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Accurate measurement

Stable and reliable

Support for multiple caliber

Camera framing and positioning

Dual optical path system

Mobile APP

LED light source
xenon lamp

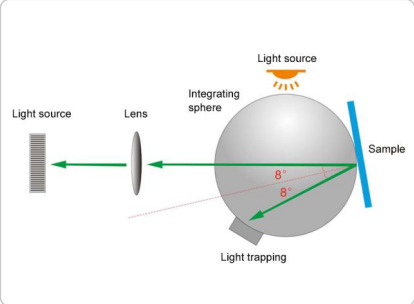
TS8560

Desktop spectrophotometer

ISO 9001 Certified

The desktop spectrophotometer TS8560 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 10.5 inch independent rotatable tablet computer, making operation convenient and fast. Supports two lighting methods: pulse xenon lamp and LED, and the repeatability of the reflection chromaticity value of the TS8560 desktop spectrophotometer Δ E * ab ≤ 0.01, inter station difference Δ E * ab is controlled within 0.1, and the data is stable and reliable.

Product Features

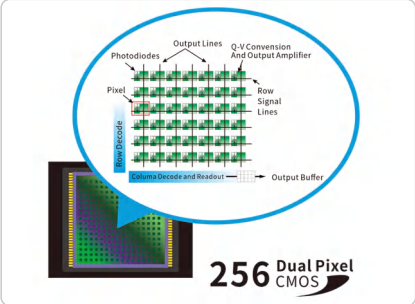


1. Adopting an internationally recognized D/8 structure

The TS8560 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.

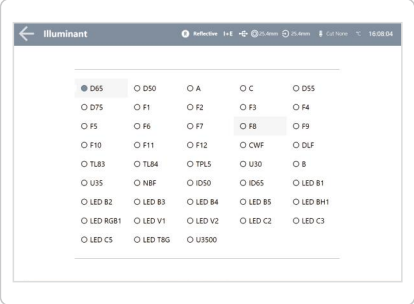
2.Large screen for easy operation, faster and more accurate measurement

Equipped with a 10.5 inch independent rotatable tablet computer, fast response speed, comfortable and convenient operation.



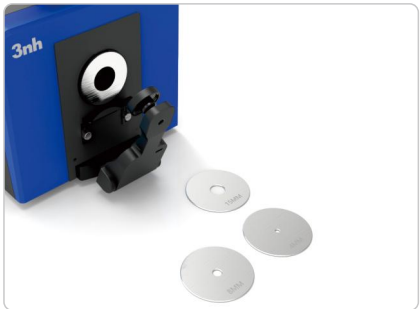
3. Dual array CMOS image sensor

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



4. Rich measurement indicators and multiple observation light sources

Provide more than 40 measurement indicators, as well as a variety of customizable light sources (a total of 41 light sources, some implemented through the upper computer) for observation, which can meet special measurement needs under different measurement conditions.



5. Automatic caliber recognition

TS8560 desktop spectrophotometer equipped with 3-4pcs 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.

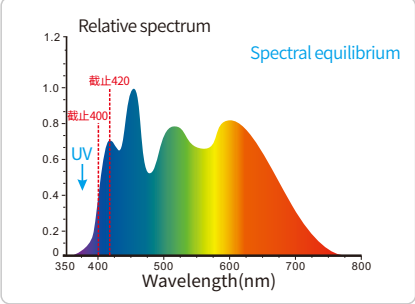
6. Convenient measurement and wide sample adaptation

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 TS8560 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.



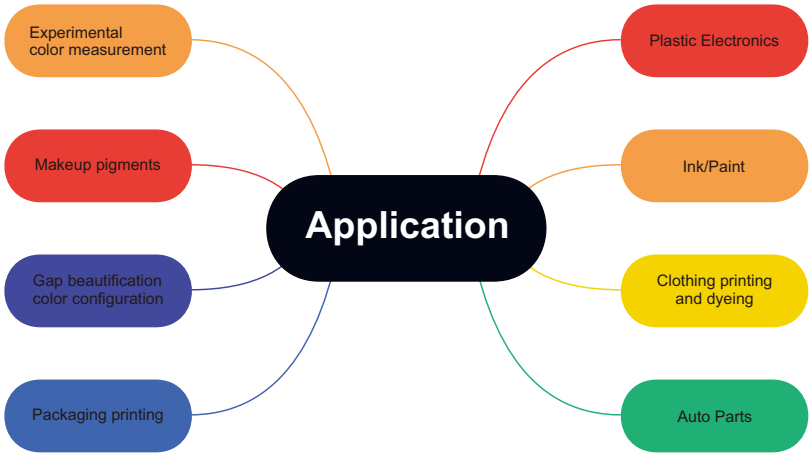
9. Adopting a combination of full spectrum LED light sources and UV light sources

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

SQCX Color Quality Management Software

10、Color management software

The SQCX quality management software paired with the TS8560 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.



