



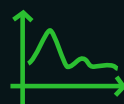
3nh Global



Flat Grating



3.5in color touch screen



400-700nm measuring range

TS7020 INTRODUCTION

TS7020 is a new portable spectrophotometer with 3nh own core research and development technology. It is the high level colorimeter in spectral architecture. In addition to ensure accurate relative ΔE at the same time, it is also to ensure the accuracy of the absolute value of L, A and B for a long time. And it can pass the international standards and national standards of calibration any time any where. Using built-in silicon photodiode array (double row group 24) sensors, imported whiteboard, repeatability ΔE^*_{ab} is easily controlled within 0.08. The measurement speed and convenience of the operation makes it easy to use. TS7020 spectrophotometer can all quickly judge color difference measurement when connecting to PC software or not.



SHENZHEN THREE NH TECHNOLOGY CO., LTD.

APPLICATION INDUSTRY

With 8mm aperture, TS7020 spectrophotometer is widely suitable for the industry production and quality inspection of accurate color difference control like plastic electronics, paint and ink, textile printing and dyeing, printing, ceramic industry etc.



Automobile

Leather

Plastics

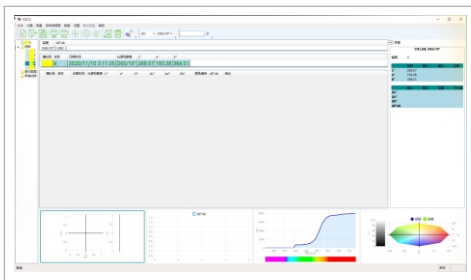
Paint

Food stuff

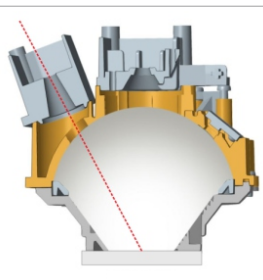
Laboratory

Others

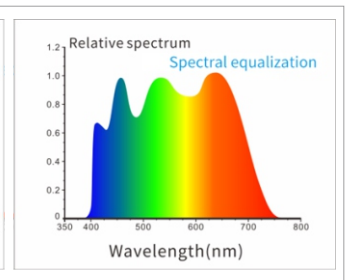
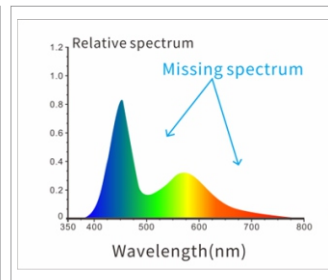
PRODUCT ADVANTAGES



Color management software



ETC real-time calibration technology



Adopt fullwaveband balanced LED light source

1. Adopt fullwaveband balanced LED light source

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

2. Silicon photodiode array sensor (24groups with double rows)

The dual-24 array sensor with larger area has strong light but not saturate, higher sensitivity of low light and wider spectral response range, which ensures the measurement speed, accuracy, stability and consistency of the instrument.

3. Ergonomic design and easy measuring device

TS7020 spectrophotometer has a beautiful, smooth shape and comfortable grip, in line with the structure design of human mechanics, fit the palm for continuous testing, so that you can use it quickly and easily. An automatic measuring device is added, which is portable, quick and easy to measure.

4. Calibration Certificate

Each TS7020 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 Metrotechnical Institute to ensure the authority of the instrument test data.

5. ETC real-time calibration technology

TS7020 spectrophotometer adopts imported standard white board, which is resistant to yellowing and dirt infiltration and can be wiped, ensuring the long-term accuracy of the instrument. An innovative ETC real-time Calibration technique is also used, with a built-in standard white board into the optical system, which is reliably accurate and repeatable for each Test.

6. Color management software

SQCX quality management software with TS7020 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.

SPECIFICATION PARAMETER

TS7020 Spectrocolorimeter

Model: TS7020

Optical Geometry: D/8(diffused illumination, 8-degree viewing angle), SCI Mode

Characteristic: Φ8mm apertures, Used for accurate color measurement and quality control in plastic electronics, paint and ink, textile and garment printing and dyeing, printing, ceramics and other industries

Integrating Sphere Size: Φ40mm

Light Source: Combined full spectrum LED light source

Spectrophotometric Mode: Flat Grating

Senso: Silicon photodiode array (double row 24 groups)

Wavelength Range: 400~700nm

Semiband Width: 10nm

Measured Reflectance Range: L:0~100; reflectivity:The reflectivity can be measured at 3 specific wavelengths specified by the user (default: 440nm, 550nm, 600nm)

Measuring Aperture: Φ8mm

Specular Component: SCI

Color Space: CIE LAB,XYZ,Yxy,LCh

Color Difference Formula: $\Delta E^*ab, \Delta E^*00$

Observer Angle: 10°

Illuminant: D65,A,F2(CWF)

Displayed Data: Reflectivity (the user specifies the reflectivity at 3 specific wavelengths), Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Simulation, Color Offset

Displayed Accuracy: Display 0.1, storage 0.01

Measuring Time: About 1.5s

Repeatability: Chromaticity value: MAV/SCI, within ΔE^*ab 0.08 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

Inter-instrument Error: MAV/SCI, Within ΔE^*ab 0.4(Average for 12 BCRA Series II color tiles)

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

Locating Method: Stabilizer cross position

Dimension: L*W*H=81X71X214mm

Weight: About 460g

Battery: Li-ion battery, 6000 measurements within 8 hours

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

Display: 3.5-inch TFT color LCD, Capacitive Touch Screen

Data Port: USB

Data Storage: Standard 500 Pcs, Sample 10000 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, Protective Cover, Wrist strap, 8mm flat aperture

Optional Accessory: USB Micro Printer, Powder Test Box

Notes: Technical parameters are only for reference, subject to the actual sale of the product



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