



# SPECTRODENSITOMETER BSDM-1301

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Spectrodensitometer has the capability of densitometer and measures color and numeric color differences and widely used in the ink printing

## BSDM-1301 SPECTRODENSITOMETER

45/0 geometrical optics structure, comply with CIE, the testing conditions of M0, M1, M2, M3 stipulated by ISO 13655 standard, it can accurately measure various printing density, overprint rate and other printing parameters.

Accurately measure reflectance spectrum, CMYK density and Lab value of the sample;

High-configuration electronic hardware: 3.5-inch TFT true-color screen, capacitive touch screen, concave grating, 256-pixel dual-array CMOS image sensor, etc.;

Perfect combination of the beautiful appearance and the ergonomic structure design;

Optional apertures:  $\Phi 2/4/8$ mm, adapt to more samples;

Large-capacity storage space, over 20,000 test data

Combined LED light sources with long life and low power consumption, including UV light;

USB/Blue2.1 dual communication mode is widely useful;

Especially suitable for process control and quality control of printing plants;

PC software has powerful function expansion.

## SPECIFICATIONS

Model	BSDM-1301
Optical Geometry	45/0(45 ring-shaped illumination, 0 degree viewing angle)
Standards compliant	ISO 5-4,CIE No.15 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)
Illuminant	D65,A,C,D50,D55,D65,D75,F2(CWF),F7(DLP),F11(TL84),F12(TL83/U30),F1,F3,F4,F5,F6,F8,F9,F10(TPL5)
Spectral Mode	Concave Grating
Sensor	256 Image Element Double Array CMOS Image Sensor
Wavelength Pitch	10 nm
Semi-bandwidth	10 nm
Density Standards	ISO Status A, E, I, T
Density index	Density value, density difference, dot area, dot enlargement, overprint, printing characteristics, printing contrast, tone error and gray scale, density scanning Customized one aperture: $\Phi 2$ mm, $\Phi 4$ mm, $\Phi 8$ mm optional
color space	CIE LAB,XYZ,Yxy,LCh,CIE LUV,HunterLAB
Color Difference Formula	$\Delta E^*ab, \Delta E^*94, \Delta E^*00, \Delta E^*uv, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E$ (Hunter)
Other Colorimetric data	WI(ASTM E313,CIE/ISO,AATCC,Hunter), YI(ASTM D1925,ASTM 313), MI (Metamerism Index),Opacity
Observer	2° / 10°
Measurement Time	About 1.5s
Repeatability	Density: Within 0.01 D Chromaticity value:within $\Delta E^*ab$ 0.03 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Inter-instrument agreement	Within $\Delta E^*ab$ 0.18 (Average for 12 BCRA Series II color tiles)
Measurement Method	Single Measurement, Average Measurement(2-99)
Interface	USB, Bluetooth



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