

Restore True Color, Enjoy Color Matching



YS3010 ECONOMIC SPECTROPHOTOMETER

YS3010 is independently developed by 3nh, who has completed intellectual property rights. With high-effective cost and 8mm aperture, it has good accuracy and enough storage, suitable for most users' requirement. It has a PC software to connect the computer for color control quality management to achieve more functions.



Con-cave Grating



USB interface



LED light



Camera Locating

APPLICATION INDUSTRIES



Automobile



Leather



Plastics



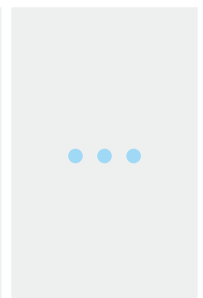
Paint



Food stuff



Laboratory



Others

PRODUCT FEATURES

- 1.D/8 geometrical optics, conforms with CIE No.15,GB/T 3978,GB2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil
- 2.Use long life and low power consumption combined LED light source
- 3.Single 8mm aperture, support both SCI and SCE at the same time;
- 4.Measure sample spectra, accurate Lab data , can be used in color matching and accurate color transmission;
- 5.High electronic hardware configuration: 3.5-inch TFT color LCD,Capacitive Touch Screen, concave grating, 256 Image Element Double Arrays CMOS Image Sensor;
- 6.Super stain-resistant and stable standard white calibration plate;
- 7.Large capacity storage space, over 20,000 measurement data;
- 8.Two standard observer angles, a variety of illuminant, a variety of color indexes, conforms with a variety of standard colorimetric data, meet a variety of customers' demand for color measurement;
- 9.Camera Locating Function, better position;
- 10.PC software has a powerful function extension.

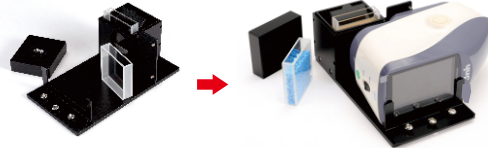


OPTIONAL ACCESSORIES

The instrument is equipped with various accessories; Such as micro printer, powder test box, etc.; Meet the needs of more measurement samples.



Powder test box: Easy to use, focusing on powdered target measurement.



Multifunctional test components: can be used to test liquid reagents, sauces (such as ketchup, paint), powders (such as coffeeBrown), color masterbatch, etc.



Micro printer: easy to carry, without computer can continuously print out the measurement of various parameters, easy to save.

SPECIFICATION PARAMETERS

Model: YS3010 Grating Spectrophotometer

Optical Geometry: Reflect: di:8°, de:8°(diffused illumination, 8-degree viewing angle)

Integrating Sphere Size: 48mm

Light Source: Combined LED Light

Spectrophotometric Mode: Concave Grating

Locating Method: Camera Locating

Sensor: 256 Image Element Double Array CMOS Image Sensor

Wavelength Range: 400-700nm

Wavelength Interval: 10nm

Semiband Width: 10nm

Measured Reflectance Range: 0-200%

Measuring Aperture:Single Aperture: 8mm/10mm

Specular Component: SCI&SCE

Color Space: CIELAB,XYZ,Yxy,LCh,CIELUV,s-RGB,HunterLab,βxy,DINLab99,Munsell(C/2)

Color Difference Formula: $\Delta E^*ab, \Delta E^*uv, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00, \text{DIN}\Delta E99, \Delta E(\text{Hunter})$

Other Colorimetric Index: Spectral reflectance, whiteness (ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube-Berger-Stensby), yellowness (ASTM D1925, ASTM E313-00, ASTM E313-73), metamerism index Mt, colorfastness to crocking, colorfastness to light, strength (dye strength, tinting strength), opacity, 8-degree gloss, 555 hue classification, blackness (My, dM), color density CMYK (A, T, E, M), tint (ASTM E313-00), color density, Munsell (some functions realized through a higher-level computer).

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(A total of 41 light sources (some functions realized through a higher-level computer)

Displayed Data: Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph,

PASS/FAIL Result, Color Offset

Observer Angle: 2°/10°

Software Support: Android,iOS,Windows,WeChat Mini Program,HarmonyOS

Measuring Time: Approx.1.0s(whiltestingSCI/SCEapprox.2.6s)

Repeatability: Spectral reflectance: MAV/SCI, standard deviation within 0.1%(400~700nm: within 0.2%)

Chromaticity value: MAV/SCI, within ΔE^*ab 0.05(After calibration, measure the average value of the white board 30 times each 5S.)

Inter-instrument agreement: MAV/SCI, within ΔE^*ab 0.2(Average value for 12 BCRA series II color tiles)

Measurement mode: single measurement, average measurement(2-99 times)

Measurement Mode:Single Measurement, Average Measurement

Battery:Li-ion battery.

Dimension:L*W*H=184*77*105mm

Weight:600g

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

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

Data Port:USB / Bluetooth

Data Storage:Standard 1000 Pcs, Sample 20000 Pcs

Language:English, Chinese ,Traditional Chinese, Russian, Italian, French, Portuguese, Spanish, German

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, Built-In Li-ion Battery, User Guide, PC Software, White and Black Calibration Cavity, Dust Cover

Optional Accessory:Micro Printer, Powder Test Box ,Multifunctional test components