



Highly cost-effective Color Densitometer

Product model

DS 526

DS 528

DS 530



Suitable for printing and packaging industries

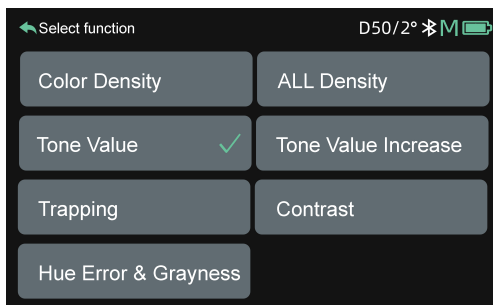
Solve the color quantization problem of CMYK and spot colors

Provide quantitative operating guidance to printing press staff

一、 Product features

■ Horizontal compression measurement, physical positioning observation window

●The DS 52X series 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 52X series 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

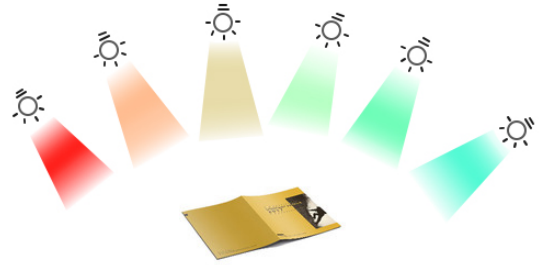


■ DS 52X series supports 5 measurement calibers

●The DS 52X series Color Densitometer supports 5 apertures, $\Phi 11\text{mm}$, $\Phi 10\text{mm}$, $\Phi 6\text{mm}$, $\Phi 5\text{mm}$, $\Phi 3\text{mm}$, 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 52X series Color Densitometer provide spectral reflectance, CIE-Lab, CIE-LCh, ΔE^*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 52X series 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 52X series Color Densitometer comes with the Windows color management system ColorExpert, which can be connected to the DS 52X series 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, aSuitable for printing and packaging industries Solve the color quantization problem of CMYK and spot colors Provide quantitative operating guidance to printing press staffnd 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、 Brief table of model distinctions

model	DS 526	DS 528	DS 530
Measurement repeatability	dE*ab≤0.02		
caliber	Φ5mm	Φ11mm,Φ5mm,Φ3mm	Φ11mm,Φ10mm,Φ6mm, Φ5mm,Φ3mm
UV	/	•	•
Integrated physical positioning holes	•	•	•
NetProf network calibration	/	/	•

三、 Product parameters

Model	DS 526	DS 528	DS 530
Measuring structure*	45/0		
NetProf network calibration	/	/	support
Integrated physical positioning holes	support		
Measurement repeatability*	dE*ab≤0.02		
Display accuracy	0.01		
lighting source	Full-band balanced LED light source		
UV light source	/	support	
caliber	Φ5mm	Φ11mm,Φ5mm,Φ3mm	Φ11mm,Φ10mm,Φ6mm, Φ5mm,Φ3mm
measurement standard	Spectral reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB color difference (ΔE^*ab , ΔE^*cmc , ΔE^*94 , ΔE^*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.

CHNSpec Technology (Zhejiang) Co., Ltd



CHNSpec Technology (Zhejiang) Co., Ltd is a domestic leading enterprise in the field of color detection, mainly engaged in the research and development, production and sales of color detection equipment, products including color difference meter, spectrophotometer, transmittance fog meter, gloss meter, paint color matching software, hyperspectral camera, in domestic and foreign plastics, paint, printing, auto parts, metal, home appliances and other industries, universities, scientific research institutions are widely used. Color spectrum Technology is located in Xiasha Higher Education Park, Hangzhou. The principal person in charge of the company has a senior title and a doctorate degree or above. The company has introduced research and development teams from well-known universities such as Zhejiang University and China Jiliang University. The development of color spectrum has attracted the attention of domestic experts and scholars, and has cooperated with authoritative research institutions such as the Key Laboratory of Modern Metrology Testing and Instrumentation of Zhejiang Province and the National Engineering Center of Metrology Testing Technology of the Ministry of Education. Under the care of experts, the technical level and research and development ability of color spectrum have been developed by leaps and bounds, and have achieved remarkable results. Color spectrum technology has a number of invention patents, including the United States invention patent 1, a number of utility model patents, appearance patents, software Copyrights. In addition, there are a number of invention patents in the announcement stage. Many papers published by color spectrum technology were published in domestic first-class scientific research journals, and were included by SCI and EI.



Qualification and honor



Product certificate



CE Certificate



Full Test Report



RoHS Certificate



FCC Certificate



UKCA Certificate



Verification Certificate of National Institute of Metrology

Participation in standard development



Specification for calibration of Pt-Co colorimeters



Leather color fastness test - Change in color under accelerated aging conditions (QB/T 5250-2018)



Leather Color Fastness Test - Color Migration onto PVC Film (QB/T 5252-2018)

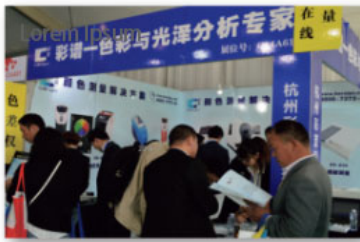


Textiles - Quantitative analysis of polyester blended fabrics - Hyperspectral method



Color fastness test - Rating of staining on adjacent fabrics - Hyperspectral method

Industry conference



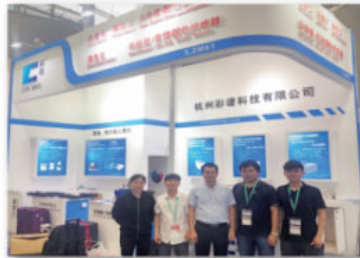
Chinaplas 2016



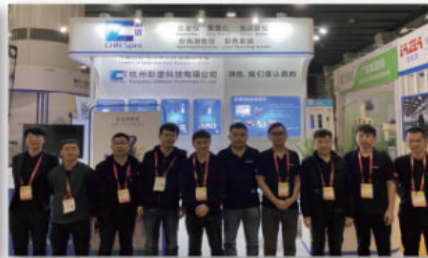
2016 CHNSpec Technology Seminar - Dongguan Station



2016 CHNSpec Technology Seminar - Guangzhou Station



Chinaplas 2019



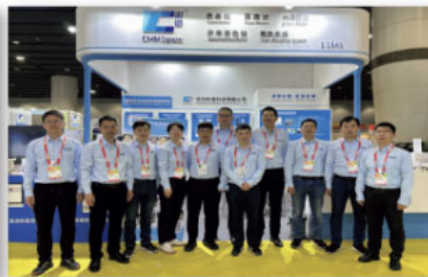
The CHINACOAT Series Of Exhibition 2020



United Coatings Conference 2022



2023 Chongqing Color Masterbatch Annual Conference



The CHINACOAT Series Of Exhibition 2023



2023 Shanghai Sewing Industry Annual Conference