-MD	Large screen, double beam, 2 single cell holder, Bandwidth: 0.5/1.0/2.0/4.0/5.0nm, with PC software.
AE-S90-1D	Large screen, double beam, 2 single cell holder, Bandwidth: 1nm, with PC software.
AE-S90-2D	Large screen, double beam, 2 single cell holder, Bandwidth: 1.8nm, with PC software.

## Technical Specifications:

Wavelength		Photometric	
Wavelength Range	190-1100nm	Accuracy	±0.3%T
Wavelength Accuracy	±0.3nm	Photometric Repeatability	0.2%T
Wavelength Repeatability	0.2nm	Photometric Display Range	-0.3-3A,0-200%T,0-9999C
Bandwidth	1nm/1.8nm/0.5,1,2,4,5nm	Stability	± 0.001A/h @ 500nm
<b>Others</b>		Baseline Flatness	±0.001A
Data Output Port	USB	Noise	±0.001A
Printer Port	Parallel Port	Stray Light	≤0.05%T @220nm, 360nm
Optical System	Double Beam (1200 lines/mm grating)		
Display	LCD (320x240 Dots)		
Lamps	Deuterium & Tungsten Halogen Lamp		
Detector	Silicon Photodiode		
Software	UV PC Software		
Power Supply	AC 220V/50Hz, 110V/60Hz.		
Packing Size & Weight	860x660x465mm & 35kg		

# AE-S80 Series UV Vis Spectrophotometer

## Key Features:

- \* Single beam spectrophotometer with highly stable optics.
- \* Extremely versatile with full functionality from 190 to 1100nm.
- \* Variable spectral bandwidth 0.5, 1, 2, 4,5nm.
- \* 4 or 8 cell holder available.
- \* 6 inches LCD display & integrated user interface.
- \* USB port for data storage.
- \* ISO/CE Certificate passed.
- \* A & E Lab PC software included as standard.
- \* Extensive range of accessories available.



## Applications:

AE-S80 series are large scanning uv vis spectrophotometer which combine best features of single beam spectrophotometer. They vary in bandwidth, wavelength accuracy and dimension. They provide excellent performance for measurements in the range of 190nm to 1100nm. All spectrophotometers features high performance sealed optics mounted on a stable machined platform.

AE-S80 series is ideal for quality control, general research, pharmaceutical, biochemical and clinical laboratory applications. Such as: quantitative analyses, kinetics, wavelength scanning, multiple components and DNA/Protein analysis,etc.

## Ordering Information:

Order Code	Description
AE-S80-MS	Large screen, single bean, 4 cell holder, Bandwith: 0.5/1.0/2.0/4.0/5.0nm, with PC software.
AE-S80-1S	Large screen, single beam, 4 cell holder, Bandwith: 1nm, with PC software.
AE-S80-2S	Large screen, single beam, 4 cell holder, Bandwith: 1.8nm, with PC software.

## Technical Specifications:

Wavelength		Photometric	
Wavelength Range	190-1100nm	Photometric Accuracy	±0.3%T
Wavelength Accuracy	±0.3nm	Photometric Repeatability	0.2%T
Wavelength Repeatability	0.2nm	Photometric Display Range	0-200%T, -0.3-3.0A, 0-9999C
Band Width	1nm/1.8nm/0.5,1,2,4,5nm	Stability	0.002A/h @ 500nm
<b>Others</b>		Baseline Flatness	±0.001A
Data Output Port	USB	Noise	±0.001A
Printer Port	Parallel Port	Stray Light	≤0.05%T @220nm, 360nm
Optical System	Single Beam (1200 lines/mm grating)		
Display	LCD (320x240 Dots )		
Detector	Silicon Photodiode		
Lamps	Deuterium & Tungsten Halogen Lamp		
Power Supply	AC 220V/50Hz, 110V/60Hz.		
Packing Size & Weight	860x660x465mm & 35kg		

# AE-S70 Series

## UV-VIS/VIS Spectrophotometer



### Key Features:

- \* Single beam spectrophotometer with highly stable optics.
- \* Extremely versatile with full functionality  
UV range: 190 to 1100nm, VIS range:320-1100nm.
- \* Spectral bandwidth 1.8 & 2nm.
- \* 6 inches & compact LCD display. Integrated user interface.
- \* USB port for data storage.
- \* ISO/CE Certificate passed.
- \* A & E Lab PC software available.
- \* Extensive range of accessories available.

### Application:

AE-S70 Series spectrophotometers have the most attractive cost performance. It is widely used in colleges and enterprises for general quantitative analysis and experiments.

- \* The instrument use a lead screw structure so that the instrument wavelength accuracy and wavelength resolution can be greatly improved.
- \* 8mm thick optical base: the instrument use a rigid die-cost aluminum base as its optical mount to ensure instrument stability and reliability.
- \* It can set up various standard curves according to customer/s solutions and find the concentration of unknown solutions.

