



# INTELLIGENT MEASURE ONE-BUTTON TO COMPLETE

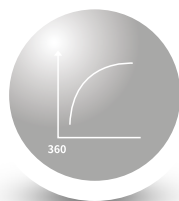


## YS 6003 Benchtop Grating Spectrophotometer

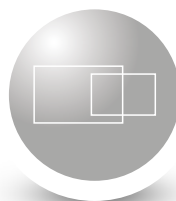
YS 6003 Benchtop spectrophotometer is widely used in color difference of quality control for various products ,YS003 is equipped with high-end color management software,which can be connected to a computer for more functions.The instrument has stable performance, accurate color measurement and powerful function. It is widely used in plastics,paints, inks,textile and garment printing, dyeing, printing paper,automotive, medical,cosmetics,food industries,scientific research institutions and laboratories



camera locating



360~780nm  
full spectrum



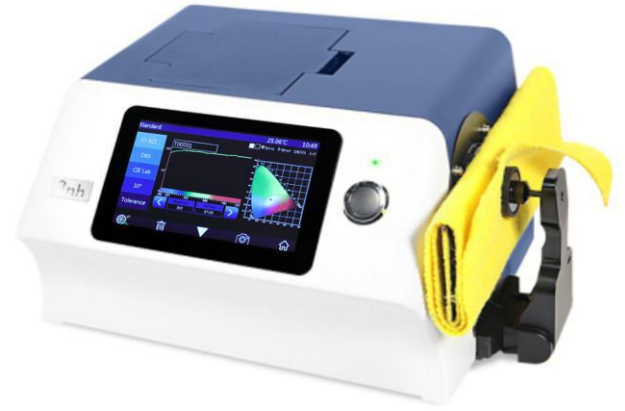
multiple measure model



7 inch color touch screen

## PRODUCT FEATURES

- 1、 High configuration of hardware: 7 inches TFT Color Capacitive Touch-screen Display; Bluetooth 2.1; Concave Grating.
- 2、 Double Array 256 Image Element CMOS Sensor; Long life-span stable xenon lamp.
- 3、 With reflective and transmissive spectrum, accurate Lab value, good to calculate color formula and do precise color transmission.
- 4、 Auto identify measuring aperture. Freely switchable between 3 measuring apertures:  $\Phi$  25.4mm/8mm/4mm.
- 5、 Built-in temperature sensor to monitor and compensate the measuring temperature to ensure the measurement more precision.
- 6、 Wavelength range 360nm – 780nm. It can be used to test fluorescent samples with wide applicability and simple operation
- 7、 Independent light source detector to ensure the light source reliable.
- 8、 Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirement.
- 9、 Multiple accessories, sample holders, fixation clamp, suitable to more working condition.
- 10、 Big capacity data storage, for 20000 pieces test result.
- 11、 Built-in camera locating.
- 12、 More powerful extended functions at the PC software.

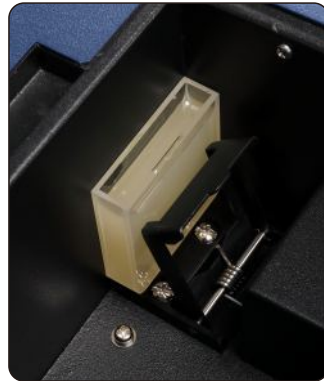


## PRODUCT FEATURES



**plastic sample**

Reflect: di:8°, de:8°(diffused illumination, 8-degree viewing angle) Conforms to ISO7724/ 1、 CIE、 ASTM、 DIN and JIS



**Transmissive samples**

Transmittance: di:0°, de:0° (diffuse illumination: 0° viewing); Conforms to ISO、 CIE、 ASTM 、 DIN.



**Liquid, Powder, Solid samples**



**Measuring Aperture**

Auto identify measuring aperture. Freely switchable between 3 measuring apertures:  $\Phi$  25.4mm/8mm/4mm.

## APPLICATION INDUSTRY

YS 6003 benchtop spectrophotometer is designed for accurate analysis and transmission of laboratory color and appearance: It's widely used in plastics, paints, inks, textile and garment printing, dyeing, printing paper, automotive, medical, cosmetics, food industries, scientific research institutions and laboratories.



