

Colorimeter



DS-200/210/220

Product Features

- Double optical path design improves repeatability accuracy $dE^*ab \leq 0.03$
- 30+measuring indicators such as color difference, whiteness and yellowness.
- Provide nearly 40 evaluation light sources.
- Including UV, can be used for fluorescent color measurement.
- It is equipped with three measuring calibers without tools and can be replaced at any time.
- Built-in high-definition camera to clearly observe the tested area.
- Automatic calibration base ensures long-term stability of the instrument.
- Support WeChat applet, Android, Apple, and Hongmeng mobile app.
- Use the powerful PC-side color management system ColorExpert.

Technical Data

Name	DS-200		DS-210		DS-220	
Geometry [※]	D/8, SCI					
Repeatability ^{※※}	ΔE*ab≤ 0.03					
Display Resolution	0.01					
Measuring aperture	One: Φ6mm	Two: Φ11mm, Φ6mm		Three: Φ11mm, Φ6mm, Φ3mm		
Measurement index	Reflectance,CIE-Lab,CIE-LCh,HunterLab,CIE-Luv,XYZ,Yxy,RGB, Color difference(ΔE*ab,ΔE*cmc,ΔE*94,ΔE*00),WI(ASTM E313-00, ASTM E313-73,CIE,ISO2470/R457,AATCC,Hunter,TaubeBergerStensby),YI(ASTM D1925, ASTM E313-00,ASTM E313-73),Blackness (My,dM) ,Color Fastness, Tint, (ASTM E313-00),Color Density CMYK(A,T,E,M),Milim, Munsell, Opacity, Color strength					
Illuminants	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					
Light Source	Full-band balancedLED light source			Full-band balancedLED light source+UV		
Measurement and observation mode	Visual	Camera				
Calibration	Manual calibration	Intelligent automatic calibration				
Software support	Andriod,iOS,Windows,WeChat applet					
Accuracy	Qualified measurement	Metrology Level I				
Observer Angles	2°, 10°					
Sphere Size	40mm					
Standards	CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7					
Spectroscopic method	Nanometer integrated spectral device					
Sensor	Silicon photodiode array double 16 groups					
Wavelength Interval	10nm					
Wavelength Range	400-700nm					
Reflectance Range	0-200%					
Reflectivity resolution	0.01%					
Measurement method	Single measurement, average measurement (2~99 times)					
Measurement time	About 1 second					
Interface	USB, Bluetooth					
Screen	Full-color display, 2.4 inches					
Battery capacity	Rechargeable, 8000 times continuous tests, 3.7V/3000mAh					
Light Source Lifetime	10 years, 1 million tests					
Language	Chinese and English					
Storage	Instrument: 10000 pieces of data; APP: mass storage					

※45 degree circular illumination/0 degree angle reception
※※ When a white tile is measured 30 times at 5-seconds interval with MAV