

One-Button to measure



YS6020-Benchtop Grating Spectrophotometer

The spectrophotometer YS6020 is also widely used in the control of color difference quality of various products. YS6020 is equipped with color management software, which can be connected to a computer to achieve more functional expansion. The instrument has stable performance, accurate color measurement and powerful functions. It is widely used in scientific research institutions and laboratories in industries such as plastic electronics, paints and coatings, textile printing and dyeing, printing paper products, automotive, medical, cosmetics and food.

















multiple measure



camera locating



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 cut off, 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.

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: 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



TECHNICAL SPECIFICATIONS

Model: YS6020(Pulsed xenon lamp)

 $Optical\ Geometry:\ Reflect: di: 8^\circ, de: 8^\circ (diffused\ illumination, 8-degree\ viewing\ angle); SCI\ (specular\ component\ included)/SCE\ (specular\ compon$ 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: Φ154mm

Light Source Device: 360nm-780nm Xenon Lamp, 400nm 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, Φ10mm/Φ8mm, Φ6mm/Φ4mm; Transmissive: Φ30mm/Φ25.4mm;

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), TI (ASTM E313, CIE/ISO), MI (Metamerism Index),

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

Observer Angle: 2°&10°

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

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 0.07% (400 nm to 700 nm: within 0.06%) Chromaticity value: Φ 25.4mm/SCI, Standard deviation within Δ E*ab 0.015 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration) Spectral Transmittance: Φ25.4mm/SCI, Standard deviation within 0.07% (400 nm to 700 nm: within 0.07%) Chromaticity value: Φ 25.4mm/SCI, Standard deviation within Δ E*ab 0.018 (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)

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 & Print serial port

Data Storage: Standard 2000 Pcs, Sample 20000 Pcs Language: Simplified Chinese, Traditional Chinese, English,

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, 8 caliber, 4 caliber,

Optional Accessory: Micro-printer, Transmissive Test Clamp Component, Micro Aperture (4mm) transmission test clamp component,

Instrument inversion components

Notes: The specifications are subject to change without notice.