Automobile



Leather



Plastics



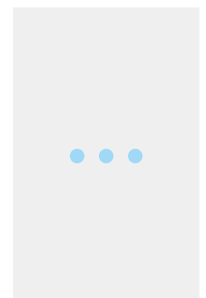
Paint



Food stuff



Laboratory



Others

**Model:** YS6003

**Optical Geometry:** Reflect: di:8°, de:8°(diffused illumination, 8-degree viewing angle);SCI (specular component included)/SCE (specular component excluded) ; Include UV / excluded UV light source;Transmittance: di:0°, de:0° (diffuse illumination: 0° viewing); SCI (specular component included)/SCE (specular component excluded) ;Haze(ASTM D1003);Conforms to CIE No.15, GB/T 3978,GB 2893,GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7

**Application:** It is used for accurate analysis and transmission of laboratory color. Apply in paints, inks, textiles, garments, printing and dyeing, printing etc industries for color transfer and quality control.

**Integrating Sphere Size:** Φ154mm

**Light Source:** 360 nm to 780 nm, Combined LED Light (5 million life span)

**Spectrophotometric Mode:** Concave Grating

**Sensor:** 256 Image Element Double Array CMOS Image Sensor

**Wavelength Range:** 360-780nm

**Wavelength Interval:** 10nm

**Semiband Width:** 5nm

**Measured Reflectance Range:** 0-200%

**Measuring Aperture:** Reflective : Φ30mm/Φ25.4mm, Φ10mm/Φ8mm, Φ6mm/Φ4mm;Transmissive : Φ30mm/Φ25mm; Remark:

1. Automatic identification of switch caliber 2. Customized Configuration caliber and lens position  
**Specular Component:**Reflectance: SCI&SCE / Transmittance: SCI&SCE

**Color Space:** CIE LAB,XYZ,Yxy,LCh,CIE LUV,Musell,s-RGB,HunterLab,βxy,DIN Lab99

**Color Difference Formula:** ΔE\*ab,ΔE\*uv,ΔE\*94,ΔE\*cmc(2:1),ΔE\*cmc(1:1),ΔE\*00, DINΔE99,ΔE(Hunter)

**Other Colorimetric Index:** WI (ASTM E313, CIE/ISO, AATCC, Hunter),YI (ASTM D1925, ASTM 313), MI (Metamerism Index),Staining Fastness, Color Fastness, Color Strength, Opacity,8° Glossiness,Gardner Index, APHA/Hazen/Pt-Co Index, 555 Index, Haze(ASTM D1003) , Saybolt

**Observer Angle:** 2°/10°

**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

**Displayed Data:** Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Offset

**Measuring Time:** About 2.4s (Measure SCI & SCE about 5s)

**Repeatability:** Spectral reflectance: Φ25.4mm/SCI, Standard deviation within 0.06% (400 nm to 700 nm: within 0.05%);Chromaticity value: Φ25.4mm/SCI, Standard deviation within ΔE\*ab 0.01 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration); Spectral Transmittance: Φ25.4mm/SCI, Standard deviation within 0.06% (400 nm to 700 nm: within 0.06%); Chromaticity value: Φ25.4mm/SCI, Standard deviation within ΔE\*ab 0.015 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration).

**Inter-instrument Error:** Φ25.4mm/SCI, Within ΔE\*ab 0.15 (Average for 12 BCRA Series II color tiles)

**Dimension:** L\*W\*H=370x300x200mm

**Weight:** Approx. 9.6kg

**Power:** AC 24V, 3A Power adapter power supply

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

**Display:** 7-inch TFT color LCD, Capacitive Touch Screen

**Data Port:** USB & Print serial port

**Data Storage:** Standard 1000 Pcs, Sample 20000 Pcs

**Language:** Simplified Chinese, Traditional Chinese, English,

**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, User Guide, CD Disk(PC Software), USB cable, Standard Calibration Board, Black Calibration Cavity, Transmission black baffle, Sample holder, 25.4 caliber, 8 caliber, 4 caliber

**Optional Accessory:** Micro-printer, Transmissive Test Component, Micro Aperture(4mm) transmission test clamp component, Instrument inversion components ,Culture dish

**Notes:** The specifications are subject to change without notice. YS6003 quality management software can only be used for data management



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