## **SPECTROPHOTOMETER**



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## ANALYTICAL EXCELLENCE...

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# Scanning UV / VIS Spectrophotometer

#### **FEATURES:**

- SiO<sub>2</sub> coating optical mirror, reducing outside pollution
- Adopted high-class grating with hermetic light path design, ensuring the instrument has super low stray light
- GLP self-check function: check wavelength accuracy and Photometry accuracy
- Real-time monitoring of the Deuterium and Tungsten lamp's lifetime with advanced system
- Wavelength calibration, wavelength setting, change lamp source and dark current calibration automatically

# BASIC FUNCTIONS:

- Photometry
  - o Test Abs, Transmittance and Energy by fixed wavelength
- Quantitative
  - o Linear fit and Linear fit through zero two modes
  - Coefficient, standard sample input and standard sample read three modes to establish standard curve
  - Establish A=K1\*C+K0, can search original data, graph curve, parameter settings
  - Can save 240 group curves, can test 240 data in each curve
  - Double wavelength, triple wavelength test functions
- Kinetics
  - $\circ$  Used for time course scanning or reaction rate calculations  $\Delta A/t$ , can search all data



- Multi-Wavelength
  - o Can test transmittance and Abs. with 8 different wavelengths at most
- Scanning
  - O Scan range can be set from 190nm to 1100nm to test the max. Abs peak value, can do derivation, arithmetical operations to the graph
- Biology
  - o 6 methods: DNA/Protein, UV, Lowry, BCA, CBB and Biuret

## **MODEL SPECIFICATIONS:**

Model	MA-UV1900	MA-V1900
	MA-UV1900PC	MA-V1900PC
Optical System	Single Beam, Grating 1200 lines/mm	
Wavelength Range	190∼1100nm	320~1100nm
Spectral Bandwidth	2nm	
Wavelength Accuracy	±0.5nm	
Wavelength Repeatability	≤0.2nm	
Photometric Accuracy	±0.002A (0~0.5Abs), ±0.004A (0.5~1.0Abs), ±0.5% T (0~100% T)	
Photometric Repeatability	0.001Abs (0~0.5Abs), 0.002Abs (0.5~1.0Abs), ≤0.2% T (0~100% T)	
Stray Light	≤0.04% T @ 360nm; 220nm	
Stability	±0.001A/h @ 500nm	
Baseline Flatness	±0.002A	
Noise	±0.0005A @ 500nm	
Display	65 thousand true colour TFT LCD (480*272)	
Photometric Mode	T, A, C, E	
Photometric Range	0~200% T, -0.301~3.0A	
Detector	Silicon Photodiode	

Light Source	Deuterium Lamp, Tungsten Lamp	Deuterium Lamp, Tungsten Lamp	
Input	Membrane keypad	Membrane keypad	
Output	USB print and data output, connect PC		
Standard Accessories	1cm glass cuvette*4, 1cm quartz cuvette*2, 1cm quadruple cuvette holder *1, scanning software (only for PC type)	1cm glass cuvette*4, 1cm quadruple cuvette holder *1, scanning software (only for PC type)	
Optional Accessories	tube type absorber rack, solid sample holder, Deute holder, 4-slot water bath type constant temperature absorption pool, single bath type constant temperature	1cm standard single slot cuvette holder, long optical path cuvette holder, cuvette, micro cuvette, test tube type absorber rack, solid sample holder, Deuterium lamp, Tungsten lamp, quadruple cuvette holder, 4-slot water bath type constant temperature absorption pool, printer, X-Y adjustable micro absorption pool, single bath type constant temperature absorption pool, program controlled thermostatic absorption pool seat, 8 racks, reflection accessories, general application software or scanning software (not for PC type)	
Power Supply	AC110/220V±10%, 60/50Hz	AC110/220V±10%, 60/50Hz	
Package Size (W*D*H*) mm	620*500*370	620*500*370	
Gross Weight (kg)	18	16.5	