

One-key to measure density CMYK & color LAB value



YD5010-Standard Grating Spectrodensitometer

Under the 45/0 geometric optical illumination and the testing conditions of M O, M 1, M 2, M 3 stipulated by ISO 13655 standard, the instrument can accurately measure the reflectance data of samples. Under multiple color spaces, it can accurately measure various printing density indexes, color difference formulas and color indexes, and can meet the user's regular testing of various parameters.



Con-cave Grating



LED light



High hardware configuration



USB interface



PRODUCT FEATURES

1. Perfect combination of the beautiful appearance and the ergonomic structure design.
1. Combined LED light sources with long life and low power consumption, including UV light.
2. Switchable apertures: $\Phi 2/4/8\text{mm}$, adapt to more samples.
4. Accurately measure reflectance spectrum, CMYK density and Lab value of the sample.
5. High-configuration electronic hardware: 3.5-inch TFT true-color screen, capacitive touch screen, concave grating, 256-pixel dual-array CMOS image sensor, etc..
6. Two standard observer angles: 2/10, multiple light source modes and color systems.
7. USB mode can extend more function.
8. Large-capacity storage space, over 10,000 test data.
9. Especially suitable for process control and quality control of printing factory.
10. PC software has powerful function expansion.



APPLICATION INDUSTRY

It is widely used in ink, printing, film processing, textile dyeing, plastic electronics and other industries for accurate color measurement and quality control, as well as in scientific research institutions, quality testing institutions, laboratories; especially suitable for precise measurement and quality control of optical density and dot enlargement in ink printing.



Ink & Printing



Paper



Textile



Automobile



Plastics



Laboratory



Other

SPECIFICATION PARAMETER

Model: YD5010

Illumination: 45/0 (45 circular illumination, vertical viewing)

Standard: ISO 5-4, CIE No.15

Light Source: Combined LED source, UV light

Spectral mode: Concave-Grating

Sensor: 256-pixel dual-array CMOS image sensor

Wavelength range: 400~700nm

Wavelength pitch: 10nm

Half bandwidth: 10nm

Measurement conditions: meet the ISO 13655 measurement conditions: M0 (CIE light source A); M1 (CIE light source D50) M2 (excluding UV illumination); M3 (M2 + polarized light filter)

Density standard: ISO Status T, E, A, I

Density index: density value, density difference, dot area, dot increase, overprint, printing characteristics, printing contrast, tone error and grayscale

Measurement Aperture: $\Phi 2\text{mm}$, $\Phi 4\text{mm}$, $\Phi 8\text{mm}$

Color Space: CIE L AB, XYZ, Yxy, LCh

Color difference formula: ΔE^*ab , ΔE^*94 , ΔE^*00

Other colorimetric indexes: WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), MI, Cover Ratio

Observer Angle : 2°/10°

Illuminant: D65, A, C, D50, D55, D75, F2 (CWF), F7 (DLF), F11, F12

Measuring time: Approx. 1.5s

Repeatability: density value: within 0.01D

Chromaticity value: within ΔE^*ab 0.04

Inter-instrument agreement: within ΔE^*ab 0.2 (Average for 14 BCRA series II color tiles, except -M3)

Measurement method: single measurement, average measurement (2-99 times)

Size: L*W*H: 184X77X105mm

Weight: Approx. 600g

Battery life: lithium battery, 5000 times of using after charging for 8 hours

Lighting source life: 5 years, more than 3 million measurements

Display screen: TFT true color 3.5 inch,

Touch Screen Interface: USB

Storage: 10,000

Language: simplified Chinese, English, Traditional Chinese

Standard accessories: power adapter, data line, built-in lithium batteries, instructions, quality control software (+download from official website), black and white calibration board, protection cover, polarization filter box

Optional accessories: Micro printer

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Focus on Color