



### 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 4.0 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



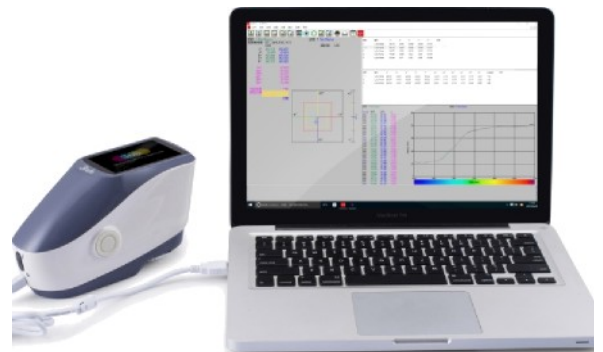
usb/Bluetooth



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 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.



## APPLICATION INDUSTRIES



Automobile

Leather

Plastics

Paint

Foodstuff

Laboratory

Others

## SPECIFICATION PARAMETERS

Model: YS3020( Customized Aperture)	Measuring Time:1.5s
Optical Geometry: Reflect: di:8°, de:8°(diffused illumination, 8-degree viewing angle)	Repeatability: Spectral reflectance: MAV/SCI, standard deviation within 0.1%(400-700nm: within 0.2%)
Integrating Sphere Size: 48mm	Chromaticity value: MAV/SCI, within 6E*ab 0.04(After calibration, measure the average value of the white board 30 times each 5S.)
Light Source: Combined LED Light	Inter-instrument agreement: MAV/SCI, within 6E*ab 0.2(Average value for 12 BCRA series II color tiles)
Spectrophotometric Mode: Concave Grating	Measurement mode: single measurement, average measurement(2-99 times)
Sensor: 256 Image Element Double Array CMOS Image Sensor	Locating Method: Camera Locating
Wavelength Range: 400-700nm	Battery: Li-ion battery. 5000 measurements within 8 hours
Wavelength Interval: 10nm	Dimension: L*W*H=184*77*105mm
Semiband Width: 10nm	Weight: 600g
Measured Reflectance Range: 0-200%	Illuminant Life Span: 5 years, more than 3 million times measurements
Customized measuring aperture: g4mm/g8mm/1x3mm	Display: 3.5 inch TFT color LCD, Capacitive Touch Screen
Specular Component: SCI&SCE	Data Port: USB/RR-232
Color Space: CIE Lab, XYZ, Yxy, LCh, CIE LUV, Hunter LAB	Data Storage: Standard 1000 Pcs, Sample 20000 Pcs
Color Difference Formula: 6E*ab, 6E*uv, 6E*94, 6E*cmc(2:1), 6E*cmc(1:1), 6E*00v, BE(Hunter)	Language: English, Chinese
Other Colorimetric Index: WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313), TI(ASTM E313, CIE/ISO),	Operating Environment: 0-40°C, 0-85%RH (no condensing), Altitude < 2000m
Metamerism Index MI, Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness	Storage Environment: -20-50°C, 0-85%RH (no condensing)
Illuminant: D65, A, C, D50, DN5, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12	Standard Accessory: Power Adapter, Built-In Li-ion Battery, User Guide, PC Software, White and Black Calibration Cavity, Dust Cover
Displayed Data: Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset	Optional Accessory: Micro Printer, Powder Test Box
Observer Angle: 2°/10°	

**3nh**  
Focus on Color

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The specifications and design may be changed without notice.