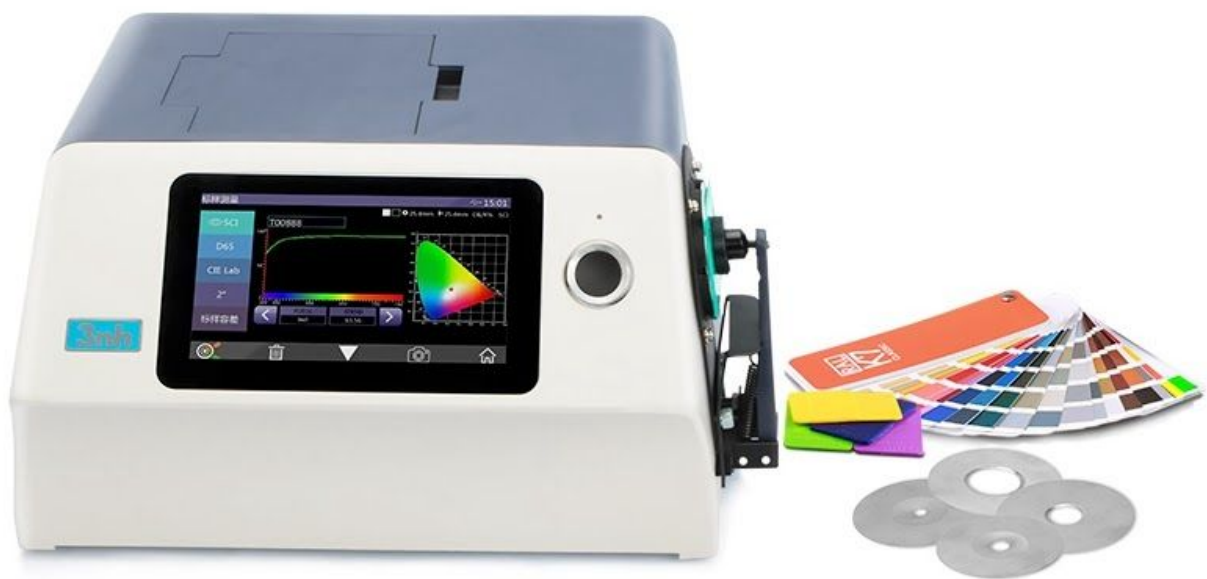




YS6060 Benchtop Grating Spectrophotometer

Introduction

YS6060 is a benchtop grating spectrophotometer which is developed by 3nh independently with independent 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.



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 LED, UV LED.
- 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: $\phi 25.4\text{mm}/15\text{mm}/8\text{mm}/4\text{mm}$. 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/420nm 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, 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 40000 pieces test result.

11, Built-in camera locating.

12, More powerful extended functions at the PC software.

Application Industry

YS6060 benchtop spectrophotometer is used to do precise color analysis and transmission in laboratories. It can be widely applied in different industries, such as plastics, electronics, paint and ink, printing, garments, leather, paper, auto, medical, cosmetics, food, science institutes, laboratories.

Technical Specification

Model	YS6060 Benchtop Spectrophotometer
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
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, 400nm cut-off light source,420nmCut-off light source
Spectrophotometric Mode	Concave Grating
Sensor	256 Image Element Double Array CMOS Image Sensor
Wavelength Range	360-780nm

Wavelength Interval	10nm
Semiband Width	10nm
Measured 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,Musell,s-RGB,HunterLab,βxy,DIN Lab99
Color Difference Formula	ΔE^*ab , ΔE^*uv , ΔE^*94 , $\Delta E^*cmc(2:1)$, $\Delta E^*cmc(1:1)$, ΔE^*00 , DIN $\Delta E99$, ΔE (Hunter),
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, Haze(ASTM D1003)
Observer Angle	2°/10°
Illuminant	D65,A,C,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12
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 0.04% (400 nm to 700 nm: within 0.04%) 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 0.05% (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)

Inter-instrument Error	Φ25.4mm/SCI, Within ΔE^*ab 0.12
	(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 & Bluetooth & Print serial port
Data Storage	Standard 5000 Pcs, Sample 40000 Pcs
Language	Simplified Chinese, Traditional Chinese, English, (Optional Customized German, French and Spanish)
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, 15 caliber, 8 caliber, 4 caliber, Transmissive Test Component
Optional Accessory	Micro-printer, Micro Aperture(4mm) transmission test clamp component, Instrument inversion components
Notes:	The specifications are subject to change without notice.