



PRESTO®
Testing Instruments



FB9500 Desktop Spectrophotometer

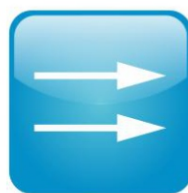
Accurate measurement and stable performance



Support for
multiple caliber



Camera framing
and positioning



Dual optical
path system



Mobile APP

Product Introduction

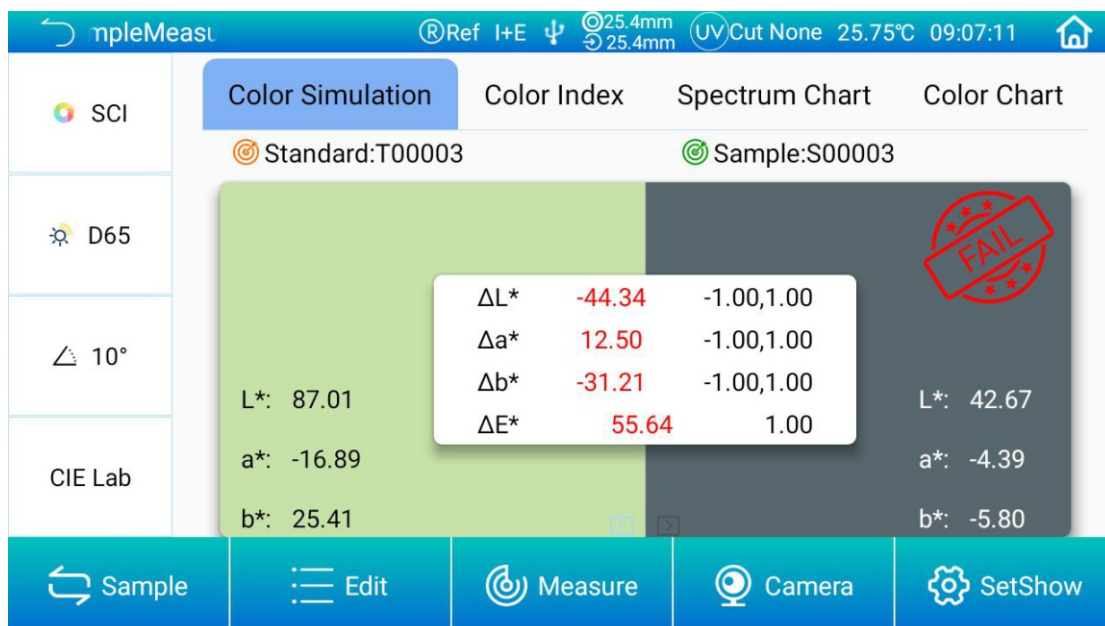
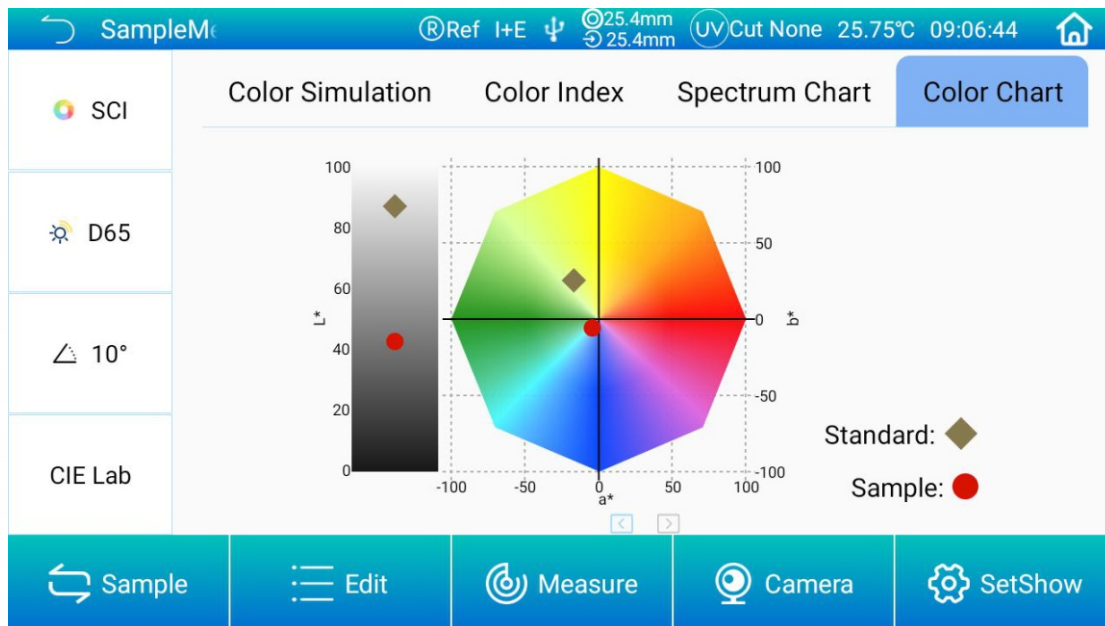
The desktop spectrophotometer FB 9500 adopts a dual array CMOS image sensor with high sensitivity and a wide spectral response range, making testing more accurate. It is equipped with a 7 inch independent rotatable touchscreen, making operation convenient and fast. Repeatability of reflection chromaticity values of FB9500 desktop spectrophotometer $\Delta E^*_{ab} \leq 0.015$, inter station difference ΔE^*_{ab} is controlled within 0.15, and the data is stable and reliable.