Efficient

- Very suitable for laboratory and factory use
- Multiple measurement apertures, supporting measurement in different situations such as flat and curved surfaces, and small items
- Supports USB wired and Bluetooth wireless transmission, data Instant testing and transmission, convenient and fast.
- Fast and accurate measurement, while measuring SCI and SCE in just 1 second

Accurate reading

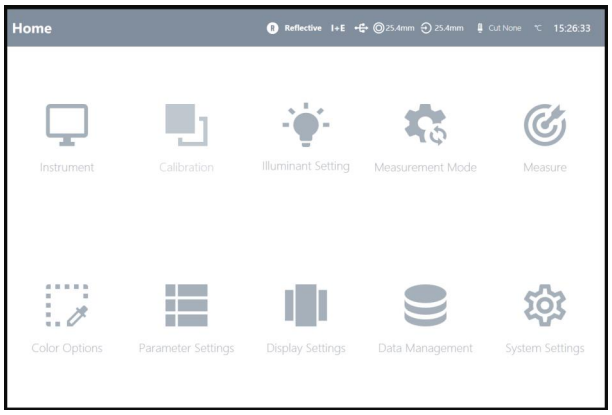
- Measurement accuracy 0.01
- The repeatability standard deviation is within Δ E * ab ⩽ 0.1 or less
- Support multiple national and international standard measurements
- Multiple algorithms with different apertures

Powerful

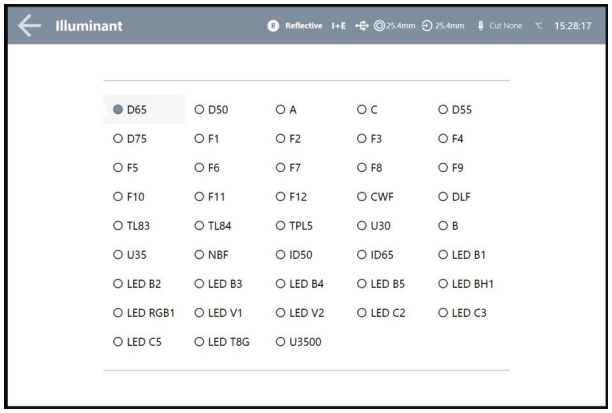
- Suitable for color difference quality control in industries such as plastic electronics, paint and ink, textile and clothing printing and dyeing, printing, ceramics, etc

- 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)

