CHNSpec

DC-25D

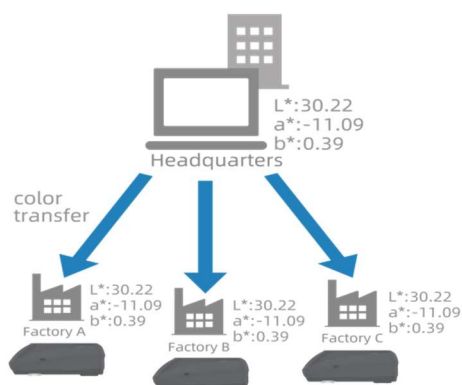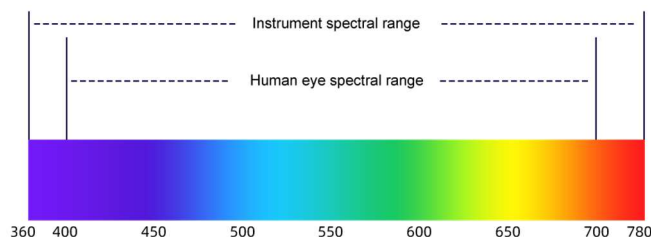# High precision Portable spectrophotometer

Repeatability Accuracy dE*ab≤0.01

Inter-Instrument Agreement dE*ab≤0.2

一、 Product features

■ **Industry-leading wavelength range: 360-780nm**

●The wavelength range of conventional colorimeter is 400-700nm. In order to achieve moreAdd precise color measurement and extend the wavelength to 360-780nm

Instrument spectral range

Human eye spectral range

360 400   450   500   550   600   650   700 780

■ **Outstanding stage-to-stage variation and repeatability**

●The inter-stage difference is 0.2, which helps improve the color quality between manufacturers and suppliers

●The repeatability is 50% higher than the previous generation, reaching 0.01

■ **Dual light source system provides longer service life than expected**

●Use xenon lamp and LED to provide sufficient ultraviolet and visible light at the same time energy and ensure a measurement life of tens of millions of times
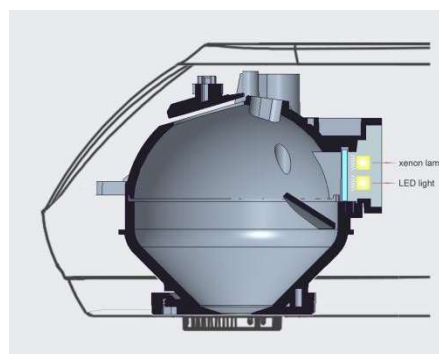
■ **Support NetProf network correction function**

●Using NetProf software, the measurement performance of the instrument can be regularly checkedto ensure accurate and reliable color measurement Calibration can reduce the risk of instrument failure caused by component aging, wear, etc.System deviation caused by the system deviation, accurate measurement data brings users more freedom Xin usage experience

■ **Provides 4 measuring apertures to easily measure samples of different shapes**

●Six hole specifications: Φ11mm, Φ10mm, Φ6mm, Φ3mm, very small objects or curved surface samples can also be easily measured
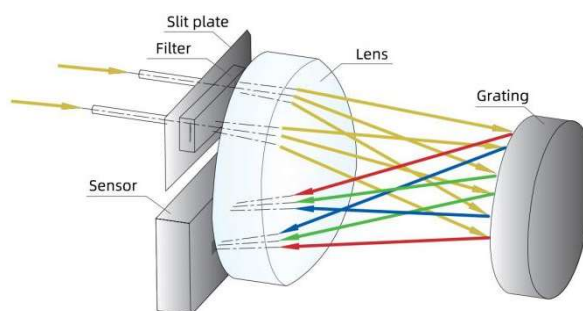
■ BCRA green plate wavelength calibration

●Automatic wavelength accuracy calibration using reference grade BCRA green plate correct to ensure that the instrument is consistent

■ Indication accuracy increased by 60%

●Using a new generation of array silicon light sensor, the amount of light input is increased 65%, spectral resolution increased by 39%,

■ Intelligent automatic calibration

●Frequent manual calibration is not required during use, as long as the calibration On the accurate base, the instrument will automatically adjust according to its own status and environmental factors.Calibrate the overall instrument function and accuracy to ensure that the instrument The device is always in a stable state and ready for use at any

二、 Product parameters

Product model	Spectrophotometer DC-25D
Measuring structure※	D/8, SCI+SCE
Light source life	10 million times
Wavelength range	360-780nm
SCI+SCE Measure simultaneously	support
NetProf network calibration	support

Calibration method	BCRA certified black and white board energy calibration, green board wavelength accuracy calibration
Measurement repeatability※※	dE*ab≤0.01
Inter-Instrument agreement※※※	dE*ab≤0.2
Display accuracy	0.01
Lighting source	Full-band balanced LED light source + xenon lamp
UV light source	Yes
Caliber	Φ11mm,Φ10mm,Φ6mm,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 (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), stain fastness, discoloration 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
Observation method	Camera
Calibration	Intelligent automatic calibration
Software support	Android, iOS, Windows, WeChat applet
Accuracy guaranteed	Guarantee first-level measurement qualification
Standard observer	2°, 10°
Integrating sphere diameter	40mm
Standards	CIE No.15, GB/T 3978, GB 2893, GB/T 18833 , ISO7724-1, ASTM E1164,DIN5033 Teil7
Spectral method	grating
Sensor	Dual column high-precision CMOS array sensor
Wavelength interval	10nm
Reflectivity measurement range	0-200%
Reflectance resolution	0.01%
Measuring time	about 1 second
Interface	USB, Bluetooth
Screen	Full color screen, 3.5 inches

Battery capacity	Can continuously measure 8000 times on a single charge, 7.2V/3000mAh
Language	Simplified Chinese, English
Storage	Instrument: 10,000 items; APP: Mass storage
Size	233mm*77mm*93mm
Weight	About 600g

※ Diffuse lighting/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. Standard deviation of the MAV caliber measurement results.

※※※ The average of the MAV caliber measurement values of 12 color plates in the BCRA series.