CR8+
Professional Plus

3nh

3nh Global

Smart color measurement

Let's do it

Color measuring instrument that can be connected to mobile phone APP

Grating spectroscopy

Dual-line sensor

Wireless transmission

Software support

1. Use full-band balanced LED light source

The full-band balanced LED light source ensures sufficient spectral distribution in the visible light range, avoids the lack of spectrum of white LEDs in a specific band, and ensures the measurement speed of the instrument and the accuracy of the measurement results.

2. Silicon photodiode array (dual 32 array) sensor

Larger area dual 32 array sensor, strong light will not saturate, low light sensitivity higher and wider spectral response range, ensuring the measurement speed, accuracy, stability and consistency of the instrument, mastering the core technology and complying with international standards The same platform is fully compatible.

3. Grating spectroscopy technology

Using grating spectroscopy technology, it has higher resolution and makes color measurement more accurate.

4. Carry a massive color card database

The instrument data stores 1,000 standard samples and 20,000 samples, and the APP synchronously stores a large amount of data, which can quickly check color data, analyze and compare.
Use the App to build your private color database in the cloud, without carrying a heavy color card, you can use CR8+ color difference treasure to find the closest color among multiple color cards anytime and anywhere.

5. A variety of color measurement space, a variety of observation light sources

Provide CIE LAB, XYZ, Yxy, LCh, s-RGB, βxy, Munsell (C/2) color space, and D65, A, C, D50, F2 (CWF), F7 (DLF), F10 (TPL5), F11 (TL84), F12 (TL83/U30) a variety of observation light sources, can meet the special measurement requirements under different measurement conditions.

6. Adopt the internationally used D/8 SCI/SCE synthesis technology

The D/8 (SCI/SCE) measurement structure is adopted to reflect the color itself more objectively and reduce the influence of the surface texture of the object on the test results. It conforms to the standard CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724 -1,ASTM E1164,DIN5033 Teil7

The ColorReader can satisfy the analysis and control of the quality in the production process of plastics (PET, PE, PP, PTA, ABS, EVA particles and powders), color steel plates, coatings, textiles, denim, medicine, food and other industries, and help companies control Product color difference, improve product competitiveness, reduce business losses, and control production costs.
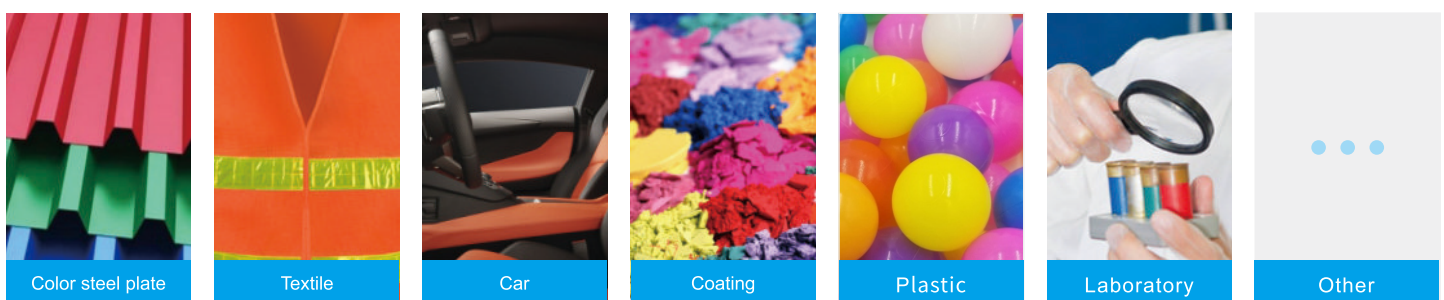
| Color steel plate | Textile | Car | Coating | Plastic | Laboratory | Other |

Model : CR8+ (Professional Plus)

Geometry: (Diffuse illumination, 8° direction reception), SCI/SCE measurement

Standards compliant : CIE No.15, GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7

Characteristic: Three measurement caliber, wide adaptability; used for accurate color measurement and quality control in plastic electronics, paint ink, textile and garment printing and dyeing, printing, ceramics and other industries

Integrating sphere size : Φ40mm

Illuminant: Full spectrum LED light source

Spectrophotometric Mode : Flat grating

Sensor : Silicon photodiode array (dual row 32 groups)

Wavelength Range : 400 ~ 700nm

Wavelength interval : 10nm

Semiband Width : 10nm

Measuring range : L: 0~120 Reflectance: 0~200%

Measuring Aperture : Φ12mm、Φ8mm、Φ4mm

Focusing method : Optical focus + electronic focus

Specular Component : SCI/SCE

Color Space : CIE LAB,XYZ,Yxy,LCh,s-RGB,βxy,Munsell(C/2)

Color Difference Formula: $\Delta E^*ab, \Delta E^*94, \Delta E^*cmc(2:1), \Delta E^*cmc(1:1), \Delta E^*00$, DIN$\Delta E99$

Other Color Index： WI(ASTM E313, CIE/ISO,AATCC,Hunter), YI(ASTM D1925, ASTM 313),metamerism index Mt,Color fastness, Change color fastness, strength, opacity, color card retrieval

Observer Angle: 2°/10°

Light source: D65,A,C,D50,F2(CWF),F7(DLF),F10(TPL5),F11(TL84),F12(TL83/U30)

Display Data: Spectrogram/data, sample chromaticity value, color difference value/graph, pass/fail result, color simulation, color deviation

Display accuracy: 0.01

Measurement Time： About 1.5s (approximately 3.2s when testing SCI/SCE at the same time)

Repeatability: Repeatability: Chromaticity value: MAV/SCI, ΔE^*ab within 0.04 (after warm-up correction, the average value of 30 measurements on the whiteboard at an interval of 5s)

Inter-instrument Error: MAV/SCI, within ΔE^*ab 0.35 (Measured average value of 12 swatches of BCRA series Ⅱ)

Measurement mode: Single measurement, average measurement (2~99 times)

Locating Method： Display camera viewfinder positioning, stabilizer film positioning

Size: Length x width x height=81x71×214mm

Weight: About 460g

Battery: Lithium battery, 6000 times in 8 hours

Illuminant Life Span: 5 years, more than 3 million times measurements

Display: 3.5-inch TFT color LCD, Capacitive Touch Screen

Data Port： USB, Bluetooth

Data Storage: 1000 standard samples, 20000 samples (a piece of data can include SCI/SCE at the same time), APP mass storage

Language: Simplified Chinese, English, Traditional Chinese

Working Environment: 0~40℃,0~85%RH (no condensing), Altitude < 2000m

Storage Environment： -20~50℃, 0~85%RH (no condensation)

Standard Accessories: Power adapter, data cable, manual, SQCX quality management software (download from official website), black and white calibration box, protective cover, wrist strap, three caliber: Ø12mm+Ø8mm+Ø4mm platform caliber, MOBCCS APP (download from official website)

Optional Accessories： USB micro printer, powder test box, Bluetooth micro printer