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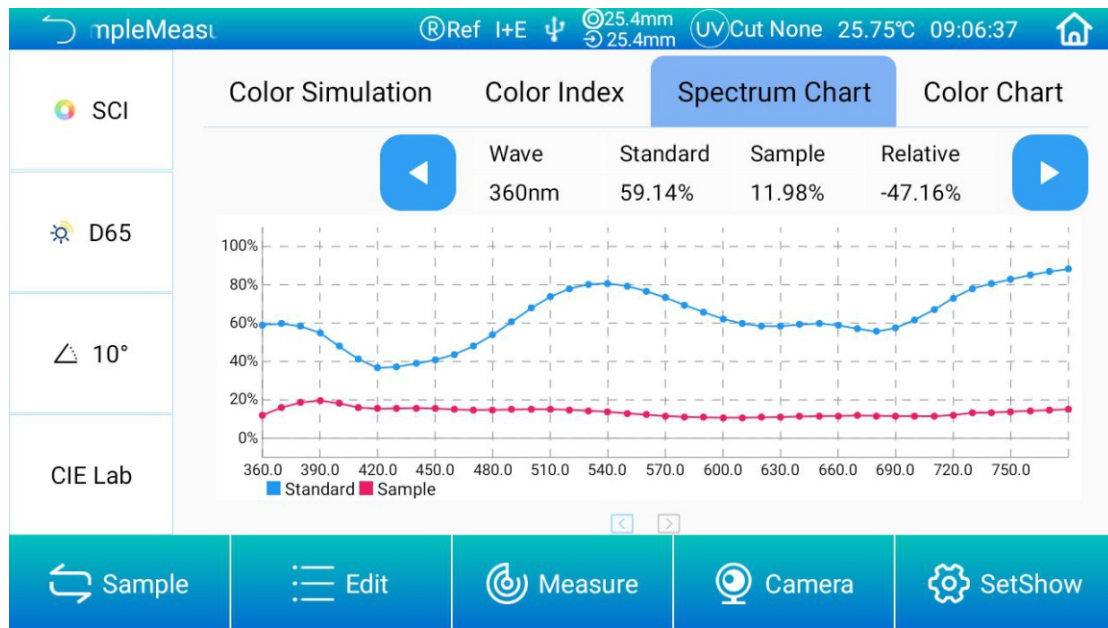


Functional Interface

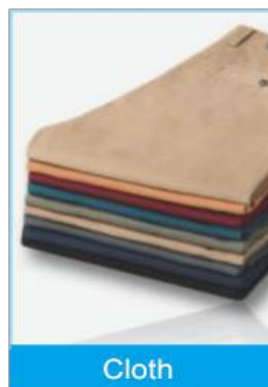
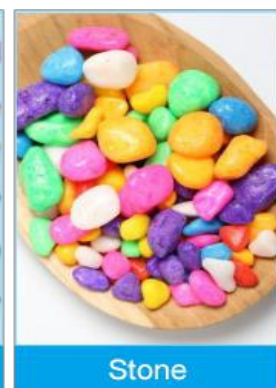


