

Intelligent color measurement, easy operation



YL4560–Non–contact benchtop spectrophotometer

YL4560 is a benchtop grating spectrophotometer which is developed by 3nh independently with independent intellectual property. YL4560 has many features, like 7 inches TFT capacitive touch screen display, full illuminants, UV light source, 45/0 optical geometry, which can achieve precise non-contact measurement between the measuring probe and the sample like liquids, sauces, powders, etc. It can be applied for accurate color analysis and transmission in laboratories and R & D industries; it can also be used for accurate color measurement and quality control of automated production lines; it is widely used in cosmetics, fruits and vegetables, food hygiene, plastic electronics, paint and ink, printing, ceramics and other industries . And it can be used for fluorescent sample measurement.



7 inch capacitive touch screen



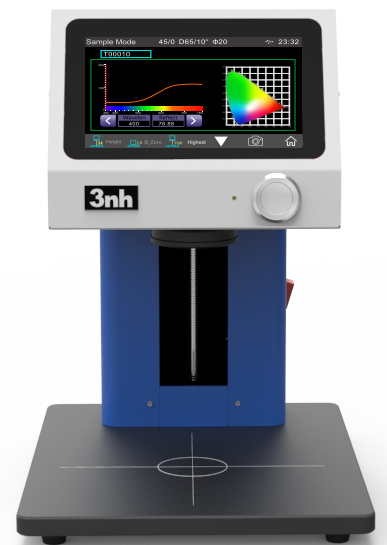
USB / Bluetooth ®



Measurement wavelength:
400 ~ 700nm



Camera location



PRODUCT FEATURES

1. According to the actual height of the testing sample, the measuring probe can be moved up and down automatically and the height of the testing sample can be stored.
2. TFT true color 7 inch capacitive touch screen; concave grating.
3. 256 Image Element Double Array CMOS Image Sensor.
4. Wavelength range: 400~700nm, 10nm output.
5. Lighting source: full spectrum LED light and UV light.
6. Multiple measurement modes: Sample mode, QC mode, Continuous Statistical mode are optional to meet more customer needs.
7. Large capacity storage: Sample mode + QC mode: 40,000
Continuous statistics mode: 10,000
8. Built-in camera locating.
9. PC software has powerful expansion function.



PRODUCT DETAILS



Display

TFT true color 7 inch capacitive touch screen, Clear display and easy operation



Non-contact measurement

The reflectance and chromaticity of the sample can be measured without directly contacting the measuring probe with the sample.



Movable measuring probe

The measuring probe can be moved up and down automatically according to the actual height of the measured sample. The height of the testing sample can be stored.



Measuring aperture

Aperture: 20mm
.Less than 20 mm, multiple apertures can be customized. Customers can customize it according to their needs.

APPLICATION INDUSTRY

45/0 non-contact benchtop spectrophotometer, which can achieve precise non-contact measurement between the measuring probe and the sample like liquids, sauces, powders, etc. It can be applied for accurate color analysis and transmission in laboratories and R & D industries; it can also be used for accurate color measurement and quality control of automated production lines; it is widely used in cosmetics, fruits and vegetables, food hygiene, plastic electronics, paint and ink, printing, ceramics and other industries. And it can be used for fluorescent sample measurement.



Cosmetics



Food



Sauces



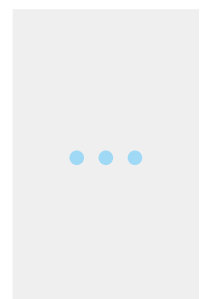
Powder



Liquid



Laboratory



Others

TECHNICAL SPECIFICATIONS

Model: YL4560
Illumination system: 45/0 method(45 ring-shaped illumination, vertical viewing); Comply with the standards of CIE No.15, GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7,GB 2893、GB/T 18833.
Features: 45/0 non-contact benchtop spectrophotometer, which can achieve precise non-contact measurement between the measuring probe and the sample like liquids, sauces, powders, etc. It can be applied for accurate color analysis and transmission in laboratories and R & D industries; it can also be used for accurate color measurement and quality control of automated production lines; it is widely used in cosmetics, fruits and vegetables, food hygiene, plastic electronics, paint and ink, printing, ceramics and other industries . And it can be used for fluorescent sample measurement.It also can be used for fluorescence sample measurement.
Light Source: Full spectrum LED light, UV light
Spectrophotometric Mode: Concave Grating
Sensor: 256 Image Element Double Array CMOS Image Sensor
Wavelength Range: 400~700nm/10nm output
Measured Reflectance Range: 0~200%
Measured Reflectance Range: Φ20mm(can be customized <20mm)
Non-contact distance: 7.5mm
Sample height: 0~150mm
Distance adjustment method: Manual adjustment and automatic adjustment (test height can be stored)
Measuring mode: Sample mode/QC Mode/Continuous statistics mode
Locating Method: Camera View Finder Locating
Color Space: CIE LAB,XYZ,Yxy,LCh,CIE LUV, HunterLAB
Color Difference Formula: $\Delta E^*ab, \Delta E^*uv, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00, \Delta E$ (Hunter)
Other Colorimetric Index: WI(ASTM E313, CIE/ISO,AATCC,Hunter), YI(ASTM D1925, ASTM 313),TI(ASTM E313, CIE/ISO), Metamerism Index MI, Staining Fastness, Color Fastness, Color Strength, Opacity
Observer Angle: 2°/10°
Illuminant: D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4, F5, F6,F7(DLF),F8,F9, F10(TPL5),F11(TL84),F12(TL83/U30)
Displayed Data: Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, Chromaticity Graph, Color Simulation, PASS/FAIL Result, Color Offset
Measuring Time: About1.5s
Data Storage Capacity: Sample mode + QC mode: 40,000,Continuous statistics mode: 10,000
Repeatability: Spectral reflectance: Standard deviation within 0.08% Chromaticity value: Within ΔE^*ab 0.03 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Inter-instrument Error: Within ΔE^*ab 0.2 (Average for 12 BCRA Series II color tiles)
Measurement Mode: Single Measurement, Average Measurement(2 ~ 99 times)
Dimension: 330*250*370mm
Weight: About 10 kg
Power Supply: DC 24V, 3A Power Adapter
Illuminant Life Span: 5 years, more than 3 million times measurements
Display Screen: 7" TFT Capacitive Screen-touch Display
Data Port: USB, Bluetooth®
Language: Simplified Chinese,Traditional Chinese,English
Working Environment: Temperature: 0~40°C; Humidity: 0~85% (No Condensation); Altitude < 2000m
Storage Environment: Temperature: -20~50°C; Humidity: 0~85% (No Condensation)
Standard Accessory: Power Adapter, User Manual, USB cable, Standard Calibration Board, Black calibration Board
Notes: The specifications are subject to change without notice.



Spectrophotometers

Colorimeters

Haze Meters

Gloss Meters

Test Charts

Light Booths