



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 ^{**} | $\Delta E^*ab \leq 0.03$ | | |
| 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 ($\Delta E^*ab, \Delta E^*cmc, \Delta E^*94, \Delta E^*00$), 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), Milm, 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 balanced LED light source | | Full-band balanced LED light source+UV |
| Measurement and observation mode | Visual | Camera | |
| Calibration | Manual calibration | Intelligent automatic calibration | |
| Software support | Android, 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