



## YS6002-BENCHTOP SPECTROPHOTOMETER

YS6002 Table spectrometer colorimeter is a domestic colorimeter independently developed by the company with independent intellectual property rights. The instrument meets the transmission D/0 (diffuse lighting, 0° direction reception) geometric optical structure stipulated by CIE 15 (it can also achieve approximate transmission 0/0 (parallel light lighting /0 degree reception) geometric optical structure). The lighting source of the instrument is 360~780nm composite full-spectrum LED light source (D65), and the spectral acquisition at an interval of 10nm is achieved by precision concave grating and 256-pixel CMOS detector. Achieve accurate testing of various optical indicators (fog, transmittance, chroma, chromatic difference, yellowness, whiteness, cobalt-platinum index, Gardner index, etc.) according to industry standards. It is widely used in glass processing, plastic processing, film manufacturing, display processing and packaging industry, liquid and pharmaceutical analysis, laboratory and other industries.



7 inches TFT Capacitive Touch-screen



Store approximately 20000 test data



Wavelength range 360nm — 780nm



Built-in camera locating



## PRODUCT FEATURES

- 1.High configuration for the hardware: 7 inch capacitive touch screen; 25000 data storage ; with USD / Bluetooth data port.
- 2.With high optical configuration and resolution, 154mm integrating sphere, concave grating, 256 Image Element CMOS Sensor, dual light path;
- 3.Adopt 360~780nm composite full spectrum LED light source (which is closed to the spectrum of D65), which is low power consumption and long life time.
- 4.Easy realize the precision measurement for 3 kinds of light sources A,C and D65 for haze (ASTM D1003/1044), transmittance, Pt-Co Index and Gardner index.
- 5.Multiple measurement modes : quality control mode and sample mode to meet more customers' requirement;
- 6.Independent light source detector and built-in temperature sensor will continuously monitor the change of light sources and environment to ensure the measurement more reliable.
- 7.Observer angle 2/10, multiple light sources, multiple color spaces, multiple chromaticity to meet different kinds of customers' testing requirements.
9. More powerful extended functions at the PC software.
- 10.Instrument with optional accessory - micro printer; Easy to carry, without computer can be continuously printed out the measurement of various parameters, easy to save.



Microprinter

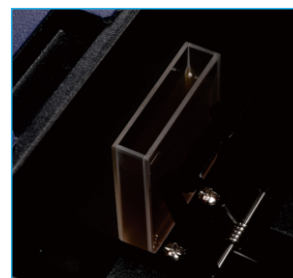
## FEATURES



Lens measurement



Transparent sample



Liquid sample

**Higher measurement accuracy:** measurement stability and accuracy:  $\Delta E^* ab < 0.03$

**Professional guarantee:** transmission  $\Phi 25.4\text{mm}$ , measuring concave or surface samples is more simple.

**Large capacity:** multiple color spaces, multiple color indexes, and wider applicability.

**Dual locating:** illuminating positioning, cross positioning.

## APPLICATION INDUSTRY

It is widely used in glass processing, plastic processing, film manufacturing, display processing and packaging industry, liquid medicine analysis, laboratory and other industries.



Glass processing



Plastic processing



Film manufacturing



Liquid analysis



Laboratory

## TECHNICAL SPECIFICATIONS

**Model:**YS6002

**Optical Geometry:**Transmittance:d/0 (diffused illumination, 0-degree viewing angle);  
similar to CIE15 standard 0/0(parallel illumination, 0-degree viewing angle);  
Confirms to the standard of ASTM D1003/1044, CIE No.15, GB/T 3978, GB2893, GB/T 18833, ASTM E308, DIN5033 Teil7

**Application:**wildly used in the field of glass processing, plastic processing, film manufacturing, display screen processing and packaging industry, liquidpharmaceutical analysis, laboratory etc.

**Intergrating Sphere Size:**Φ154mm

**Light Source:**360~780nm Combined LED Lamp

**Spectral Separation Device:**Concave-Grating

**Detector:**256 Image Element Double Array CMOS Image Sensor

**Wavelength Range:**360~780nm

**Wavelength Pitch:**10nm

**Half Bandwidth:**10nm

**Reflectance Range:**0~200%

**Measurement Aperture:**Transmittance: Φ25.4mm

**Color Spaces:**CIE LAB,XYZ,Yxy,LCh,CIE LUV,Musell,s-RGB,HunterLab,βxy,DIN Lab99

**Color Difference Formulas:**ΔE\*ab,ΔE\*uv,ΔE\*94,ΔE\*cmc(2:1),ΔE\*cmc(1:1),ΔE\*00, DINΔE99,ΔE(Hunter)

**Other Colorimetric Data:**Haze (ASTM D1003/1044), transmittance rate T, WI(ASTM E313, CIE/ISO,AATCC,Hunter), YI(ASTM D1925, ASTM 313),TI(ASTM E313, CIE/ISO),Mt(Matamerism Index ), Color Strength, Staining fastness,Color Strength, Opacity,Pt-Co index and Gardner index ,Saybolt(SeibertIndex),ASTMD1500colorcode

**Observer Angle:**2°/10°

**Illuminant:**D65,A,C,D50,D55,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12 ,CWF,DLF,TL83,TL84,TPL5,U30

**Display Data:**Spectral/Values, Chromaticity Values, Color Difference Values/Graph,ColorDiagram, Color Simulation, Pass/ Fall Result, Color Offset

**Measurement Time:**About 1.5s

**Repeatability:**Spectral transmittance: for test transmission reference white within ΔE\*ab0.05% (400~700nm: within 0.04%);  
Chromaticity Data: Φ25.4mm,within ΔE\*ab 0.03 (after do warm-up and calibration, it is the average value to measure transmission reference whiteplate for 30 times at 5 second intervals)

**Inter-instrument Agreement:**Φ25.4mm,within ΔE\*ab 0.15 (average value for 5 pcs standard transmittance color plates measurement )

**Size:**370X300X200mm(L\*W\*H)

**Weight:**About 9.6kg

**Power:**DC 24V,3A Power Adapter

**Illuminant Life Span:**5 years, more than 3,000,000 times measurement

**Screen:**7-inch TFT Capacity Touch Screen Display

**Interface:**USB,Printing Port

**Storage:**Standard:5000; Sample:20000

**Language:**Simplified Chinese, Traditional Chinese, English

**Working Temperature:**0~40°C(32~104°F)

**Storage Temperature:**-20~50°C(-4~122°F)

**Standard Accessory:**Power Adapter, User Manual, QC software(please download from website),USB cable, reflectance white and black board, transmittance black board,25.4mm aperture, transmissive test component

**Optional Accessory:**Miniature- printer

**Note:**The specifications are subject to change without notice

## GUANGDONG THREENH TECHNOLOGY CO., LTD.



Spectrophotometers



Colorimeters



Haze Meters



Gloss Meters



Test Charts



Light Booths

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