



### 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:  $\lt 1 \gt 2/4/8$ 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.
  - a. 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.



## SPECIFICATION PARAMETER

<p>Model: YDS010                  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: <math>\phi 2</math>mm, <math>\phi 4</math>mm, <math>\phi 8</math>mm                  Color Space: CIE LAB, XYZ, Yxy, LCh                  Color difference formula: <math>\Delta E^*ab</math>, <math>L^*E^*94</math>, <math>L^*E^*00</math>                  Other colorimetric indexes: <math>W_i</math> (ASTM E313, CIE/ISO, AATCC, Hunter), <math>Y_i</math> (ASTM D1925, ASTM 313), M1, Cover Ratio                  Observer Angle: <math>2^\circ/10^\circ</math></p>	<p>Illuminant: D65, A, C, D50, DSS, D75, F2 (CWF), F7 (DLF), F11, F12                  Measuring time: Approx. 1.5s                  Repeatability: density value: within 0.01D                  Chromaticity value: within <math>\Delta 0.01</math>                  Inter-instrument agreement: within <math>\Delta 0.02</math> (Average for 14 BCRA series I 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</p>
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Authorized Distributor:



www.sperdirect.com

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