OUR OTHER PRODUCTS :-

Benchtop Spectrophotometer FS890	Transmittance Tester	Spectrophotometer TP900	Color Matching Cabinet	Gloss Meter Tri-angle	TP-800 Portable Spectrophotometer



FB 9500 desktop spectrophotometer equipped with Φ Four measuring apertures, 25.4/15/8/4mm,

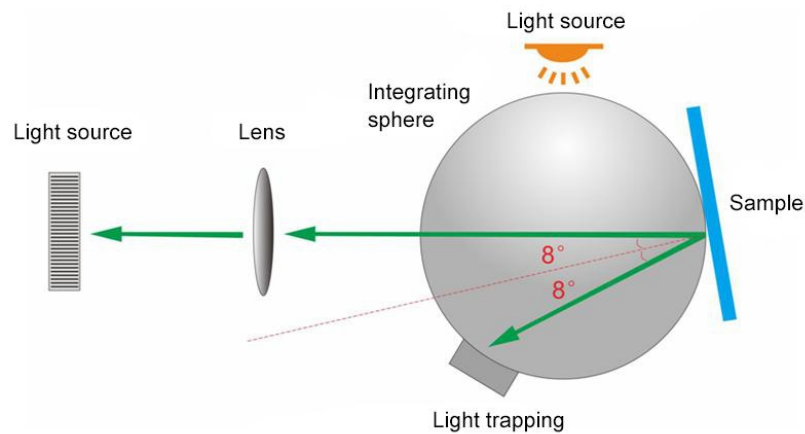




Product Features

1. Adopting an internationally recognized D/8 structure, compatible with SCI/SCE measurement, and supporting rapid measurement of SCI+SCE simultaneously

The FB 9500 desktop spectrophotometer adopts a wide range of D/8 lighting observation conditions and SCI/SCE (including mirror reflection/excluding mirror reflection) synthesis technology internationally, supporting rapid measurement of SCI+SCE simultaneously.



2. Large screen for easy operation, faster and more accurate measurement

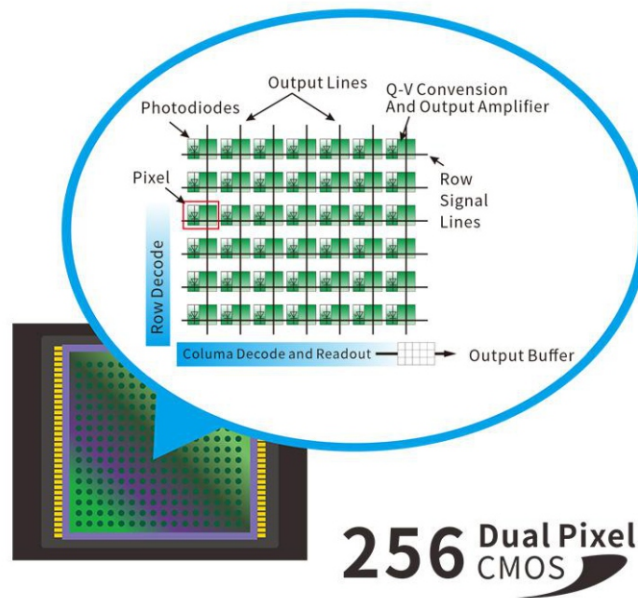
Equipped with a 7 inch independent rotatable tablet computer, fast response speed, comfortable and convenient operation.





3. Dual array CMOS image sensor

It has high sensitivity and a wide spectral response range, enabling high-precision and repeatable measurements.



256 Dual Pixel
CMOS

4. Rich measurement indicators and multiple observation light sources

D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, DLF, TL83, TL84, TPL5, U30B, U35, NBF, ID50, ID65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2, LED-C2, LED-C3, LED-C5, customizable light sources (a total of 41 types) Multiple observation light sources are partially implemented through the upper computer, which can meet special measurement needs under different measurement conditions.



