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TECHNOLOGY CHANGES LIFE  
MAKES MEASUREMENT EASIER

# Online desktop Spectrophotometer YL4668L



The online desktop spectrophotometer YL4668L is a color measuring instrument using the D/8 (diffuse illumination, 8 ° direction reception, SCI including specular reflection) standard. The test probe and the tested sample are non-contact tested to achieve non-contact precision color measurement of liquids, sauces, powders, etc. The simple probe design allows this product to be placed anywhere on the automated production line for accurate color measurement and color quality control. It is widely used in cosmetics, fruits and vegetables, food hygiene, plastic electronics, paint and ink, printing, ceramics and other industries, and can be used for fluorescence sample measurement. Its unique innovative design can not only provide non-contact measurement scheme directly from the production line, but also ensure stable and high-precision measurement results.



### 7in color touch screen

7in color large screen, clearer display, more convenient viewing results



### USB / Bluetooth

Supports USB wired and Bluetooth wireless connection, and can connect to computers or mobile phones



### Measuring wavelength 400-700nm

Full-spectrum LED lighting source is adopted, with no spectral loss at 400~700nm, and the measurement is more accurate



### Camera locating

Camera positioning can facilitate the viewing of measurement position and more accurate measurement



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## Powerful

- It is applicable to color difference quality control in plastic electronics, paint and ink, textile and clothing printing and dyeing, printing, ceramics and other industries
- Support the measurement of WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), metamerism index MI, color fastness to staining, color fastness, strength, cover, etc

## Durable

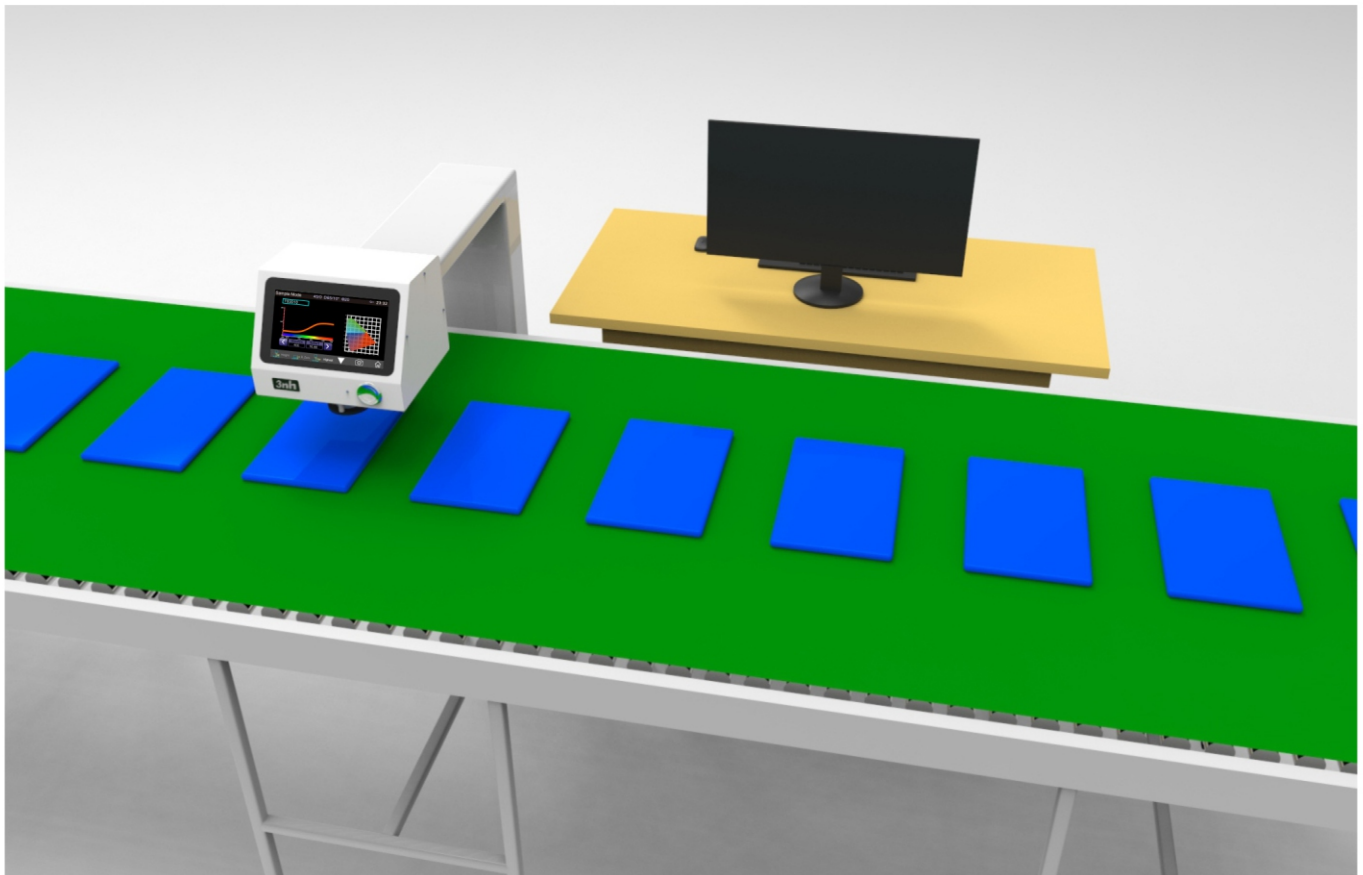
- Light weight, impact resistance, dirt resistance and storage resistance

