WELLZION®

One-button to measure density CMYK & color LAB value

YD5050—Enhanced Grating Spectrodensitometer

Under the CIE 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 and present various printing density indexes, color difference formulas and color indexes, with Built-in scanning function ,it can meet the user's regular testing of various parameters,the instrument with top color manager software, connect to PC ,more function expansion.

Concave-Grating Spectral

USB/Bluetooth 4.0

LED light sources

Scanning

ISO 9001 Certified

PRODUCT FEATURES

1.45/0 geometrical optics structure, comply with CIE, the testing conditions of M O, M 1,M 2 , M 3 stipulated by ISO 13655 standard, it can accurately measure various printing density , overprint rate and other printing parameters.
2. Accurately measure reflectance spectrum, CMYK density and Lab value of the sample;
3. High-configuration electronic hardware: 3.5-inch TFT true-color screen, capacitive touch screen, concave grating, 256-pixel dual-array CMOS image sensor, etc;
4.Especially suitable for process control and quality control of printing plants;
5.Switchable apertures: Φ2/4/8/20mm, adapt to more samples;
6.Large-capacity storage space, over 20,000 test data
7. USB/Blue2.1 dual communication mode is widely useful;
8. PC software has powerful function expansion.
9.Perfect combination of the beautiful appearance and the ergonomic structure design;
10.Combined LED light sources with long life and low power consumption, including UV light;

APPLICATION INDUSTRY

YD5050 with multiple switchable apertures:(2mm,4mm,8mm,20mm),It is widely used in ink printing,paper,painting,scientific research and laboratory. especially suitable for precise measurement and quality control of optical density and dot enlargement in ink printing.

Ink&Printing

Paper

Textile

Automobile

plastics

Laboratory

others

TECHNICAL SPECIFICATIONS

Model：YD5050
Illumination：45/0
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 bandwith：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 ,Density scanning.
Measurement Aperture: Customizable single Φ2mm、Φ4mm、Φ8mm optional.
Color Space：CIE L AB,XYZ,Yxy,LCh,CIE LUV,HunterL AB
Color difference formula：ΔE*ab,ΔE*uv,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, ΔE (Hunter)
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,F1,F2(CWF),F3,F4，F5，F6,F7(DLF),F8,F9, F10(TPL5),F11(TL84),F12(TL83/U30
Measuring time：Approx. 1.5s
Repeatability：density value：within 0.01D
Chromaticity value：within ΔE*ab 0.03
Inter-instrument agreement：within ΔE*ab 0.18 (Average for 12 BCRA series II color tiles)
Measurement method: single measurement, average measurement (2-99 times)
Size: L*W*H 184X77X105mm
Weitht：Approx. 600g
Battery life: lithium battery, 5000 times in 8 hours
Lighting source life: 5 years, more than 3 million measurements
Display screen: TFT true color 3.5 inch,
Touch Screen Interface: USB& Blue4.0 (compatible 2.1)
Storage：20000
Language：simplified Chinese，English，Traditional Chinese
Operating Environment:0~40°C, 0~85%RH (no condensing), Altitude < 2000m
Storage Environment:-20~50°C, 0~85%RH (no condensing)
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,Locating plate.
Optional accessories: Micro printer