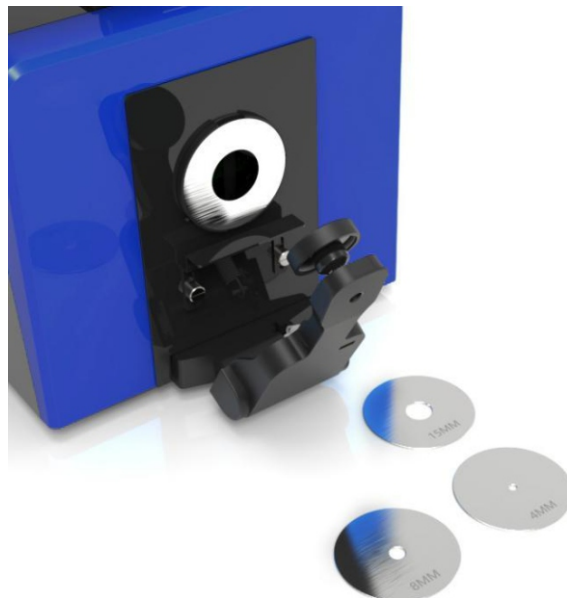
← Illuminant ®Ref I+E 25.4mm UV Cut None 24.75°C 08:46:06 ⌂

☒ D65	☐ D50	☐ A	☐ C
☐ D55	☐ D75	☐ F1	☐ F2
☐ F3	☐ F4	☐ F5	☐ F6
☐ F7	☐ F8	☐ F9	☐ F10
☐ F11	☐ F12	☐ CWF	☐ DLF

Back OK

5 Automatic caliber recognition

FB 9500 desktop spectrophotometer equipped with Φ There are four measurement apertures of 25.4/15/8/4mm, and the aperture and lens position can be configured according to needs, taking into account special measurement needs.



6 Convenient measurement and wide sample adaptation

Multiple positions such as side measurement, upward measurement, and downward measurement (using accessories) can be used for measurement. The open transmission chamber is suitable for more tested samples.



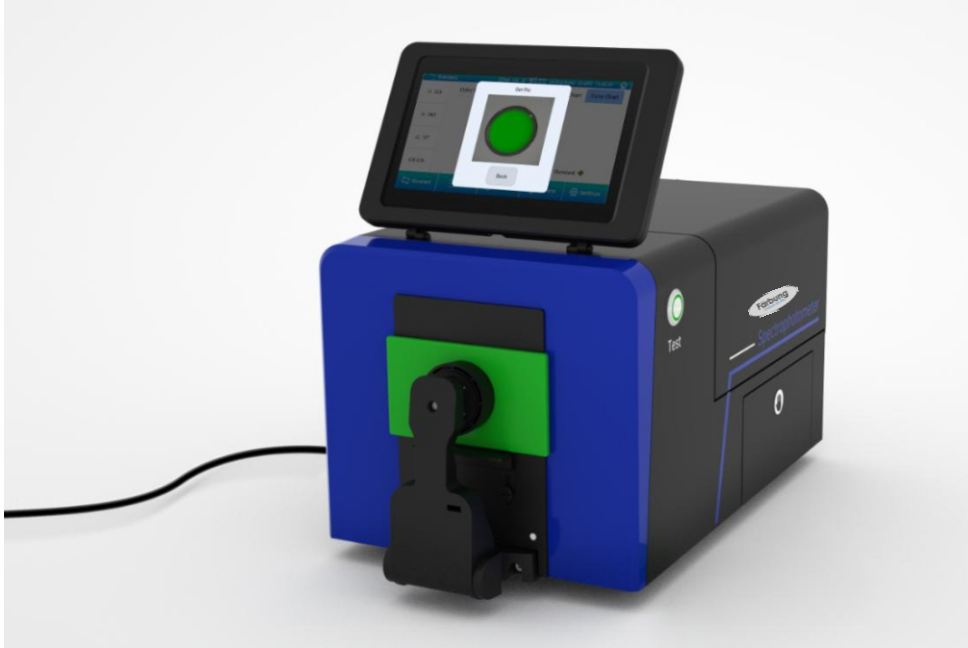
7 Automatic temperature and humidity compensation function, making measurement data more accurate



