®

3nh

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Portable Desktop
Grating Spectrophotometer

TS8210

PORTABLE

DESKTOP
SPECTROPHOTOMETER

- Flat Grating
- 7-inch large touch screen
- 400-700nm spectrum display
- Camera Locating

The portable desktop spectrophotometer TS8210 is a spectrophotometer developed by 3NH with independent core spectroscopic technology. IIt adopts built-in silicon photodiode array (40 groups in double rows) sensors and imported white board, and gives consideration to:the speed of measurement and the convenience of operation.The rotating and pressing structure makes the test more convenient.TS8210 portable desktop spectrophotometer color measurement instrument features with repeatability $\Delta E * ab$ easily control within:0.025,and inner errors $\Delta E*ab$ control within 0.2.This accuracy measurement makes it good used in the lab color accurate analysis and transfer.

ISO 9001 Certified   CE   SCM   TÜV   RoHS   FC

PRODUCT SHOW
TS8210

Display screen

Handle

Measured object

Power DC interface

USB interface

Test

Foot switch interface

Removable bracket

Switch

Caliber switch

Test

4mm

8mm

Peco Test

The TS8210 portable desktop spectrophotometer adopts a customized single Φ8mm, Φ4mm measuring caliber, which can be measured horizontally or vertically, and has a wider adaptability. It can meet the precise color measurement and quality of plastic electronics, paint ink, textile and clothing printing and dyeing, printing, ceramics and other industries. Control, can be used for fluorescence sample measurement.

Horizontal or vertical measurement

Camera Locating

Color management software

PRODUCT ADVANTAGES

1. Use full-band balanced LED 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 LEDs in specific wavelength bands, and ensures the measurement speed of the instrument and the accuracy of the measurement results.

2. Silicon photodiode array (double 40 array) sensor

Larger area of the dual 40 array sensor, strong light will not be saturated, low light sensitivity higher and wider spectral response range, which ensures the measurement speed, accuracy, stability and consistency of the instrument.

3. Adopt the international D/8 structure to support SCI+SCE simultaneous rapid measurement

The TS8210 portable desktop spectrophotometer adopts a wide range of internationally applicable D/8 illumination observation conditions, SCI/SCE (including specular reflection/excluding specular reflection) synthesis technology, supports SCI+SCE simultaneous rapid measurement, and the test time is about 3.2 second.

4. Camera Locating

The TS8210 portable desktop spectrophotometer has a built-in camera for viewing and positioning. Through the camera for real-time viewing, it can accurately determine whether the measured part of the object is the center of the target, which improves the measurement efficiency and accuracy.

5. Industrial grade HD touch screen

Using a 7-inch industrial-grade high-definition touch screen, the control is smooth, and the easy-to-use user interface makes the operation comfortable, convenient and easier to use.

6. Color management software

The SQCX quality management software with the TS8210 portable desktop spectrophotometer is suitable for quality monitoring and color data management in various industries. Data the user's color management, compare color differences, generate test reports, provide a variety of color space measurement data, and customize customer color management.

SPECIFICATION PARAMETER

TS8210 Portable desktop spectrophotometer

Model: TS8210

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

Characteristic: Customized aperture,good for horizontal or vertical measurement, wider adaptability;Suitable for precise color measurement and quality control in textile and garment printing and dyeing, plastic electronics, ceramics and other industries;

Integrating Sphere Size: Φ40mm

Light Source: Combined full spectrum LED light source

Spectrophotometric Mode: Flat Grating

Sensors: Silicon photodiode array (double row 40 groups)

Wavelength Range:400~700nm

Wavelength Interval:10nm

Semiband Width:10nm

Measured Reflectance Range:0~200%

Measuring Aperture: Customized single aperture: MAV: Φ8mm/ Φ10mm;SAV:Φ4mm/Φ5mm

Specular Component:SCI/SCE

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

Color Difference Formula: $\Delta E^*ab,\Delta E^*uv,\Delta E^*94,\Delta E^*cmc(2:1), \Delta E^*cmc(1:1),\Delta E^*00$

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

Observer Angle:2°/10°

Illuminant:D65,A,C,D50,F2(CWF),F7(DLF),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 0.025(When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

Inter-instrument Error:MAV/SCI, Within ΔE^*ab 0.2(Average for 12 BCRA Series II color tiles)

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

Locating Method: Camera Locating

Dimension:L*W*H=370X240X260mm

Weight: About 7.8kg

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, trigger switch interface

Data Storage: Standard 1000 Pcs, Sample 20000 Pcs

Language: Simplified Chinese, English, Traditional Chinese

Operating Environment: 0~40℃, 0~85%RH (no condensing), Altitude < 2000m

Storage Environment: -20~50℃, 0~85%RH (no condensing)

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

Optional Accessory: Micro Printer, Foot Switch, Rotating Bracket

Notes: Technical parameters are only for reference, subject to the actual sale of the product
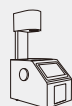
GUANGDONG THREENH TECHNOLOGY CO., LTD.

Spectrophotometers   Colorimeters   Haze Meters   Gloss Meters   Test Charts   Light Booths

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