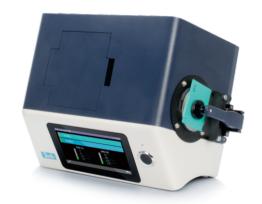


GRATING SPECTROPHOTOMETER



YS6010 Benchtop Grating Spectrophotometer

YS6010 spectrophotometer is a bench-top measurement instrument designed to evaluate the color and appearance of many measuring applications for objects' reflectance and also the transmittance of translucent or transparent liquids and solids. Equipping with 7 inchesTFTcapacitive touch screen display,full illuminants, reflective d/8 and transmissive d/0 geometr(including or excluding UV) makesYS6010 ideal for color analysis within R&D and laboratory environments.









Store approximately 20000 test data



Wavelength range 360nm – 780nm



Built-in camera locating







PRODUCT FEATURES

- 1. Double Array 256 Image Element CMOS Sensor; Long life-span stable LED, UV LED and xenon lamp.
- 2. With reflectance and transmittance spectrum, accurate L*a*b value, good to calculate color formula and do precise color transmission.
- 3. Auto-identify measuring aperture. Freely switchable between 3 reflective measuring apertures: φ25.4mm/8mm/4mm. Users can also customize apertures.
- 4. Built-in temperature sensor to monitor and compensate the measuring temperature to ensure the measurement more precision.
- 5. Wavelength range 360nm 780nm. Built-in 400nm cut off/420nm cut off/460nm cut off (only xenon lamp edition), more professional in UV measurement.
- 6. Independent light source detector, continuously monitor the change of light sources to ensure the light source reliable.
- 7. Multiple accessories, sample holders, fixation frame, suitable to more working condition.
- 8. More powerful extended functions with the PC software.



PRODUCT HIGHIGHTS









Plastic Sample

Reflectance Measurement: Adopt D/8° Geometry, conform to ISO7724/1, CIE, ASTM, DIN and JIS standard.

Transmissive Sample

Transmittance Measurement: Adopt D/0° Geometry, conform to ISO, CIE. ASTM and DIN standard.

Liquid, Powder, Solid Sample Measuring Apertures Measurement

360-780nm wide wavelength range measurement, professional UV sample measurement.

Auto-indentify the apertures, 25.4/8/4mm three apertures freely switch. Special aperture can be customised.

APPLICATION INDUSTRY

YS6010 benchtop spectrophotometer is designed for accurate analysis and transmission of laboratory color and appearance of solids, liquids, pastes, powders, pills, and granules in a more comprehensive, streamlined process. YS6010 is widely used in paints, inks, textiles, garments, printing and dyeing, printing etc industries for color transfer and quality control.















Automobibe

Leather

Plastics

Paint

Food stuff

Laboratory

Others

YS6010 Specification

Optical Geometry: Reflective: d/8° (diffused illumination, 8-degree viewing angle); SCI&SCE / SPIN&SPEX; Including / excluding UV measurements

Transmissive: d/0° (diffused illumination, 0-degree viewing angle); SCI&SCE / SPIN&SPEX; Including / excluding UV measurements

Comply to standard CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724/1, ASTM E1164, DIN5033 Teil7

Integrating Sphere Size: \$\Pi\$154mm

Light Source Device: 360~780nm Combined LED Lamp, 400nm Cut-off light source

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

Spectral Separation Device: Concave grating

Detector: 256 Image Element Double Array CMOS Image Sensor

Wavelength Range:360~780nm

Reflectance Range:0~200%

Wavelength Pitch: 10nm

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

Specular Component: Reflectance: SCI⪰ Transmittance: SCI&SCE

Color Space: CIE LAB, XYZ, Yxy, LCh, CIE LUV, Musell, s-RGB, HunterLab, \(\beta xy, DIN \) Lab99

Other 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,8° Glossiness, Gardner Index, Pt-Co Index, 555 Index

 $\textbf{Color Difference Formula} : \Delta E^*ab, \Delta E^*uv, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00, \ DIN\Delta E99, \Delta E (Hunter)$

Displayed Data: Spectrogram/Values, Chromaticity Values, Color Difference Values/Graph, Pass/Fail Result, Color Offset

Measurement time: About 3s (Measure both SCI & SCE about 6s)

Repeatability: Spectral reflectance: Φ 25.4mm/SCI, Standard deviation within 0.05% (400 nm to 700 nm: within 0.04%)

Chromaticity value: Φ25.4mm/SCI, Standard deviation within ΔE*ab 0.02 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration) Spectral Transmittance: Φ25.4mm/SCI, Standard deviation within 0.05% (400 nm to 700 nm: within 0.04%)

Chromaticity value: Φ25.4mm/SCI, Standard deviation within ΔE*ab 0.03 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

 $\textbf{Specular Component} : Reflectance : SCI\⪰ Transmittance : SCI\&SCE$

Observer Angle: 2°/10°

Inter-instrument Error: Φ 25.4mm/SCI, Within Δ E*ab 0.15(Average for 12 BCRA Series II color tiles)

 $\textbf{Size}: 370 \times 300 \times 200 \text{mm} (\text{L*W*H})$

Weight:9.6kg

Power: AC 24V, 2A 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 Capacity: Standard: 2000 Pcs; Sample: 20000 Pcs (One PCS can include both SCI and SCE)

Language: English & Chinese

Working Environment: Temperature: 0~40°C; Humidity: 0~85% (No Condensation)

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

Standard Accessory: White and Black Calibration Board, Checking Green Board, Sample Holder, Φ4mm, Φ8mm, Φ25.4mm Aperture,
Power Adapter, USB Cable, User Guide, PC Software

Optional Accessory: Micro-printer, Transmissive Test Component

Notes: The specifications are subject to change without notice



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