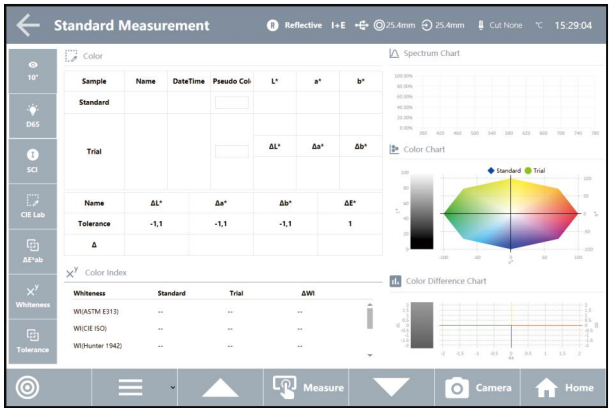
Instrument interface



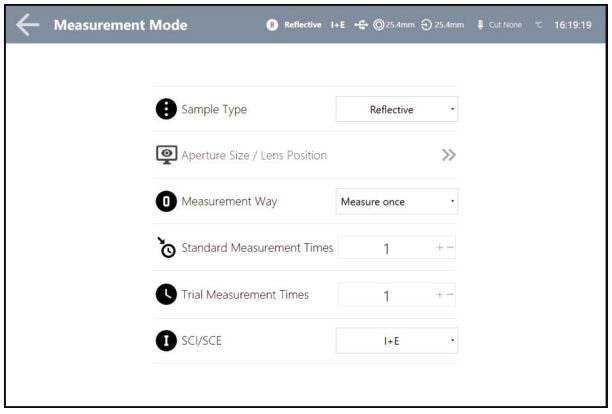
Main menu



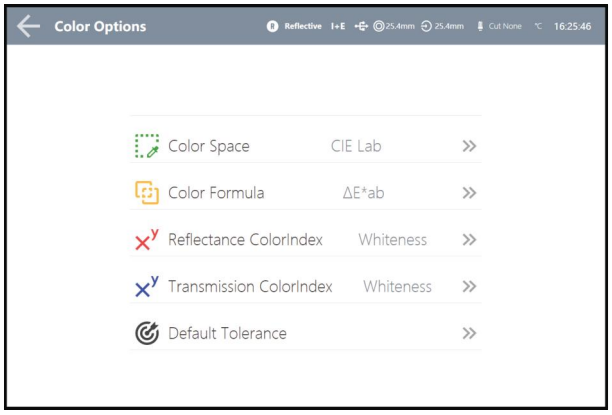
Illuminant



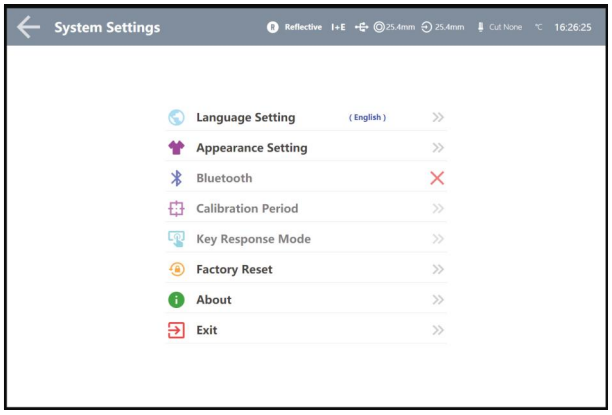
Measurement interface



Measurement parameter settings



Color options



System settings

Optional Accessory Meet more needs of customers

The instrument is equipped with various accessories; Such as inverted stand, petri dish, microporous (4mm) transmission test fixture assembly, film fixture; Meet the needs of more measurement samples.

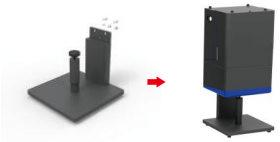
Petri dish

Microhole (4mm) transmission test fixture assembly

Make sure the petri dish is fixed for measurement.

Film fixture

Easy film sample measurement.



handstand

Meet more sample measurement needs; Measurement is more convenient and flexible.

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SQCX

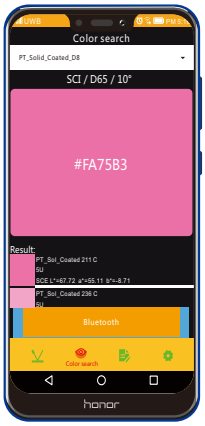
Connect devices for powerful functionality expansion

SQCX can be connected to a spectrophotometer through USB cable or Bluetooth (only instruments that support Bluetooth), control the instrument for measurement, change instrument configuration, and operate instrument data. At the same time, it has also greatly expanded the functions of the instrument, supporting multiple color schemes, light sources, and more complex data management, color detection, report generation, etc. It is a powerful assistant for color quality management.

SQCA

Connect

Via Bluetooth ® Connect the instrument to the mobile phone to see the real-time readings directly, and save them to the historical record.

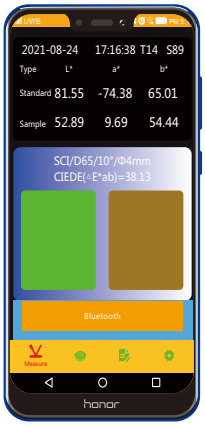


Review

Visually view historical measurement records for easy comparison.

Management and printing

You can copy, delete and upload data to the cloud, or print the data by connecting to a Bluetooth printer.

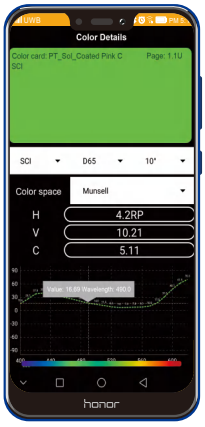


Rename and change

You can name data records to facilitate data modification while recording.

Color check and color formula

The APP is built with massive color data. Through the analysis of measured colors, the software automatically finds similar color cards and obtains color formulas.



Transmission

Transfer detection data from mobile devices to computers for further analysis, create reports or upload to the cloud.

Android

iOS Mobile/PC

HarmonyOS

WeChat applet

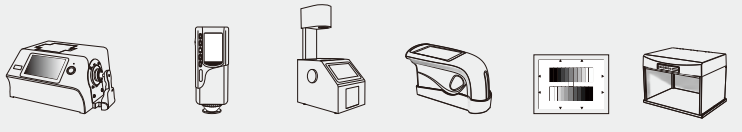
Windows

Color matching cloud

Technical Parameter

Model	TS8560(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);
Standard	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. 2.10.5 inch independent rotatable tablet computer with 64GB 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, 360~780nm xenon lamp
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	Δ E*ab, Δ E*uv, Δ E*94, Δ E*cmc(2:1), Δ E*cmc(1:1), Δ E*00, DIN Δ E99, Δ E(Hunter) , Δ E * 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)
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, Δ E * ab within 0.01 (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: ≤ 0.1%
Inter-instrument Error	Φ 25.4mm/SCI, Δ E * ab within 0.1 (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	10.5 inch independent rotatable tablet
Data Port	USB, Bluetooth ®
Data Storage	64G 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℃ (32~104°F)
Storage Environment	–20~50℃ (–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, 10.5 inch tablet computer
Optional Accessory	Inverted stand, culture dish, microporous (4mm) transmission testing fixture assembly, film fixture
Notes	Subject to change without prior notice

Guangdong Sanenshi Intelligent Technology Co., Ltd.



Spectrophotometers Colorimeters Haze Meters Gloss Meters Test Charts Light Booths

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