



# One key to complete intelligent color measurement



**YS6060 Benchtop Grating Spectrophotometer** 

YS6060 is a benchtop grating spectrophotometer which is developed by our independently with propietary intellectual property. YS6060 has many features, like 7 inches TFT capacitive touch screen display, full illuminants, reflective d/8 and transmissive d/0 geometry(including or excluding UV). With very stable and precise color measurement, large storage and powerful PC software all makes YS6060 ideal for color analysis within R&D and laboratory environments.



7 inches TFT Capacitive Touch-screen



USB/Bluetooth



Wavelength range 360nm - 780nm



Built-in camera locating









#### **PRODUCT FEATURES**

- 1.High configuration of hardware: 7 inches TFT Color Capacitive Touch-screen Display; Concave Grating.
- 2.Double Array 256 Image Element CMOS Sensor; Long life-span stable LED, UV LED and 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 4 measuring apertures: φ25.4mm/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/460nm cut off (only xenon lamp edition), 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. 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 HIGHIGHTS**









**Plastic Sample** 

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

**Transmissive Sample** 

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

Liquid, Powder, Solid Sample Measurement

**Measuring Apertures** 

Auto-indentify the apertures, 25.4/15/8/4mm three apertures freely switch. Special aperture can be customised.

#### **APPLICATION INDUSTRY**

YS6060 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. YS6060 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

### YS6060Specification

Optical Geometry:Reflectance: d/8 (SCI⪰ Include UV/Exclude UV) Transmittance: d/0 (SCI⪰ Include UV/Exclude UV)

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

Integrating Sphere Size: Ф154mm

Light Source Device: 360nm-780nm Combined LED Lamp, 400nm cut-off, 420nm cut-off, UV Lamp

Sensor: 256 Image Element Double Array CMOS Image Sensor

Light Source Device: 360nm-780nm Combined LED Lamp, 400nm cut-off, 420nm cut-off, UV Lamp

Wavelength Pitch: 10nm

Semiband Width: 5nm

Reflectance Range:0~200%

 $\textbf{Measuring Aperture:} Reflective: \Phi 30 mm/\Phi 25.4 mm, \Phi 18 mm/\Phi 15 mm, \Phi 10 mm/\Phi 8 mm, \Phi 6 mm/\Phi 4 mm; Transmissive: \Phi 30 mm/\Phi 25.4 mm$ 

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

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

Color Difference Formula:  $\triangle E$  ab,  $\triangle E$  uv,  $\triangle E$  94,  $\triangle E$  cmc(2:1),  $\triangle E$  cmc(1:1),  $\triangle E$  00, DIN $\triangle E$ 99,  $\triangle E$ (Hunter)

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 , Saybolt

Observer Angle:2°&10°

Illuminants:D65A,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, Chromaticity Values, Color Difference Values/Graph, Pass/Fail Result, Color Offset

Measurement time: About 2.4 s (simultaneous measurement SCI / SCE about 5 s)

Repeatability	Spectral reflectance:	Φ25.4mm/SCI Standard deviation within 0.04%(400 nm to 700 nm: within 0.04%)
	Chromaticity value:	$\Phi 25.4 mm/SCI  Standard  deviation  within  \Delta E^* ab  0.01  (When a  white  calibration  plate  is  measured  30  times  at  5  second  intervals  after  white  calibration)$
	Spectral Transmittance:	Φ25.4mm/SCIStandard deviation within 0.05% (400 nm to 700 nm: within 0.04%)
	Chromaticity value:	$\Phi$ 25.4mm/SCI Standard deviation within $\Delta$ E*ab 0.02 (When a white calibration plate is measured 30 times at 5 second intervals

Inter-instrument Error: Φ25.4mm/SCI Within ΔE\*ab 0.12(Average for 12 BCRA Series II color tiles)

Size:370X300X200mm

Weight:9.6kg

Power Supply: DC 24V, 3A Power Adapter

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

Screen:7" TFT Capacitive Screen-touch Display

Data Port: USB & Bluetooth

Data Storage Capacity: Standard: 5000 Pcs; Sample: 40000 Pcs. (One PCS can include both SCI and SCE)

Language: English & Chinese

Standard Accessory: White and Black Calibration Board, Checking Green Board, Sample Holder, Ф4mm, Ф8mm, Ф15mm, Ф25.4mm Aperture, Power Adapter,

USB Cable, User Guide, PC Software, Culture dish, Micro Aperture (4mm) Transmission Test Fixture Assembly

Optional Accessory: Micro-printers, instrument inverted test fixtures, petri dishes

# GUANGDONG THREENH TECHNOLOGY CO., LTD.

















Colorimeters

Haze Meters

Gloss Meters

Test Charts

Light Booths

## **★**CONTACT US