8 Camera positioning for clear observation of the measured area

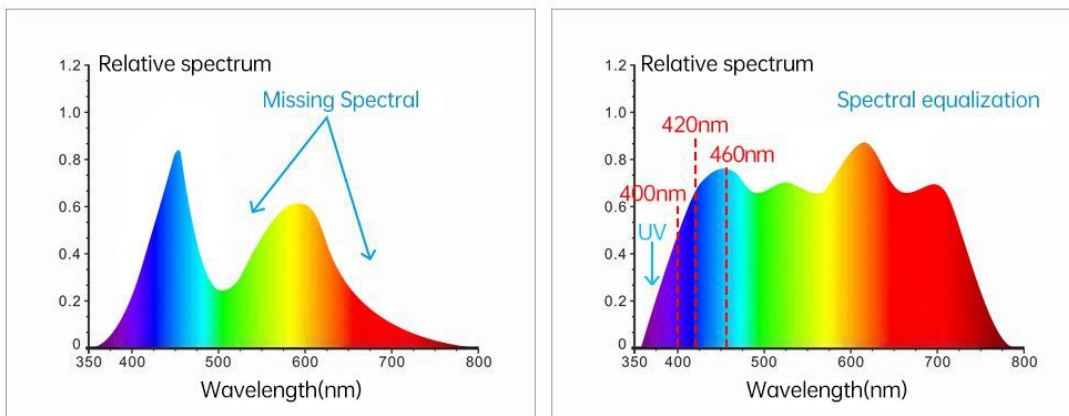


The FB 9500 desktop spectrophotometer has a built-in camera for framing and positioning. Through real-time framing, the camera can accurately determine whether the measured part of the object is the center of the target, improving measurement efficiency and accuracy.



9 Adopting a combination of full spectrum LED light sources and UV light sources

360~780nm combined LED light source, including UV, 400nm cut-off light source, 420nm cut-off light source, 460nm cut-off light source.



10 Color management software

The SQCX quality management software paired with the FB 9500 portable desktop spectrophotometer is suitable for quality monitoring and color data management in various industries. Digitize user color management, compare color differences, generate test reports, provide multiple color space measurement data, and customize customer color management work.



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Analysis and management

By connecting SQX software on PC, the instrument can analyze, copy, delete, modify, name and save the measured data.



Share and pass

The generated test report can be shared and transmitted through a connected computer. Fast exchange of color information to speed up production time.



Data printing

Compare color differences, generate test reports, and print out the data by connecting to a Bluetooth printer.



Mass storage

The measured data report can be uploaded to the cloud storage. Achieve mass data storage.

Model

FB 9500 (LED light source+xenon lamp)

Optical Geometry

Reflection: D/8 (diffuse illumination, receiving in 8 ° direction);
SCI/SCE measurement; Including UV/exclusion UV measurement;
Transmission: D/0 (diffuse illumination, receiving in 0 ° direction)
SCI/SCE measurement; Including UV/exclusion UV measurement;
Haze (ASTM D1003);
Conforming to standard CIE No.15, GB/T 3978, GB 2893, GB/T 18833,
ISO7724/1, ASTM E1164, DIN5033 Teil7, JIS Z8722 condition C



Characteristic	1. Widely used in industries such as plastic electronics, paint and ink, textile and clothing printing and dyeing, printing, etc.
	2.7 inch independent rotatable touchscreenr with 32GB storage space and real-time camera viewing.
	3. The instrument can be placed in multiple positions for measurement, such as side measurement, upward measurement, and downward measurement (using accessories).
	4. Open transmission chamber, capable of testing transmission samples with a thickness of 54mm.
	5. Automatic temperature and humidity compensation function.
	6. Built in full spectrum and high lifespan LED light sources and xenon light sources, testing fluorescence samples for better recognition.
Integrating Sphere Size	Φ154mm
Light Source	360~780nm combined LED light source, including UV, 400nm cut-off light source, 420nm cut-off light source
Spectrophotometric Mode	Concave grating
Senso	256 pixel dual array CMOS image sensor
Wavelength Range	360~780nm
Wavelength Interval	10nm
Semiband Width	5nm
Measured Reflectance Range	0~200%
Reflectivity resolution	0.01
Measuring Aperture	Reflection: XLAV Φ 25.4mm/ Φ 30mm LAV Φ 15mm/ Φ 18mm MAV Φ 8mm/ Φ 10mm SAV Φ 4mm/ Φ 6mm
	Transmission: Φ 25.4mm (Sample height and thickness:No restrictions on height,thickness≤54 mm)
	remarks:
	1. Switch caliber automatic recognition
	2. Customers can configure the aperture and lens position according to their



