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YS3020 is independently developed by 3nh, who has complete intellectual property rights. With variety of light sources, single customized aperture (8 or 4 or 1 *3 mm), USB/Bluetooth dual modes, it has high accuracy and standard storage, very suitable for lab color analysis and transmission. It can accurately measure the SCI and SCE reflectance data of samples/fluorescent samples, and can accurately measure various color difference formulas and color indexes under multiple color spaces.



Camera Locating

APPLICATION INDUSTRIES

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.

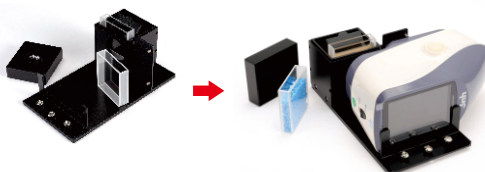


OPTIONAL ACCESSORIES

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: YS3020(Customized Aperture)

Optical Geometry: Reflect: $d_i: 8^\circ$, $d_e: 8^\circ$ (diffused illumination, 8-degree viewing angle)

Integrating Sphere Size: 48mm

Light Source: Combined LED Light

Spectrophotometric Mode: Concave Grating

Sensor: 256 Image Element Double Array CMOS Image Sensor

Wavelength Range: 400-700nm

Wavelength Interval: 10nm

Semiband Width: 10nm

Measured Reflectance Range: 0-200%

Customized measuring aperture: $\phi 4\text{mm}/\phi 8\text{mm}/1 \times 3\text{mm}$

Specular Component: SCI&SCE

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

Color Difference Formula: $\Delta E^*ab, \Delta E^*uv, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00, \Delta E^*99, \Delta E^*(\text{Hunter})$

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: $2^\circ/10^\circ$

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

Measuring Time: Approx. 1.0s (while testing SCI/SCE approx. 2.6s)

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

Chromaticity value: MAV/SCI, within ΔE^*ab 0.04 (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)

Locating Method: Camera Locating

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

GUANGDONG THREEENH TECHNOLOGY CO., LTD.



Spectrophotometers



Colorimeters



Haze Meters



Gloss Meters



Test Charts



Light Booths

★ CONTACT US

web: www.3nh.com

Email: 3nh@3nh.com

Tel: 0086-020-82880288

Add: 6-8th floors, Building B33, Low Carbon Headquarters Park, Xincheng Road No.400, Zengcheng District, Guangzhou, Guangdong Province, China