

TECHNICAL DATA SHEET

ALab™ SP-UV2101 Touch Screen Single Beam Visible Spectrophotometer

Touch screen single beam Visible spectrophotometer • 190–1100 nm • 1.0nm bandwidth



ALab™ SP-UV2101 Touch Screen Single Beam Visible Spectrophotometer

The ALab™ SP-UV2101 spectrophotometer. Image shown for reference.

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SECTION I

Product Overview

The ALab™ SP-UV2101 is a touch screen single beam Visible spectrophotometer with a 10.1 inches high resolution TFT colored capacitive touch screen (1024*600) and a windows graphic interface, offering photometric measurement, quantitative measurement, kinetics, spectrum scan, DNA\Protein test and multi-wavelength test.

Wavelength range 190–1100 nm with 1.0nm spectral bandwidth; light source: Tungsten Lamp(Japan HYBEC) | Deuterium Lamp (Milaras). Test data and working curves are saved in the in-house memory (up to 1024M) and exported through the USB port.

SECTION II

Core Advantages

- **Touch screen** — 10.1-inch, 1024×600
- **Optics** — single beam
- **Functions** — photometric, scan, kinetics
- **Range** — 190–1100 nm, 1.0nm
- **Light source** — tungsten + deuterium
- **Data** — 1024M memory, USB

SECTION III

Specifications

Technical data — SP-UV2101

Specifications	
Brand	ALab™ by ACS Material
Model	SP-UV2101
SKU #	ALSPU100
Optical System	Single Beam
Wavelength Range	190–1100 nm
Spectral Bandwidth	1.0nm
Wavelength Accuracy	±0.1nm (at 656.1nm), ±0.3nm full range
Wavelength Repeatability	≤0.1nm
Photometric Accuracy	±0.0015A(0–0.5A) ±0.002A(0.5A–1A)
Photometric Repeatability	±0.001A(0–0.5A) ±0.0015A(0.5A–1A)
Photometric Range	-0.3–3A, 0–9999C(0–9999F)
Stray Light	≤0.03%T @ 220,360nm
Stability	≤0.001 A/h / 500 nm (After 1 hour of preheating)
Baseline Flatness	±0.001A
Noise	0.0005A@500nm
Work Mode	T, A, C, E
Scanning Speed	High Medium Slow
Wavelength Setting	Auto
Display	10.1-inch large color touch screen(1024×600)
Light Source	Tungsten Lamp(Japan HYBEC) Deuterium Lamp (Milaras)
Detector	Imported Silicon Photodiode
Cuvette Holder	Manual 4-position 1cm holder (standard for single beam)
Output	USB Port, Printer Port
Power Requirements	110/220V, 50/60Hz, 120W
Dimension[L×W×H]	570mm×440×210mm
Weight	20kg

Accessories — SP-UV2101

Accessories	
Item no.	Description
18901007	Thin film sample holder 1mm(H)*10mm(W)*30mm(L) (for SP-UV2101/SP-UV2102)
18204256	4 position 5cm holder(1cm-5cm) (for SP-UV2101/SP-UV2102)
18900336	10MM water bath 4-position manual cuvette holder 1cm (for SP-UV2101/SP-UV2102)
18901012	Integrating Sphere 95mm(L)*101mm(W)*99mm(H) (for SP-UV3101/SP-UV3102/SP-UV2101/SP-UV2102)
18901013	Automatic 8-position cell holder 1cm (for SP-UV2101/SP-UV2102)
18901014	Automatic 5-position cell holder 1cm-5cm (for SP-UV2101/SP-UV2102)
18902175	Automatic 4-position cell holder 1cm-5cm (for SP-UV2101/SP-UV2102)
18901011	Deuterium lamp (A510KU) 10V (for SP-UV3101/SP-UV3102/SP-UV2101/SP-UV2102)
18901382	Tungsten lamp HYBEC (for SP-UV3101/SP-UV3102/SP-UV2101/SP-UV2102)
18901509	Visible light precision filter 440, 546, 635nm (for full series)
18901510	UV-K2Cr2O7 235, 257, 313, 350nm (for full series)
18901511	HOMIUM 241, 361, 417, 538, 641nm (for full series)
18901512	Stray light filter 220nm (for full series)
18901513	Stray light filter 360nm (for full series)

Scope of delivery

- **Standard configuration:** 10mm glass cuvette x 4, 10mm quartz cuvette x 2, power cord, user's manual, PC software.
- **Listed accessories:** see the Accessories table for item numbers and descriptions.

SECTION IV**Applications**

The SP-UV2101 is listed with photometric measurement, quantitative measurement, kinetics, spectrum scan, DNA\Protein test and multi-wavelength test; optional accessories extend the application range for common samples and special ones.

Product value: a 10.1-inch capacitive touch screen with a windows graphic interface, 1.0nm spectral bandwidth, 1024M in-house memory, USB data transfer with export to Excel, and a range of optional accessories.

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