



SPECTRODENSITOMETER

SPECTRODENSITOMETER BSDM-1301 TO BSDM-1304

SPECTRODENSITOMETER

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-1301	BSDM-1302	BSDM-1303	BSDM-1304
Optical Geometry	45/0 (45° ringshaped illumination, 0° viewing angle)			
Standards compliant	ISO 54, CIE No.15			
Illuminant (source)	Combined LED Light, UV Light		Combined LED 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 value, density difference, dot area, dot enlargement, overprint, printing characteristics, printing contrast, tone error and gray scale	
Density index (aperture)	Customized one aperture: Φ2 mm, Φ4 mm, Φ8 mm optional			
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, HunterLAB		CIE LAB, XYZ, Yxy, LCh	
Color Difference Formula	ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*00, ΔE (Hunter)		ΔE*ab, ΔE*00, ΔE*94	
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)		D65, A, C, D50, D55, D75, F2 (CWF), F7, F11, F12	
Measurement Time	About 1.5 s			

Repeatability	Density: Within 0.01 D; Chromaticity value: within ΔE^*ab 0.03 (white calibration plate measured 30x at 5-s intervals after white calibration)	Density: Within 0.01 D; Chromaticity value: within ΔE^*ab 0.04 (white calibration plate measured 30x at 5-s intervals after white calibration)
Interinstrument agreement	Within ΔE^*ab 0.18 (Average for 14 BCRA Series II color tiles) Except M3	Within ΔE^*ab 0.20 (Average for 14 BCRA Series II color tiles) Except M3
Measurement method	Single Measurement; Average Measurement (2-99)	
Interface	USB, Bluetooth	USB
Data Storage	20000 pcs	10000 pcs
Alt Name	Spectrophotometer	



BSDM-1301 BSDM-1303



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BSDM-1302 BSDM-1304



BSDM-1302 BSDM-1304



BSDM-1302 BSDM-1304

FEATURES

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 Combined LED light sources with long life and low power consumption, including UV light;
 Optional apertures: $\Phi 2/4/8\text{mm}$, 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;
 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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