

YD5000

Spectrodensitometer

Print detection good helper

YD5050 Grating Spectrophotometer Densitometer with 45/0(45 ring-shaped illumination, 0 degree viewing angle), comply to standard ISO 5-4,CIE No.15. It is suitable for using in ink printing, in Film Processing, Textile Printing and Dyeing, Plastic Electronics and Other Industries for Color Measurement and Quality Control;especially suitable for the measurement and quality control of optical density and dot enlargement in ink printing.



Concave
Grating



Single
aperture



Combined
LED Light



High hardware
configuration



ISO9001



National high-tech enterprises through the ISO9001 certification

Two in one, easy to achieve color, density measurement

- Excellent performance: Combined LED light source, UV light source, concave grating splitting; High speed measurement, robust precision;
- Standardization: button selection of polarizing filter; Comply with ISO international standards;
- Versatile: to meet the needs of color laboratory, pre-press proofing, printing monitoring and quality sampling;
- Single diameter: $\Phi 2\text{mm}$ single measuring diameter;
- Best display: Smart TFT True Color 3.5-inch capacitive touch screen; Clear display;
- One click measurement: ergonomic design, easy to operate.

Precise measurement

Advanced optical sensors and algorithms are used to capture every subtle change in color with high precision. Accurate measurement, density value: 0.01D, chroma value: $\Delta E^*ab0.04$.

Support for all measurement conditions

All measurement conditions are fully supported on a single platform, allowing MO, M2 and M3 to be measured in a single channel, saving time and reducing the hassle of individual measurements.

The entire color network can be measured from the ink dispensing center to the printing shop

Help implement comprehensive color control from prepress to shop floor in platemaking and various printing industries.



Standardized measurement

Safety is designed according to the standards of the printing and platemaking industry, and provides corresponding filter Settings for different measurement criteria.

*MO: Reflectivity measured using A light source, also known as: no filter, including ultraviolet light.

*M1: Reflectivity measured using a D50 light source, also known as daylight.

*M2: reflectivity measured using A light source that does not contain ultraviolet components, also known as: removing UV filters to exclude ultraviolet rays.

*M3: Reflectivity measured using A transversely polarized A light source without a UV component, also known as a polarized light filter.

Various printing parameters such as printing density and overprint rate can be measured

Regardless of the density value, density difference, dot area, dot increase, overprint, printing characteristics, printing contrast, tone error and gray scale need, one click is done. All relevant information is presented at once, and even the characteristic curves can be drawn quickly and easily.

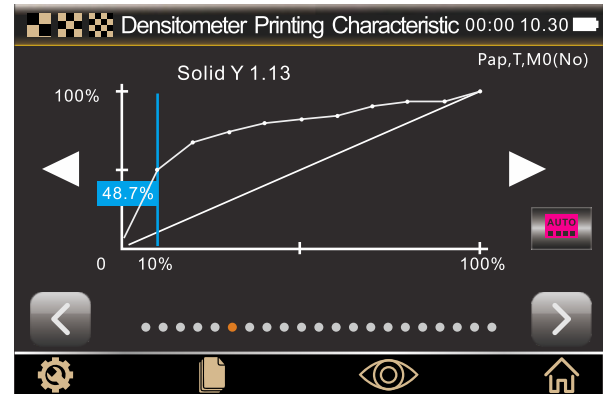
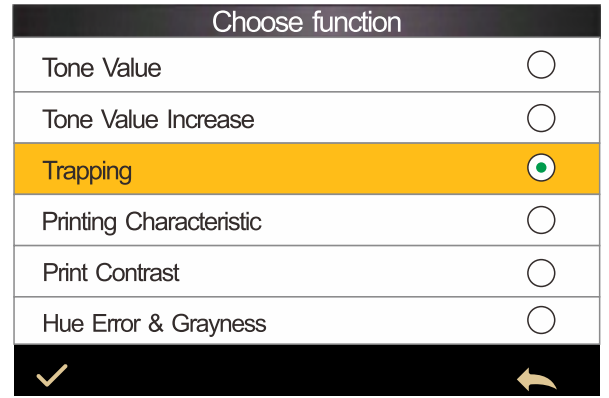
Multiple color space, observation light source

Spectrodensitometer YD5000 using CIELAB, XYZ, Yxy, LCh wait for A variety of color space, and A, C, D50, D55, D65, D75, F2, F7, F11, F12 various observation light source; To meet the needs of various customers for color density measurement.



Easy to operate, easy to get started

Beautiful appearance and structured design in line with human mechanics; Easy to carry, so you can do on-the-spot color detection anytime, anywhere. User-friendly interface, real-time display, at a glance; Let you know the color condition.



Measurement is fast and simple

Spectrodensitometer YD5000 can quickly measure and understand color and its status relative to standards, allowing the operator to manage and understand printing expectations and know what results can or cannot be achieved. With the built-in calibration strip, the operator can always ensure the best measurement accuracy.

High hardware configuration

45/0(45 ring uniform illumination 0° reception) geometric optical structure; Comply with standard ISO5-4; CIENo.15, concave grating, 256-pixel dual array CMOS detector; 3.5inTFT True Color screen, easy operation.

