



3nh Global

# COLOR MEASUREMENT ANYTIME, ANYWHERE

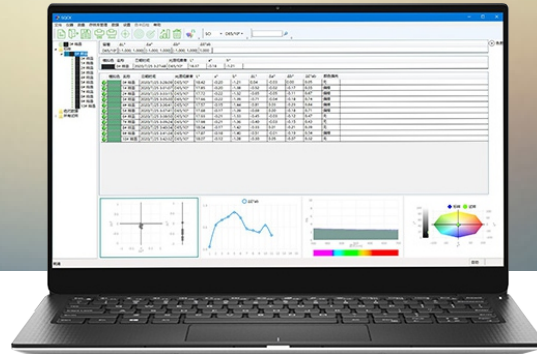


## SUPPORT

Mobile APP

Computer software

Extension



## CR7+ ColorReader

CR7+ (Basic Enhanced Edition) is a portable color measurement instrument that we independently researched and developed with core technology. It uses built-in silicon photodiode array (dual-row 24 groups) sensors and imported whiteboard. The repeatability  $\Delta E^*ab$  is easily controlled within 0.05. CR7+'s powerful performance configuration and excellent instrument-to-station difference make color measurement more professional while ensuring the consistency of measurement data from multiple devices.



3.5in Color touch screen



Dual-array silicon photodiode sensor



400~700nm Full spectrum



Mobile APP Extension



SHENZHEN THREEH TECHNOLOGY CO., LTD.

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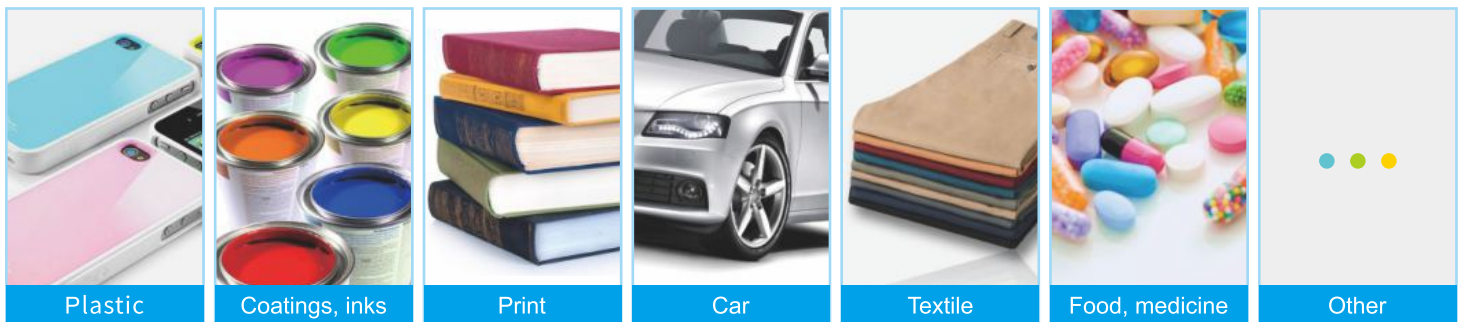
## PRODUCT FEATURES

1. Novel and fashionable appearance design based on ergonomics
2. Use full-band balanced LED light source
3. Silicon photodiode array (double 24 array) sensor
4. Using grating spectroscopy technology, it has higher resolution and more accurate measurement.
5. Imported whiteboard, high quality, unbiased calibration
6. Fast charging technology, shorter charging time
7. Equipped with dual measuring apertures to meet the measurement needs of different samples
8. Excellent inter-station difference and repeatability to ensure the consistency of measurement data of multiple devices
9. More than ten color measurement spaces, multiple observation light sources
10. Adopt the internationally accepted D/8 SCI/SCE synthesis technology
11. Support a variety of measurement results style display, such as data, graphics, color simulation, etc.
12. A variety of usage methods, which can be measured by a single machine, or connected to computer software and mobile APP for measurement



## APPLICATION INDUSTRY

ColorReader are widely used in plastics, electronics, paint and ink, textile and garment printing and dyeing, printing paper products, automobiles, medical treatment, cosmetics and food industries.



**Model:** CR7+ (Basic Enhanced Edition)

**Geometry:** D/8 (diffuse illumination, 8° direction reception)  
SCI/SCE measurement

**Standards compliant:** CIE No.15, GB/T 3978, GB 2893, GB/T 18833, JS07724-1, ASTM E1164, DIN5033 Teil7

**Integrating sphere size:** Φ40mm

**Illuminant:** Full spectrum LED light source

**Spectrophotometric Mode:** Flat grating

**Sensor:** Silicon photodiode array (dual row 24 groups)

**Wavelength Range:** 400 ~ 700nm

**Wavelength interval:** 10nm

**Semiband Width:** 10nm

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

**Measuring Aperture:** Φ12mm, Φ8mm

**Focusing method:** Electronic focus

**Specular Component:** SCI/SCE

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

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

**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:** Chromaticity value: MAV/SCI,  $\Delta E^*ab$  within 0.05 (after warm-up correction, the average value of 30 measurements on the whiteboard at an interval of 5s)

**Inter-instrument Error:** MAV/SCI, within  $\Delta E^*ab$  0.4

(Measured average value of 12 swatches of BCRA series II)

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

**Locating Method:** Stabilizer positioning

**Size:** Length x width x height=81x71x214mm

**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

**Data Storage:** Standard 1000 Pcs, Sample 20000 Pcs

**Language:** Simplified Chinese, English, Traditional Chinese

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

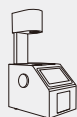
SHENZHEN THREE NH TECHNOLOGY CO., LTD.



Spectrophotometers



Colorimeters



Haze Meters



Gloss Meters



Test Charts



Light Booths

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