PORTABLE DESKTOP SPECTROPHOTOMETER

+

3nh

Easy measurement

Color difference control

Fast │ Stable │ Accurate

ISO 9001 Certified

TS8290

SHENZHEN THREENH TECHNOLOGY CO., LTD.

The portable desktop spectrophotometer TS8290 is a spectrophotometer developed by us using our own core technology of spectroscopy. It uses a built-in silicon photodiode array (40 pairs of dual-row) sensors and an imported whiteboard. It also takes into account the measurement speed and the convenience of operation. Type structure, testing is more convenient. The repeatability ΔE*ab of TS8290 portable desktop spectrophotometer is easily controlled within 0.05, and the difference ΔE*ab between stations is controlled within 0.15. The measurement is accurate and it is a good helper for color quality control inspection.
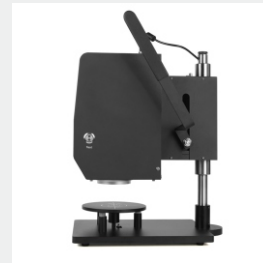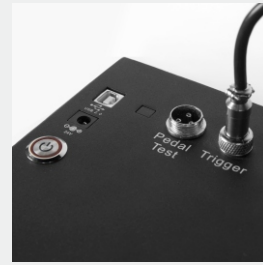
- 7in color Touch screen
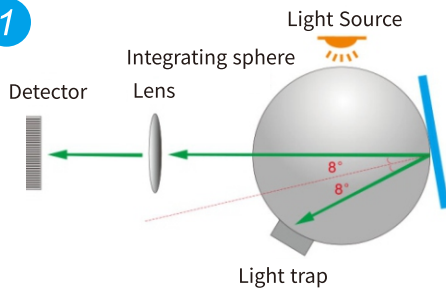- USB/Bluetooth
- 152mm Big Integrating sphere
- Camera viewfinder positioning

Features

1

Light Source

Integrating sphere

Detector Lens

8°
8°

Light trap

1. The internationally-used D/8 structure supports SCI+SCE simultaneous rapid measurement

The TS8290 portable desktop spectrophotometer adopts a wide range of internationally applicable D/8 illumination observation conditions, SCI/SCE (including specular reflection/not including specular reflection) synthesis technology, supports SCI+SCE simultaneous rapid measurement, and the test time is about 3.2 Second.
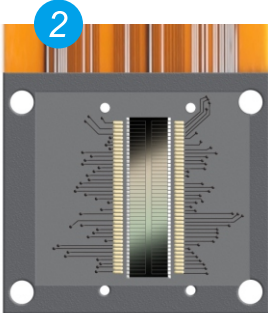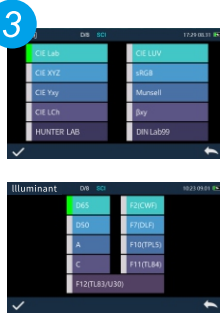

2. Silicon photodiode array (double 40 array) sensor

Larger area dual 40 array sensor, strong light will not saturate, low light sensitivity higher and wider spectral response range, ensuring the measurement speed, accuracy, stability and consistency of the instrument.
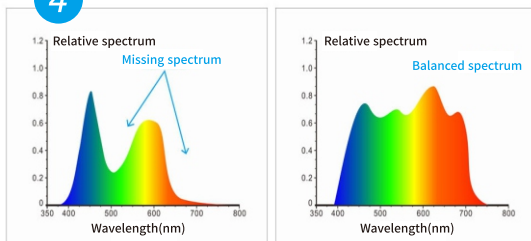
3. A variety of color measurement space, a variety of observation light sources

TS8290 portable desktop spectrophotometer provides CIE LAB, XYZ, Yxy, LCh, CIE LUV, s-RGB, HunterLab, βxy, DIN Lab99 Munsell (C/2) color space, and D65, A, C, D50, D55, D75, F1, F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL5), F11 (TL84), F12 (TL83/U30) a variety of observation light sources, can meet different requirements Special measurement requirements under measurement conditions.

Relative spectrum — Missing spectrum
Wavelength(nm)

Relative spectrum — Balanced spectrum
Wavelength(nm)

4. Adopt a combined full-spectrum LED light source and UV light source

The full-band balanced LED light source ensures sufficient spectral distribution in the visible light range, avoids the lack of spectrum of white light LEDs in specific wavelength bands

5. Camera framing and positioning, can clearly observe the measured area

The TS8290 portable desktop spectrophotometer has a built-in camera for framing and positioning. Through the real-time framing of the camera, it can accurately determine whether the measured part of the object is the center of the target, which improves the measurement efficiency and accuracy.

6. Color management software

The SQCX quality management software matched with the TS8290 portable desktop spectrophotometer is suitable for quality monitoring and color data management in various industries. Dataize the user's color management, compare color differences, generate test reports, provide multiple color space measurement data, and customize customer color management.

APPLICATION INDUSTRY

Spectrophotometers are widely used in plastics, electronics, paint and ink, textile and garment printing and dyeing, printed paper products, automobiles, medical treatment, cosmetics and food industries. The instrument is equipped with high-end color management software, which can be connected to a computer to achieve more functional expansion.

Plastic	Coatings, inks	Print	Car	Textile	Food, Medicine	Other

TS8290 Portable desktop spectrophotometer

Optical Geometry:D/8(diffused illumination, 8-degree viewing angle),SCI (specular component included)/SCE (specular component excluded) ; Include UV / excluded UV light source,Comply to CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7

Integrating Sphere Size:Φ152mm

Light Source: Combined full spectrum LED light source, UV light source

Spectrophotometric Mode: Flat Grating

Senso: Silicon photodiode array (double row 40 groups)

Wavelength Range:400~700nm

Wavelength Interval:10nm

Semiband Width:10nm

Measured Reflectance Range:0~200%

Measuring Aperture:Φ30mm/Φ25.4mm

Specular Component:SCI/SCE

Color Space:CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,HunterLab,βxy,DIN Lab99 Munsell(C/2)

Color Difference Formula:ΔE*ab,ΔE*uv,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, DINΔE99,ΔE(Hunter)

Other Colorimetric Index:WI(ASTM E313,CIE/ISO,AATCC,Hunter), YI(ASTM D1925,ASTM 313),Metamerism Index MI,Staining Fastness, Color Fastness, Color Strength, Opacity,8° Glossiness,555 tone classification

Observer Angle:2°/10°

Illuminant:D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84),F12(TL83/U30)

Displayed Data: Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Simulation, Color Offset

Measuring Time: About 1.5s (Measure SCI & SCE about 3.2s)

Repeatability: Chromaticity value: MAV/SCI, within ΔE*ab 0.05 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

Inter-instrument Error:MAV/SCI, Within ΔE*ab 0.15(Average for 12 BCRA Series II color tiles)

Measurement Mode: Single Measurement, Average Measurement(2-99times)

Locating Method: Camera Locating

Dimension:L*W*H= 425X250X470mm

Weight: About 18 kg

Battery:AC 24V, 3A Power adapter power supply

Illuminant Life Span:5 years, more than 3 million times measurements

Display:7-inch TFT color LCD, Capacitive Touch Screen

Data Port:USB, Bluetooth ® , trigger switch interface

Data Storage: Standard 1000 Pcs, Sample 30000 Pcs

Language: Simplified Chinese, English, Traditional Chinese

Standard Accessory: Power Adapter, USB Cable, User Guide, PC Software(Download from office website), White and Black Calibration Cavity,Aperture

Optional Accessory: Micro Printer, Foot Switch, Rotating Bracket

3nh
Focus on Color