

# TO COST-EFFECTIVE, XENON LAMP OF SPECTROPHO **TOMETER RECOMMENED**











YS 6080 is a benchtop grating spectrophotometer which is developed by 3nh independently with independent intellectual property. YS6080 has powerful features, accurate measurement, high configuration of hardware, 7 inches TFT capacitive touch screen display, full illuminants, reflectived/8 and transmissive d/0 geometry (including or excluding UV).large storage and powerful PC software all makes YS6080 ideal for color accurate analysis and transmission in laboratory.











# 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: Φ 25.4mm/8mm/4mm. Users also can customize apertures.
- 5. Built-in temperature sensor to monitor and compensate the measuring temperature to ensure the measurement more precision.
- 6、 Wavelength range 360nm 780nm. Built-in 400nm/420nm/460nm cut off Xenon lamp, more professional in UV measurement.
- 7. Independent light source detector, continuously monitor the condition of light sources to ensure the light source reliable.
- 8、 Multiple measurement modes: Quality Management Mode, Sample Mode; Meet more users' requirement.
- 9、 A variety of optional accessories: Reflection sample holding tool, transmission fixture, micro 4mm aperture transmission test components, instrument inversion test components, applicable to more working conditions.
- 10. Big capacity data storage, for 20000 pieces test result.
- 11, Built-in camera locating.
- 12. More powerful extended functions at the PC software.

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### PRODUCT FFATURES



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: Φ 25.4mm/8mm/4mm.

# APPLICATION INDUSTRY\_\_

YS 6003 benchtop spectrophotometeris 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, cosmestics, food industries, scientific research institutions and laboratories.













Automobile

Leather

**Plastics** 

Paint

Food stuff

Laboratory

Others

**Model:** YS6080(Pulsed xenon lamp)

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);Include UV / excluded UV light source; Haze(ASTM D1003); Conforms to CIE No.

15, GB/T 3978,GB 2893,GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7

Integrating Sphere Size: Ф 154mm

Light Source Device: 360nm-780nm Xenon Lamp, 400nm cut-off Xenon Lamp, 420nm cut-off Xenon Lamp, 460nm cut-off Xenon Lamp

**Spectrophotometric Mode:** Concave Grating

Sensor: 256 Image Element Double Array CMOS Image Sensor

Wavelength Range: 360-780nm Wavelength Pitch: 10nm Semiband Width: 5nm Reflectance Range: 0~200%

Measuring Aperture: Reflective: Φ30mm/Φ25.4mm, Φ18mm/Φ15mm, 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, Hunter LAB, Munsell, s-RGB, HunterLab, DIN, βxy

Color Difference Formula: ΔΕ\*ab, ΔΕ\*uv, ΔΕ\*94, ΔΕ\*cmc(2:1), ΔΕ\*cmc(1:1), ΔΕ\*00v, ΔΕ(Hunter), DIN ΔΕ99 Colorimetric Index: WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), MI (Metamerism Index),

Staining Fastness, Color Fastness, Color Strength, Opacity, Gardner Index, APHA/Hazen/Pt-Co Index, 555 Index, Haze(ASTM D1003), Saybolt

Observer Angle: 2° & 10°

Illuminants: D65, A, C, UV, 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, 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:  $\Phi$ 25.4mm/SCI, Standard deviation within  $\Delta$ E\*ab 0.012 (When a white calibration plate is measured 30 times at 5 second intervals after white  $calibration) Spectral Transmittance: \Phi 25.4 mm/SCI, Standard deviation within 0.06\% (400 nm to 700 nm: within 0.06\%) Chromaticity value:$  $\Phi$ 25.4mm/SCI, Standard deviation within  $\Delta$ E\*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 0.12(Average for 12 BCRA Series II color tiles)

**Size:** 370×300×200mm Weight: About 9.6kg

Power Supply: DC 24V, 3A Power Adapter

**Light Source Device Life:** 5 years, more than 3 million times measurements.

**Display:** 7" TFT Capacitive Screen-touch Display Data Port: USB & Bluetooth & Print serial port **Data Storage:** Standard 5000 Pcs, Sample 40000 Pcs

Language: Simplified Chinese, Traditional Chinese, English, (Optional Customized German, French and Spanish)

**Working Environment:** Temperature: 0~40°C; Humidity: 0~85% (No Condensation) **Storage Environment:** Temperature: -20~50°C; Humidity: 0~85% (No Condensation)

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, 15 caliber, 8 caliber, 4 caliber, Transmissive Test Component

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

**Notes:** The specifications are subject to change without notice.



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