



EX Se	EX Pro	EX Max
All density functions	All density functions CIE-L*a*b*	All density functions All color data
CMYK	CMYK+spot color	CMYK+spot color

Model	EX Se	EX Pro	EX Max
Measurement/illumination aperture	2mm/5mm, 1.5mm/3mm		
Battery capacity	8000 continuous measurements on a single charge, 7.2V/3000mAh		
Interface	USB, Bluetooth		
Density range	0.0 D – 3.0 D		
Density standard	Status A, E, I, T ,M		
Compliance with standard	ISO 5-4:2009(E), ISO 13655:2017,CIE No.15		
Instrument display	Full-color screen, 3.5 inches		
Supported language	简体中文, English		
Illumination source	Full-band balanced LED light source + UV		
Measurement mode	M0, M1, M2, M3		
Measurement structure*	45/0		
Measurement time	About 1.5 seconds		
Measurement repeatability**	Density value: ≤0.001D, Chroma value: dE*ab≤0.03		
Wavelength interval	10nm		
Wavelength range	400-700nm		
Light source life	10 years, 1 million times		
Storage	Instrument: 100 standard samples, 10,000 test samples; APP: Mass storage		
Spectroscopic method	Grating		
Sensor	Dual-row high-precision CMOS array sensor		
Reflectivity measurement range	0-200%		
Reflectivity resolution	0.01%		
Software support	Android, iOS, Windows, WeChat applet		
Accuracy guarantee	Guaranteed first-level metrology qualification		
Inter-unit difference***	dE*ab≤0.3		dE*ab≤0.25
Display accuracy	Density value: 0.001, Chroma value: 0.01		
Field of view	2°, 10°		
Measurement index	/	CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB, color difference (ΔE*ab, ΔE*cmc, ΔE*94, ΔE*00), blackness (My, dM), staining fastness, color fastness, Tint (ASTM E313-00), color density CMYK (A, T, E, M), metamerism index Milmm, Munsell, hiding power, strength (dye strength, tinting strength)	Spectral reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB, color difference (ΔE*ab, ΔE*cmc, ΔE*94, ΔE*00), whiteness (ASTM E313-00, ASTM E313-73, CIE, ISO2470/R457, AATCC, Hunter, Taube Berger Stensby), yellowness (ASTM D1925, ASTM E313-00, ASTM E313-73), blackness (My, dM), staining fastness, color fastness, Tint (ASTM E313-00), color density CMYK (A, T, E, M), metamerism index Milmm, Munsell, hiding power, strength (dye strength, tinting strength)
Printing quality index	Color density CMYK (A, T, E, M), dot area, dot area increase, overprint rate, printing contrast, grayscale, hue error		
Light source conditions	A, B, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, U35, DLF, NBF, TL83, TL84, ID50, ID65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2		

*45 degree ring lighting/0 degree angle reception

**Measure the standard deviation of the white board 30 times at 5 second intervals after white board calibration (except M3)

***BCRA series II 12 color plates M0 mode 5mm diameter measurement average value (except M3)



EX Sries Printing Densitometer

One click to get sample color



CMYK



Printing Press



Ink



Package

EX Sries Printing Densitometer

The CHNSpec EX series of handheld printing densitometers are specially designed for the printing industry.It can accurately measure the color density of various processes such as offset printing and gravure printing, and quickly obtain data to help practitioners control color quality and correct deviations.

The handheld design is easy to carry and provides reliable protection for printing color management anytime and anywhere.



Start a new journey of printing quality
Pursue excellent printing quality, choose EX series
Let precise measurement continue to escort high-quality printing

- Ultra-high repeatability: density value: $\leq 0.001D$, chromaticity value: $dE^*ab \leq 0.03$
- Horizontal compression measurement, physically positioned observation window
- Provides printing-specific measurement indicators to help users adjust colors efficiently
- Dual-aperture design to meet the measurement of samples of different sizes
- Use the powerful PC color management system ColorExpert
- More than 30 measurement parameters and more than 30 evaluation light sources
- Support WeChat applet, Android, Apple, mobile APP

Supports all measurement conditions

The CHNSpec EX series of handheld printing densitometers supports all measurement conditions, whether it is M0, M1, M2 or M3, it can easily cope with it. This means that in any complex printing environment, it can maintain stable and accurate measurement performance, without the need for practitioners to frequently change equipment or perform tedious debugging to adapt to different measurement conditions, greatly improving work efficiency. Its handheld design is easy to carry, whether it is on-site testing in the workshop or going out to communicate with customers to show measurement results, it is extremely convenient, and professional technology provides solid guarantee for printing color measurement and color management.



Which EX is best for you?

EX Se

It is suitable for printing production process control, quality inspection and evaluation, etc., which require precise control and detection of printing color density.

EX Pro

EX Pro strictly implements the industry standards for process control and accurately controls the CMYK four-color and spot color printing processes to ensure accurate color presentation.

EX Max

EX Max provides a comprehensive toolset for ink labs, quality control labs and manufacturing partners to ensure they can achieve high-quality printing results.



Measurement conditions and filters

- M0** A light source, including UV
- M1** D50 light source
- M2** A light source, excluding UV
- M3** A light source, polarizing filter

