



3nh Global



## Portable Desktop Grating Spectrophotometer

The portable desktop spectrophotometer TS8260 is a spectrophotometer developed by 3NH with independent core spectroscopic technology. It 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. TS8260 portable desktop spectrophotometer color measurement instrument features with repeatability  $\Delta E^*ab$  easily control within: 0.02, and inner errors  $\Delta E^*ab$  control within 0.15. This accuracy measurement makes it good used in the lab color accurate analysis and transfer.

The instrument is equipped with optional accessories: micro printer, foot switch, rotary support can be freely selected according to demand.



micro printer



foot switch



rotary stand

## TS8260 PORTABLE DESKTOP SPECTROPHOTOMETER

Flat Grating



7-inch large touch screen



400-700nm spectrum display



Camera Locating





Display screen

Handle

Horizontal or vertical measurement

Measured object

Test

Removable bracket

Caliber switch



Power DC interface

USB interface

Foot switch interface

Switch

## APPLICATION INDUSTRY

TS8260 portable desktop spectrophotometer color measurement instrument equipped with  $\Phi 4\text{mm}$  and  $\Phi 8\text{mm}$  free switch diameter measurement, 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; and it can be used for fluorescence sample measurement.

## PRODUCT ADVANTAGES

### 1. Adopt combination full spectrum LED light source

Full band balanced LED light source ensures sufficient spectral distribution in visible light range, avoids the spectral loss of white LED in specific band, ensures the accuracy of instrument measurement speed and measurement results.

### 2. Silicon photodiode array sensor (40 groups with double rows)

Double 40 array sensor with larger area, high light saturation, high sensitivity of low light and wide spectral response range ensure the measurement speed, accuracy, stability and consistency of the instrument.

### 3. Calibration Certificate

TS8260 spectrophotometer has been verified and tested. After leaving the factory, each instrument is verified according to the measurement standards of authoritative verification departments, and the measurement data are traceable to the National Metrological Institute to ensure the authority of the instrument test data.

### 4. Industrial-grade HD touch screen, easy to use user interface

Using 7-inch industrial grade HD touch screen, smooth operation, the user interface is easy to use and it makes the operation to become comfortable and convenient.

### 5. 10 color spaces, 18 light sources

Built-in ten kinds of color measurement spaces and eighteen kinds of observation light sources can meet the special measurement requirements under different measurement conditions.

### 6. Color management software

SQCX quality management software with TS8260 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 multiple color space measurement data, and customize the customer's color management.



Color management software



# SPECIFICATION PARAMETER

## TS8260 Portable desktop spectrophotometer

**Model:**TS8260

**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

**Characteristic:**  $\Phi$ 8/4mm apertures,free switch,good for horizontal or vertical measurement, wider adaptability;Accurate measurement, can be used for laboratory color accurate analysis and transmission;Suitable for precise color measurement and quality control in textile and garment printing and dyeing, plastic electronics, ceramics and other industries; It can be used for fluorescence sample measurement.

**Integrating Sphere Size:**  $\Phi$ 40mm

**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:** MAV: $\Phi$ 8mm/ $\Phi$ 10mm;SAV: $\Phi$ 4mm/ $\Phi$ 5mm

**Specular Component:** SCI/SCE

**Color Space:** CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,HunterLab, $\beta$ xy,DIN Lab99 Munsell(C/2)

**Color Difference Formula:**  $\Delta E^*_{ab}$ , $\Delta E^*_{uv}$ , $\Delta E^*_{94}$ , $\Delta E^*_{cmc}(2:1)$ , $\Delta E^*_{cmc}(1:1)$ , $\Delta E^*_{00}$ , DIN $\Delta E_{99}$ , $\Delta E$ (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  $\Delta E^*_{ab}$  0.02 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

**Inter-instrument Error:** MAV/SCI, Within  $\Delta E^*_{ab}$  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=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, Bluetooth, trigger switch interface

**Data Storage:** Standard 1000 Pcs, Sample 30000 Pcs

**Language:** Simplified Chinese, English, Traditional Chinese

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

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

**Standard Accessory:** Power Adapter, USB Cable, User Guide, PC Software(Download from office website), White and Black Calibration Cavity, 8mm Aperture, 4mm 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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