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Restore True Color, Enjoy Color Matching

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YS3020 Customized Aperture Spectrophotometer

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.



Con-cave Grating



USB/Bluetooth



LED light



Camera Locating



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 limage 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.



APPLICATION INDUSTRIES



SPECIFICATION PARAMETERS

Model: YS3020(Customized Aperture)

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

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: φ4mm/φ8mm/1x3mm

Specular Component: SCI&SCE

Color Space: CIE Lab, XYZ, Yxy, LCh, CIE LUV, Hunter LAB

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

Other Colorimetric Index: WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313),

TI(ASTM E313, CIE/ISO),

Metamerism Index MI, Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness

Illuminant: D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12

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

PASS/FAIL Result, Color Offset

Observer Angle: 2°/10°

Measuring Time: 1.5s

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. 5000 measurements within 8 hours

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

Data Storage: Standard 1000 Pcs, Sample 20000 Pcs

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

Optional Accessory: Micro Printer, Powder Test Box

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