Detailed software package

More features to help you achieve more efficient color management.

computer software SDQC

Connect devices for powerful functionality expansion

SDQC can connect the instrument through USB cable and Bluetooth, control the instrument for measurement, change the instrument configuration, and operate the instrument data. At the same time, it also greatly expanded the function of the instrument, to achieve complex data management, color detection, report generation, etc., is the right-hand assistant of color quality management.



Analysis and management

The instrument can analyze, copy, delete, modify, name and save the measured data by connecting SDQC software on PC.



Data printing

Compare color and density differences, generate test reports, and print out the data by connecting to a Bluetooth printer. Data printing



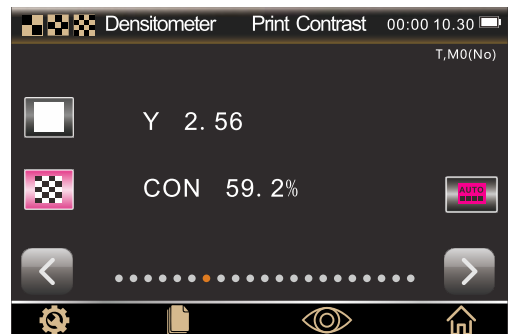
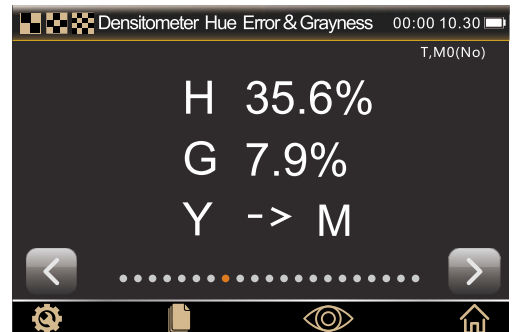
Share and pass

The generated test report can be shared and transmitted through a connected computer. Communicate color information quickly, speed up production time and simplify the skills needed to print.



Cloud storage

The measured data report can be uploaded to the cloud storage. Achieve mass data storage.



Multi-industry application

It is widely used in ink printing factory, paper factory, film processing, textile and garment printing and dyeing industry, scientific research institutions, quality testing institutions, laboratories and so on.



Printing ink



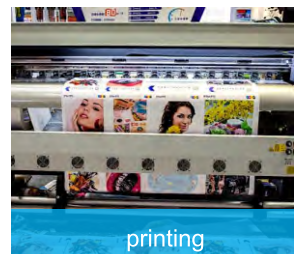
Textile printing and dyeing



laboratory



Paper mill



printing

Product Parameter

Model	YD5000
Measurement Geometry	45/0(45 ring-shaped illumination, 0 degree viewing angle); ISO 5-4,CIE No.15
Features	It is widely used in color measurement and quality control of ink printing, film processing, textile printing and dyeing, plastic electronics and other industries, especially suitable for the measurement and quality control of optical density, dot increase and other indicators in ink printing. According to product characteristics, single aperture Φ 2mm
Light Source	Combined LED Light, UV Light
Spectral separation device	Concave Grating
Detector	256 Image Element Double Array CMOS Image Sensor
Wavelength Range	400~700nm
Wavelength Pitch	10nm
Half Bandwidth	10nm
Measurement Conditions	Compliance with ISO 13655 measurement conditions;M0 (CIE Light Source A), M1 (CIE Light Source D50), M2 (Excluding UV light source), M3 (M2+Polarized light filter)
Density Standards	ISO Status A, E, I, T
Density index	Density value, density difference, dot area, dot increase, overprint, printing characteristics, print contrast, tone error, and grayscale
Measurement aperture	Φ 2mm
Color Spaces	CIE LAB,XYZ,Yxy,LCh
Color Difference Formula	ΔE^*ab , ΔE^*94 , ΔE^*00
Other Colorimetric Index	/
Observer Angle	2°/10°
Illuminants	A,C,D50,D55,D65,D75,F2,F7,F11,F12
Measurement Time	About 1.5s
Repeatability	Density: Within 0.01 D Chromaticity value:within ΔE^*ab 0.04 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration) Except M3
Inter-instrument Error	Within ΔE^*ab 0.22 (Average for 12 BCRA Series II color tiles) Except M3
Measurement mode	Single Measurement, Average Measurement(2-99)
Size(L*W*H)	184*77*105mm
Weight	About 600g
Power source	Li-ion battery. 5000 measurements within 8 hours
Illuminant Life Span	5 years, more than 3 million times measurements
Display	3.5-inch TFT color LCD, Capacitive Touch Screen
Data memory	10000 pcs
Language	Simplified Chinese, English, Traditional Chinese
Working Environment	Temperature: 0~40°C; Humidity: 0~85% (No Condensation);altitude: less than 2000 m
Storage Environment	Temperature: -20~50°C; Humidity: 0~85% (No Condensation)
Standard Accessory	Power Adapter, USB Cable, Built-in li-ion battery, User Manual, software(download from the website),White and Black Calibration Board, Protective Cover,Polarization filter box,Locating Plate
Optional Accessory	Micro Printer