## Efficient

- Very suitable for color monitoring of production line
- 20mm large caliber, which can quickly obtain the tested object
- It supports USB wired and Bluetooth wireless transmission, and data is transmitted as soon as it is tested, which is convenient and fast
- Fast and accurate measurement, 0.2 times/second

## Accurate

- Support camera viewfinder positioning, high measurement accuracy
- The repeatability standard deviation is within 0.1%
- Support multiple national and international standard measurements





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## Product features

### 1. Non-contact measurement

Accurate color data measurement can be achieved by 3mm from the measured plane

### 2. Multi-color space and observation light source

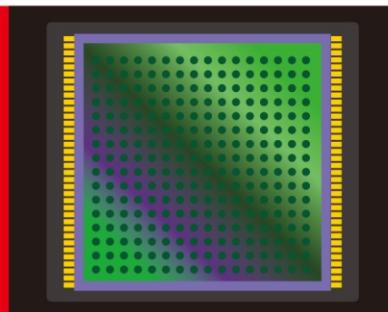
More than 10 color spaces and more than 20 observation light sources are provided to meet different measurements

### 3. Efficient

A complete measurement cycle only takes 200 milliseconds, and more than 400000 samples can be measured every day.

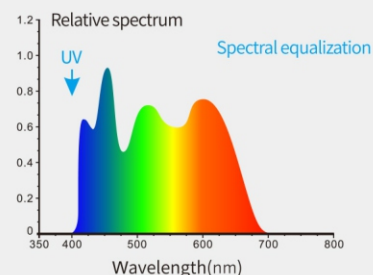
### 4. 256 pixel dual array CMOS image sensor

The higher optical resolution ensures the measuring speed, accuracy, stability and consistency of the instrument, master the core technology, and achieve good compatibility with the international standards on the same platform.



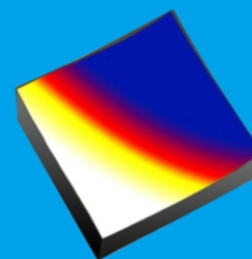
### 5. Use full-spectrum LED light source

The full-spectrum LED light source ensures sufficient spectral distribution in the visible light range, avoids the spectral loss of LED in a specific band, and ensures the accuracy of the instrument measurement results and low-cost maintenance.



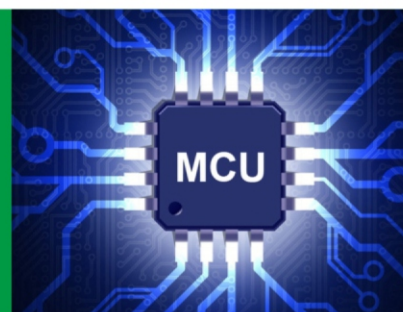
### 6. Concave grating spectroscopic technology

The concave grating splitting technology is adopted, which has higher resolution and makes color measurement more accurate.



### 7. Higher quality

MCU with industrial-grade real-time processing, supporting Bluetooth transmission is more stable and reliable.

