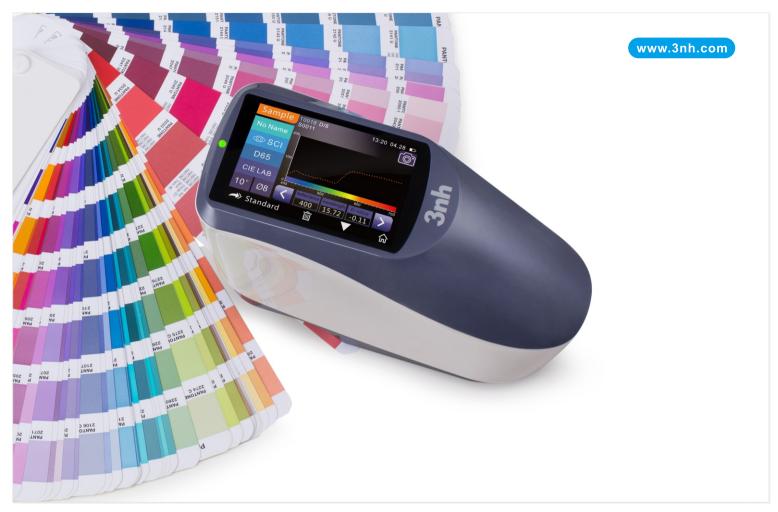


# Restore True Color, Enjoy Color Matching



## YS3020 Customized Aperture Spectrophotometer

YS3020 is independently developed by 3nh, who has completed intellectual property rights. With variety of light sources, single aperture (8 or 4 or 1\*3 mm), SCI/SCE, USB/Bluetooth, it has high accuracy and standard storage, very suitable for lab color analysis and transmission. Many color spaces make it widely used in lots of applications.









LED light



Camera Locating

















#### Product Features -----

- 1. Beautiful appearance, perfect combination design;
- D/8 geometrical optics, conforms with CIE No.15,GB/T 3978,GB2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7;
- 3. Combined LED light source, excluding UV;
- 4. Optional 8mm/4mm/1×3mm aperture, support both SCI & SCE;
- 5. Accurate lab reflectance for color matching and transmission;
- 6. USB/Bluetooth 4.0. dual modes, widely useful:
- 7. Super stain-resistant and stable standard white calibration plate;
- 8. Large capacity storage space, over 20,000 measurement data;
- 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: YS 3020 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

Sensor: 256 Image Element Double Array CMOS Image Sensor

Wavelength Range: 400-700nm Wavelength Interval: 10nm Semiband Width: 10nm

 $\textbf{Measured Reflectance Range:}\ 0\text{--}200\%$ 

Measuring Aperture: Customized Aperture: 8mm/4mm/1×3mm

Specular Component: SCI&SCE

 $\textbf{Color Space:} \ \mathsf{CIE} \ \mathsf{Lab}, \ \mathsf{XYZ}, \ \mathsf{Yxy}, \ \mathsf{LCh}, \ \mathsf{CIE} \ \mathsf{LUV}, \ \mathsf{Hunter} \ \mathsf{LAB}$ 

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

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,  $8\,^\circ$  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: 2.6s

Repeatability:MAV/SCI: ∆E\*≤0.04

Inter-instrument Error: MAV/SCI:  $\Delta E^* \le 0.2$ 

 $\textbf{Measurement Mode:} \ \textbf{Single Measurement}, \textbf{Average Measurement}$ 

**Locating Method:** Camera Locating

 $\textbf{Battery:} \ \text{Li-ion battery.} \ 5000 \ \text{measurements within 8 hours}$ 

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

Weight: 600g

 $\textbf{Illuminant Life Span:}\ 5\ \text{years, more than 3 million times measurements}$ 

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

Data Port: USB, Bluetooth 4.0

Data Storage: Standard 1000 Pcs, Sample 20000 Pcs

Language: English, Chinese

 $\textbf{Operating Environment:} 0 \sim \! 40 ^{\circ}\text{C}, \, 0 \sim \! 85 \% \text{RH (no condensing)}, \, \text{Altitude} < 2000 \text{m}$ 

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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