



Color SpectroDensitometer

Product model  
DS 528



Suitable for printing and packaging industries

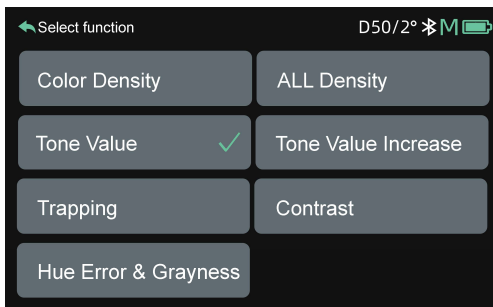
Solve the color quantization problem of CMYK and spot colors

Provide quantitative operating guidance to printing press staff

# —、 Product features

## ■ Horizontal compression measurement, physical positioning observation window

●The DS 528 Color Densitometer adopts a horizontal design with a low center of gravity, which can be stableMeasure the surface being measured. During the measurement process, you can follow the observation windowCheck the measurement position at all times to avoid measurement position errors.



## ■ Provide printing-specific measurement indicators to help users adjust colors efficiently

●Color density measurement, dot area measurement, overprint rate measurement, printing contrast measurement, hue error and grayscale measurement.

## ■ Ultra-high repeatability accuracy: $dE^*ab \leq 0.02$

●Repeatability accuracy is the most important indicator to describe the performance of a Color Densitometer. The DS 528 Color Densitometer adopts high-precision nanometer spectroscopic devices, which enables the repeatability accuracy of the instrument to reach a level of  $dE^*ab \leq 0.02$  that is difficult to match with similar products.

Sample	Toler	P/F
L*: 20.20	0.01	PASS
a*: -9.68	0.01	PASS
b*: 1.96	0.01	PASS
dE*ab	0.02	PASS



## ■ DS 528 supports 3 measurement calibers

●The DS 528 Color Densitometer supports 3 apertures,  $\Phi 11\text{mm}$ ,  $\Phi 5\text{mm}$ ,  $\Phi 3\text{mm}$ , and can be flexibly applied to a variety of samples of different sizes and testing conditions.

## ■ More than 30 measurement parameters and nearly 40 evaluation light sources

●DS 528 Color Densitometer provide spectral reflectance, CIE-Lab, CIE-LCh,  $\Delta E^*ab$ , covering power, whiteness, yellowness and other 30+ measurement indicators; A, B, C, There are nearly 40 evaluation light sources to choose from such as D50, D55, and D65, covering almost all industries All color measurement metrics and light source types included.



## ■ Support WeChat applet, Android, Apple, Hongmeng, mobile APP

- The DS 528 Color Densitometer can be connected to various mobile phones through a variety of mobile programs.
- Users no longer need to transmit the color values and physical objects of samples, but can easily transmit color data through WeChat.
- Users can search for the closest color among multiple sets of color cards
- Users can create a personal color database and enter color card information for printing, coatings, textiles, etc. The created color library can be uploaded to the cloud for multi-device data sharing, making color processing more convenient.
- Enterprise users can create and manage their own color card information library and color formulas in the cloud, and share the information library and color formulas with their own users through unique invitation codes.



WeChat applet



APP

## ■ Use the powerful PC-side color management system ColorExpert

The DS 528 Color Densitometer comes with the Windows color management system ColorExpert, which can be connected to the DS 528 Color Densitometer via Bluetooth or USB cable. ColorExpert is a full-featured color management software with four major functional modules: My Color, Color Detection, Color Matching System, and Personal Center.

1. In the "My Colors" function module, users can collect or create new color libraries they need among hundreds of color libraries shared by other users. Electricity The brain software and mobile APP can share an account, a suitable for printing and packaging industries. Solve the color quantization problem of CMYK and spot colors. Provide quantitative operating guidance to printing press staff and the color library data follows the account to achieve information synchronization between PC and mobile terminals.
2. In the "Color Detection" function module, users can calibrate, measure, and set up the spectrophotometer through computer software. Users can use the colors in the cloud database as standard samples to measure color differences, view spectra, color difference charts, standard sample data, and export the desired data test report.
3. In the "Color Matching System" function module, it can provide users with a more convenient and efficient color matching process. After the instrument measures the color of the sample, the system calculates the formula in the formula center and automatically corrects the color, finally achieving an accurate match. Suitable for computer automatic color matching applications in paints, coatings, printing, textiles and other fields.
4. In the "Personal Center" function module, users can edit their personal information, search or delete connected instrument information, manage downstream users, and manage color libraries shared with downstream users.



## 二、 Product parameters

Model	DS 528
Measuring structure*	45/0
Integrated physical positioning holes	support
Measurement repeatability	$dE^*ab \leq 0.02$
Display accuracy	0.01
lighting source	Full-band balanced LED light source
UV light source	support
caliber	$\Phi 11mm, \Phi 5mm, \Phi 3mm$
measurement standard	Spectral reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB color difference ( $\Delta E^*ab$ , $\Delta E^*cmc$ , $\Delta E^*94$ , $\Delta E^*00$ ), whiteness (ASTME313-00, ASTME313 -73, CIE, ISO2470/R457, AATCC, Hunter, TaubeBerger Stensby) yellowness (ASTM D1925, ASTM E313-00, ASTM E313-73) blackness (My, dM), stain fastness, color fastness, Tint (ASTM E313-00) Color density CMYK (A, T, E, M), metamerism index Milm, Munsell, hiding power, strength (dye strength, tinting strength)
Light source conditions	A,B,C,D50,D55,D65,D75F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12CWF,U30,U35,DLF,NBF,TL83,TL84,ID50, ID65,LED-B1,LED-B2,LED-B3,LED-B4LED-B5,LED-BH1,LED-RGB1,LED-V1,LED-V2
software support	Android, iOS, Windows, WeChat applet, Hongmeng
Accuracy guaranteed	Ensure measurement is qualified
field of view	2°, 10°
Integrating sphere diameter	40mm
follow standards	CIENo.15,GB/T3978,GB2893,GB/T18833,ISO7724-1,ASTME1164,DIN5033Teil7
Spectral method	High-precision nano spectroscopic device
sensor	Silicon photodiode array dual 16 groups
Wavelength interval	10nm

Wavelength range	400-700nm
Reflectivity measurement range	0-200%
Reflectance resolution	0.01%
measure time	about 1 s
interface	USB, Bluetooth
Screen	Full color screen, 3.5 inches
battery capacity	Can continuously measure 8000 times on a single charge, 7.2V/3000mAh
Light source life	5 million times
language	Simplified Chinese, English
storage	Instrument: 10,000 items; APP: Mass storage

※Diffuse illumination/8° direction reception, including specular reflected light/removing specular reflected light

※※After the whiteboard is calibrated, measure the whiteboard 30 times at 5-second intervals and measure the standard deviation of the results using the MAV caliber.