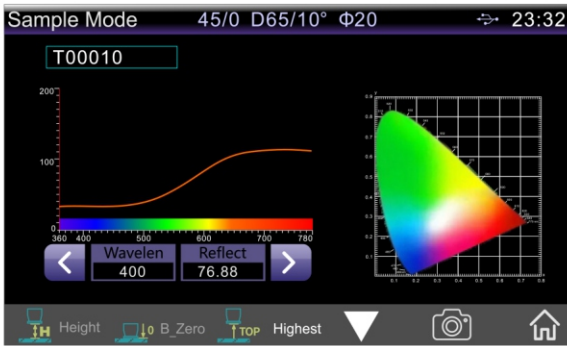


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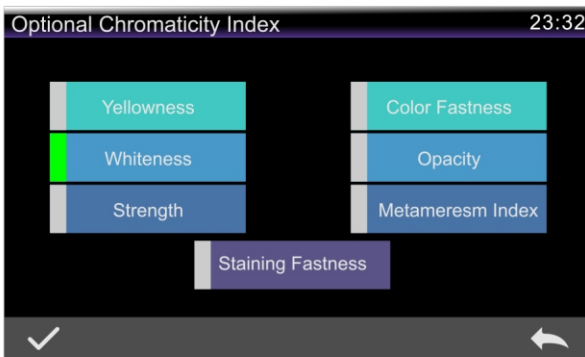
## Function description



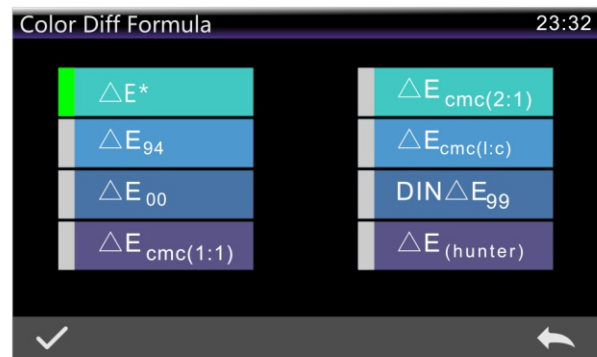
Sample measurement



View measurement records



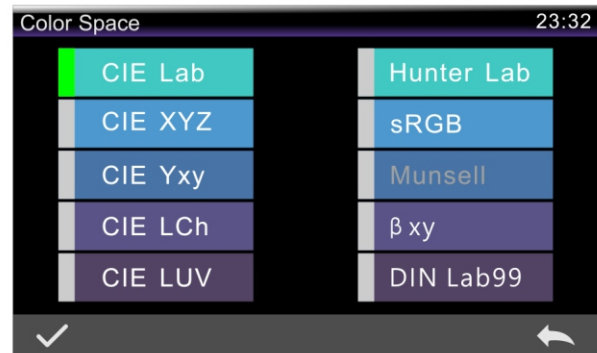
Measurement item selection



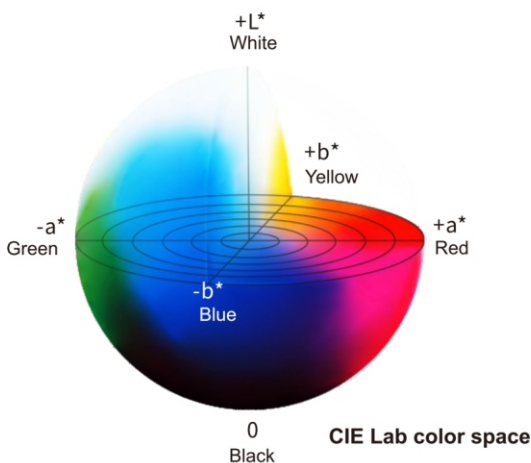
Color difference formula selection



Measurement item selection



Illuminant Selection Window



CIE LAB, XYZ, Yxy, LCh, CIE LUV, s-RGB, HunterLab, Bxy, DIN Lab99 and other color spaces can, For example, the common CIE Lab color space: L \* indicates black and white, and the greater the L \* value, the higher the brightness; A \* represents red and green, +a \* represents red, and - a \* represents green; B \* represents yellow and blue, +b \* represents yellow, and - b \* represents blue.

Through color bias display, we can easily adjust the color.

# Online desktop Spectrophotometer YL4668L



## SQCX

Connect devices for powerful function expansion  
Create instant reports using SQCX

### Color quality management software

Output

TEST  
REPORT

Transmission

XML

Print



USB cable connection

OR



Bluetooth connectivity



SQCX can connect the spectrophotometer control instrument through USB cable and Bluetooth (only for instruments that support Bluetooth) to measure, change the instrument configuration, and operate the instrument data. At the same time, it has also greatly expanded the functions of the instrument, supporting a variety of table color systems, light sources, more complex data management, color detection, report generation, etc., and is the right assistant for color quality management.

Whether you are on site or in the company, use SQCX quality management The software can realize:

1. Save the sample values measured on site directly to the storage device
2. View the color chart in real time during the test.
3. You can view historical data and personal saved data, and modify the name.
4. It can be transferred to the printer for printing output.
5. Detection data can be managed, transmitted and color matched through the network.



