



## SPECTRODENSITOMETER BSDM-1302

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Grating Spectrophotometer Densitometer with 45/0(45 ringshaped illumination, 0 degree viewing angle). It is suitable for use in ink printing, in Film Processing, Textile Printing and Dyeing, Plastic Electronics and Other Industries for Color Measurement and Quality Control.

45/0 geometrical optics structure, comply with CIE

Reflectance spectrum, CMYK density and Lab

3.5inch TFT truecolor screen, capacitive touch screen, concave grating

Ergonomic structure design

Φ2/4/8mm Optional apertures



Perfect combination of the beautiful appearance and the ergonomic structure design;  
 Combined LED light sources with long life and low power consumption, including UV light;  
 Optional apertures: Φ2/4/8mm, adapt to more samples;  
 Accurately measure reflectance spectrum, CMYK density and Lab value of the sample;  
 High configuration electronic hardware: 3.5inch TFT truecolor screen, capacitive touch screen, concave grating, 256pixel dualarray CMOS image sensor, etc.;  
 Two standard observer angles: 2/10, multiple light source modes and color systems;  
 USB mode is widely useful;

## SPECIFICATIONS

Model	BSDM-1302
Optical Geometry	45/0 (45° ringshaped illumination, 0° viewing angle)
Standards compliant	ISO 54, CIE No.15
Illuminant (source)	Combined LED Light, UV Light
Spectral mode	Concave Grating
Sensor	256 Image Element Double Array CMOS Image Sensor
Wavelength Pitch	10 nm
SemiBandwidth	10 nm
Standards compliant (ISO 13655)	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 standard	ISO Status T, E, A, I
Density index (functions)	Density value, density difference, dot area, dot enlargement, overprint, printing characteristics, printing contrast, tone error and gray scale, density scanning
Density index (aperture)	Customized one aperture: Φ2 mm, Φ4 mm, Φ8 mm optional
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, HunterLAB
Color Difference Formula	$\Delta E^*ab$ , $\Delta E^*uv$ , $\Delta E^*94$ , $\Delta E^*cmc(2:1)$ , $\Delta E^*cmc(1:1)$ , $\Delta E^*00$ , $\Delta E$ (Hunter)
Other Colorimetric Data	WI (ASTM E313, CIE/ISO, AATCC, Hunter); YI (ASTM D1925, ASTM 313); MI (Metamerism Index); Opacity
Observer	2° / 10°
Illuminant (measurement)	D65, A, C, D50, D55, D75, F1, F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL5), F11 (TL84), F12 (TL83/U30)
Measurement Time	About 1.5 s
Repeatability	Density: Within 0.01 D; Chromaticity value: within $\Delta E^*ab$ 0.03 (white calibration plate measured 30x at 5-s intervals after white calibration)
Interinstrument agreement	Within $\Delta E^*ab$ 0.18 (Average for 14 BCRA Series II color tiles) Except M3
Measurement method	Single Measurement; Average Measurement (2-99)

Interface	USB, Bluetooth
Data Storage	20000 pcs
Alt Name	Spectrodensitometer



## FEATURES

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 Accurately measure reflectance spectrum, CMYK density and Lab value of the sample;  
 High configuration electronic hardware: 3.5inch TFT truecolor screen, capacitive touch screen, concave grating, 256pixel dualarray CMOS image sensor, etc.;  
 Two standard observer angles: 2/10, multiple light source modes and color systems;  
 USB mode is widely useful;  
 Large capacity storage space, over 10,000 test data;  
 Especially suitable for process control and quality control of printing plants;  
 PC software has powerful function expansion.



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