### Ordering Information:

Order Code	Description
AE-S70-1U	Large screen, single beam, 4 cell holder, 190-1100nm, Bandwith: 1.8nm.
AE-S70-1UPC	Large screen, single beam, 4 cell holder, 190-1100nm, Bandwith: 1.8nm., with PC software.
AE-S70-2U	Compact screen, single beam, 4 cell holder, 190-1100nm, Bandwith: 2nm.
AE-S70-2UPC	Compact screen, single beam, 4 cell holder, 190-1100nm, Bandwith: 2nm, with PC software.
AE-S70 Series Visible Spectrophotometer	
AE-S70-2V	LCD display, 320-1100nm, bandwith: 2nm, wavelength accuracy: $\pm 0.5$ nm.
AE-S70-2VPC	LCD display, 320-1100nm, bandwith: 2nm, wavelength accuracy: $\pm 0.5$ nm, with PC software.

### Technical Specifications:

Wavelength		Photometric	
Wavelength Range	UV Range: 190-1100nm Visible Range: 320-1100nm	Photometric Accuracy	$\pm 0.3\%T$
Wavelength Accuracy	$\pm 0.5$ nm	Photometric Repeatability	0.2%T
Wavelength Repeatability	$\pm 0.2$ nm	Photometric Display Range	0-200%T, -0.3-3.0A, 0-9999C
Band Width	1.8nm/2nm	Stability	0.002A/h @ 500nm
Others		Baseline Flatness	$\pm 0.002A/\pm 0.0015A$
Data Output Port	USB	Noise	$\pm 0.001A$
Printer Port	Parallel Port	Stray Light	$\leq 0.05\%T$ @220nm, 360nm
Optical System	Single Beam (1200 lines/mm grating)		
Display	LCD (320x240/128x64 Dots )		
Detector	Silicon Photodiode		
Lamps	Deuterium & Tungsten Halogen Lamp		
Power Supply	AC 220V/50Hz, 110V/60Hz.		
Packing Size & Weight	680x590x420mm & 23kg		

# AE-S60 Series

## UV-VIS/VIS Spectrophotometer



### Key Features:

- \* Single beam spectrophotometer with highly stable optics.
- \* Extremely versatile with full functionality from UV range 190-1000nm & VIS range: 325-1000nm.
- \* Spectral bandwidth 4nm.
- \* 2.5 inches LCD Display.
- \* USB port for data storage.
- \* ISO/CE Certificate passed.
- \* A & E Lab PC software available.
- \* Extensive range of accessories available.

### Application:

- \* Can display wavelength, absorption and transmittance with 5 results per screen. It also has a memory store of up to 200 results.
- \* It can set up various standard curves according to customer/s solutions and find the concentration of unknown solutions.
- \* Equipped with imported deuterium lamp which ensures low stray light, photometric accuracy and is easy to be replaced.
- \* Optional software UV-Professional can expand the applications to Spectrum scanning, kinetics and quantitative, etc.

### Functions:

- ❖ T Mode: Continuously measure the Transmittance of samples
- ❖ A Mode: Continuously measure the Absorbance of samples
- ❖ C Mode: Standard Curve method, can use at most 9 standard samples to create a new standard curve, and to measure the unknown samples by the new one.
- ❖ F Mode: Coefficient Method, Input the known K and C to measure the unknown concentration samples.

### Ordering Information:

Order Code	Description
AE-S60-2U	190-1000nm, Bandwidth: 2nm
AE-S60-2UPC	190-1000nm, Bandwidth: 2nm, with PC software.
AE-S60-4U	200-1000nm, Bandwidth: 4nm.
AE-S60-4UPC	200-1000nm, Bandwidth: 4nm, with PC software.
AE-S60 Series Visible Spectrophotometer	
AE-S60-4V	325-1000nm, Bandwidth: 4nm.
AE-S60-4VPC	325-1000nm, Bandwidth: 4nm, with PC software.

### Technical Specifications:

Wavelength		Photometric	
Wavelength Range	UV range: 190-1000nm VIS range: 325-1000nm	Photometric Accuracy	±0.5%T
Band Width	2nm/4nm	Photometric Repeatability	0.3%T
Wavelength Accuracy	±1nm	Photometric Display Range	0-200%T, -0.3-3.0A, 0-9999C
Wavelength Repeatability	0.5nm	Stability	0.002A/h @ 500nm
Wavelength Setting	Auto	Stray Light	≤0.3%T@220nm, 360nm
Data Output Port	USB		
Printer Port	Parallel Port		
Optical System	Single Beam (1200 lines/mm grating)		
Display	128x64 Dots LCD		
Detector	Silicon Photodiode		
Software	UV or VIS software		
Packing Size & Weight	550×420×280mm & 14kg		