# Product application

Colorimeter is widely used in plastic, electronics, paint and ink, textile and clothing printing and dyeing, printing paper, automobile, medical treatment, cosmetics, food and other industries. The instrument is equipped with high-end color management software, which can be used by connecting computers to achieve more function expansion.



Printing and packaging industry



Textile dyeing industry



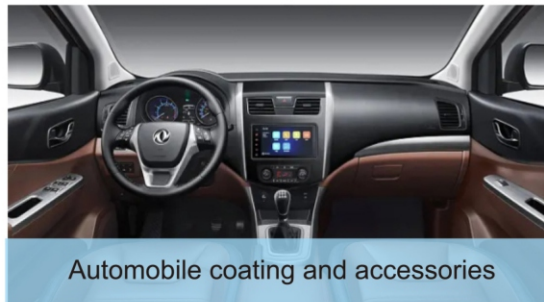
Leather industry



Ink and paint industry



Plastic industry



Automobile coating and accessories

# APPLICATION



Plastic industry



Scientific research/experiment

# Parameter

<b>Model</b>	YL4668L
<b>Optical Geometry</b>	D/8(diffuse illumination,8°reception,SCI including specular reflection); Compliance with standards CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1, ASTM E1164,DIN5033 Teil7
<b>Light Source</b>	Full spectrum LED light source,UV light source
<b>Spectroscopic method</b>	Concave grating spectroscope
<b>Sensor</b>	256-pixel dual-array CMOS image sensor
<b>Wavelength Range</b>	400~700nm,10nm Output
<b>Measured Reflectance Range</b>	0~200%
<b>Measuring Aperture</b>	Φ20mm(Customizable Φ10mm)
<b>Non-contact distance</b>	3.0mm(±0.2mm)
<b>Sample height</b>	Thickness is unlimited, only test probe is used
<b>Distance adjustment method</b>	Fix the height according to the actual sample
<b>Measurement mode</b>	Software customization function(additional customization function needs to be evaluated)
<b>Locating</b>	Camera locating
<b>Color space</b>	CIE LAB,XYZ,Yxy,LCh,CIE LUV,Musell,s-RGB,HunterLab,βxy,DIN Lab99
<b>Color Difference Formula</b>	$\Delta E^*ab, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00, \Delta E$ (Hunter) , $DIN\Delta E99$
<b>Other Colorimetric Index</b>	WI(ASTM E313, CIE/ISO,AATCC,Hunter), YI(ASTM D1925, ASTM 313),Metamerism index MI, Staining Fastness, Color Fastness, Strength, Opacity
<b>Observer Angle</b>	2°/10°
<b>Illuminant</b>	D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4, F5, F6,F7(DLF), F8,F9, F10(TPL5),F11(TL84),F12(TL83/U30)
<b>Displayed Data</b>	Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, Color simulation, pass/fail result, display tolerance can be set
<b>Measuring Time</b>	Fastest 0.2S
<b>Data Storage</b>	Sample mode+quality control mode 18,000,Continuous statistical mode 30,000,totaling no more than 48,000
<b>Repeatability</b>	In the optimal test mode (when the single measurement time is 1.5 seconds): Spectral reflectance: standard deviation within 0.1%: Chromaticity value: $\Delta E^*ab$ within 0.03 (after preheating,measure the average value of whiteboard 30 times at an interval of 5s)
<b>Inter-instrument Error</b>	$\Delta E^*ab$ within 0.2(average value of 12 color plates of BCRA series II)
<b>Measurement method</b>	Single Measurement, Average Measurement(2-99times)
<b>Dimension</b>	200*200*160mm (Test probe)
<b>Weight</b>	About 3Kg (only test probe)
<b>Power</b>	DC 24V, 3A power adapter power supply
<b>Illuminant Life Span</b>	More than 3 million measurements in 5 years
<b>Display</b>	TFT true color 7inch,capacitive touch screen
<b>Data Port</b>	USB / Bluetooth
<b>Language</b>	Simplified Chinese, English, Traditional Chinese
<b>Operating Environment</b>	0~40°C, 0~85%RH (no condensing),Altitude < 2000m
<b>Storage Environment</b>	-20~50°C, 0~85%RH (no condensing)
<b>Standard Accessory</b>	Power adapter, manual, data cable, standard correction board, black correction box
<b>Notes</b>	This model is specially applicable to streamline production line,and deep function customization will incur additional customization costs

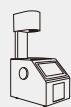
## GUANGDONG THREENH TECHNOLOGY CO., LTD.



Spectrophotometers



Colorimeters



Haze Meters



Gloss Meters



Test Charts



Light Booths

### ★ CONTACT US

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