

Portable Spectrophotometer CS-520

----- Revolution in color measurement



Portable spectrophotometer CS-520 is with the powerful performance configuration which makes color measurement more professional. Excellent inter-instrument agreement ensures consistency of the measurement data of multiple devices; Wireless connection with Android or IOS devices via Bluetooth. It greatly expands the application boundary of color spectrophotometer; automatic calibration, magnetic seat charging, touch screen operation, switchable apertures, UV included / excluded... it will fully upgrade the user experience.

Part 1. Product Features

1. 20 kinds of color indexes and 26 kinds of illuminants

Spectrophotometer CS-520 supports 26 kinds of illuminants such as D65/D50,etc. It can get the value of reflectance, CIE-Lab, CIE-LCh, whiteness, yellowness, opacity, color strength and other color indexes.

2. Excellent inter-instrument Agreement

inter-instrument agreement < 0.2 which ensures test results consistency of multiple devices.

3. Auto calibration

The revolutionary auto calibration technology allows the instrument to achieve automatic calibration, which greatly improves the user experience.

4. Switchable Apertures 11mm/6mm/1*3mm

Durable and stable aperture size to measure samples with different sizes

5. UV Included/ UV Excluded

UV Included/ UV Excluded to measure color and color difference for samples with fluorescence

6. Multi-function calibration base

The multi-function calibration base keeps the white tile being protected, combining

calibration and charging functions in one. When instrument is placed on the base, it will be automatically charged and calibrated. It saves a lot of time for the user to charge and calibration the device.

7. Connect to the mobile device App to expand more functions

Connect to APP to find the similar color from different color swatches. Personal color database can also be established in the cloud and samples saved in cloud can be set into target for color difference test. From APP, we can also obtain instrument data or download data to the instrument.

8. Camera to see the measurement area

Integrated camera to see the measurement area for accurate test

Part 2. Parameter

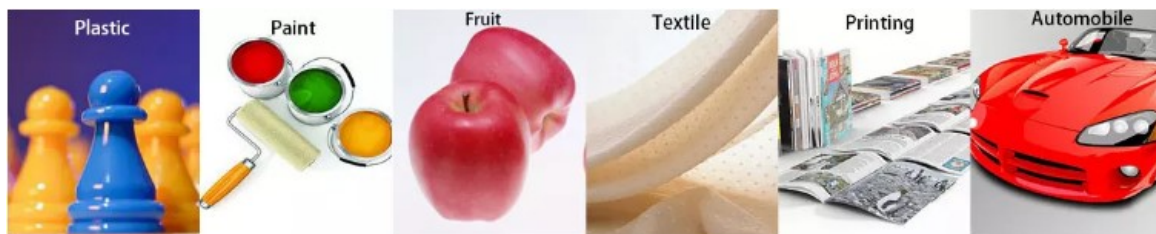
Model	Spectrophotometer CS-520
Geometry	d/8 (diffused illumination, 8° viewing) SCI (Specular Component Included) , SCE (Specular Component Excluded)
Light Source	LED(Full band balanced LED)
Color Spaces and Indices	Reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE Luv, XYZ, Yxy, RGB, Color difference(ΔE^*ab , ΔE^*cmc , ΔE^*94 , ΔE^*00), WI(ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), YI(ASTM D1925, ASTM E313-00, ASTM E313-73), Blackness(My, dM), Color Fastness, Tint, (ASTM E313-00), Color Density CMYK(A, T, E, M), Milm, Munsell, Opacity, Color strength
Illuminants	A, B, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, U35, DLF, NBF, TL83, TL84
Observer Angles	2°, 10°
Sensor	256 pixel CMOS sensor
Calibration	Auto
Wavelength Interval	10nm
Wavelength Range	400-700nm
Reflectance Range	0-200%
Reflectance Resolution	0.01%
Sphere Size	40mm
Repeatability	Chromaticity value: Max. : $dE^*ab < 0.04$ Average : $dE^*ab < 0.03$ Standard deviation within $\Delta E^*ab 0.02$ (when a white tile is measured 30 times at 5-seconds interval) Reflectance: Standard deviation $< 0.1\%$
Illumination Area/Aperture	MAV: $\Phi 8mm / \Phi 11mm$ MAV: $\Phi 4mm / \Phi 6mm$

	MINI:1*3mm
Inter-instrument agreement	$\Delta E^*ab < 0.2$ (BCRA Series II, average measurement of 12 tiles, MAV/SCI)
Test Time	About 1s
Storage	APP mass storage
Battery	Rechargeable, 8000 times continuous tests, 3.7V/3000mAh
Screen	IPS Full Color Screen,2.4 inches
Interface	USB, Bluetooth
Lamp Lifetime	10 years, 1 million tests
Language	Chinese and English
Software	Android, IOS, Windows
Pass Metrology	Yes, metrology level I
Camera	with
Instrument Size	L x W x H (77.8mm x 53.2mm x 185.7mm)
Weight	About 300g

Part 3. Packing List

Qty.	Name	Qty.	Name
1	Main Instrument	1	Power Cable
1	Operating Manual	1	Charger base

Part 4. Application



Part 5. Warranty