	needs
Specular Component	Reflection SCI/SCE, Transmission SCI/SCE
Color Space	CIE LAB,XYZ,Yxy,LCh,CIE LUV,Musell,s-RGB,HunterLab,βxy,DIN Lab99
Color Difference Formula	ΔE^*ab , ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*00 , DIN $\Delta E99$, $\Delta E(Hunter)$, ΔE^*CH , 555 tone classification
Other Colorimetric Index	WI (ASTM E313, CIE/ISO, AATCC, Hunter, Taube, Berger Stensby),YI (ASTM D1925, ASTM E313), ISO Brightness, R457 Brightness, Metamerism Index (Mt), Colorfastness to Crocking, Colorfastness to Light, Tinting Strength, Opacity, APHA/Hazen/Pt-Co (Platinum-Cobalt Index), Gardner Color Index, 8° Gloss, 555 Hue Classification, Haze and Transmission (ASTM D1003), Saybolt Color Index, ASTM D1500 Color Scale, 8° Gloss, Blackness (My, dM), Color Density (CMYK: A, T, E, M), Tinting Strength, Color Density, Pharmacopoeia (Chinese, European, US), EBC (Beer Color), ICUMSA Color (Sugar Color)(Some functions are implemented through a higher-level computer interface.)
Observer Angle	2°/10°
Illuminant	D65,A,C,D50,D55,D75,F1,F2,F3,F4, F5, F6,F7,F8,F9, F10,F11,F12,CWF,DLF,TL83,TL84,TPL5,U30, B,U35,NBF, ID50, ID65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2, LED-C2, LED-C3, LED-C5, customizable light sources (a total of 41 types of light sources, some implemented through the upper computer)
Displayed Data	Spectral map/data, sample chromaticity value, chromaticity difference value/map, chromaticity map, color simulation, qualified/unqualified results, color deviation, color evaluation, haze, liquid chromaticity
Measuring Time	About 2.0s (while testing SCI/SCE for about 4s)



Repeatability	Reflection chromaticity value: Φ 25.4mm/SCI, $\Delta E^* ab$ within 0.015 (LED, after preheating and calibration of the instrument, measure the average standard deviation of the whiteboard 30 times at an interval of 5 seconds) Spectral reflectance/transmittance: $\leq 0.1\%$
Inter-instrument Error	Φ 25.4mm/SCI, $\Delta E^* ab$ within 0.15 (BCRA series II 12 color plates measured average)
Dimension	Length X width X height=440X248X283mm
Weight	Approximately 13.5kg
Battery	DC 24V, 3A power adapter power supply
Illuminant Life Span	Over 3 million measurements over 5 years
Display	7 inch independent rotatable touchscreen with 32GB of storage space
Data Port	USB, Bluetooth®
Data Storage	32G storage space, over 100000 pieces (SCI/SCE counts as one piece of data)
Language	Simplified Chinese, Traditional Chinese, English(customizable for German, French, Spanish, Russian, Japanese, Thai, Korean, Polish, Portuguese)
Operating Environment	0~40°C (32~104°F)
Storage Environment	-20~50°C (-4~122°F)
Standard Accessory	Power adapter, manual, quality management software (USB flash drive), data cable, standard calibration board, black calibration box, transmission black baffle, sample holder, 25.4 caliber, 15 caliber, 8 caliber, 4 caliber, transmission testing fixture component, colorimetric cell
Optional Accessory	Inverted stand, culture dish, microporous (4mm) transmission testing fixture assembly, film fixture
Notes	Subject to change without prior notice



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