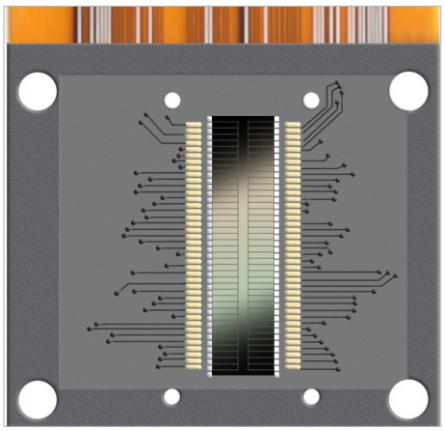
3nh Global

Powerful, Accurate and Convenient

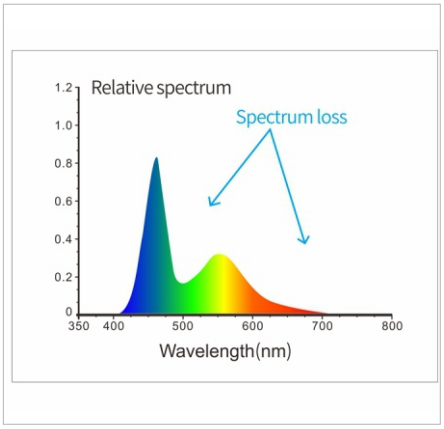
PRODUCT FEATURES



1.Silicon photodiode array (double 32 array) sensor

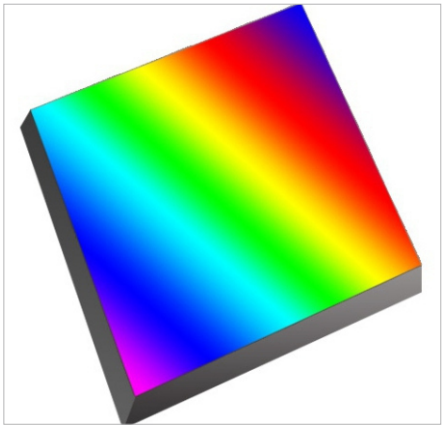
The dual-32 array sensor with larger area has strong light but not saturate, higher sensitivity of low light and wider spectral response range, which ensures the measurement speed, accuracy, stability and consistency of the instrument.

Mastering the core technology and fully compatible with international standards.



2.Adopt 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.

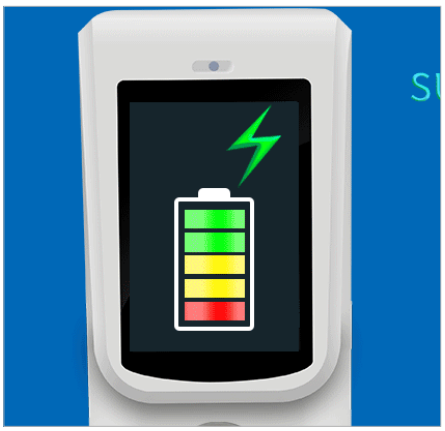


3.Grating Spectrophotometric technology

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

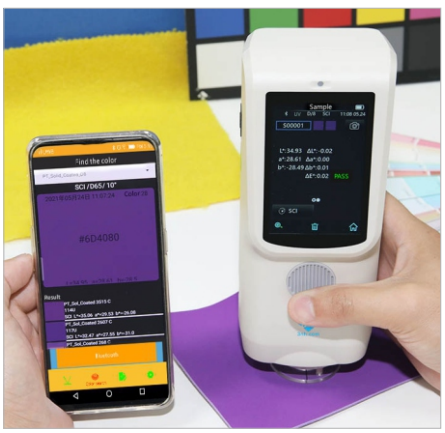
4.Place the base safely to ensure that the whiteboard is not dirty.

5.Professional whiteboard, a promise that will never change color forever.



6.Fast charging

Special fast charging method, low-voltage reminder to charge or use of off-hours to charge, to ensure the capacity and life of the battery (note: frequent repeated charging of the battery is more harmful).



7.Novel and fashionable appearance design based on ergonomics

The position of the hand grip and the measurement button are carefully designed to meet different gripping habits. The smooth and fine surface is derived from the art of high-precision appearance processing.

8.Equipped with 4/8mm dual measuring apertures to meet the measurement needs of different samples

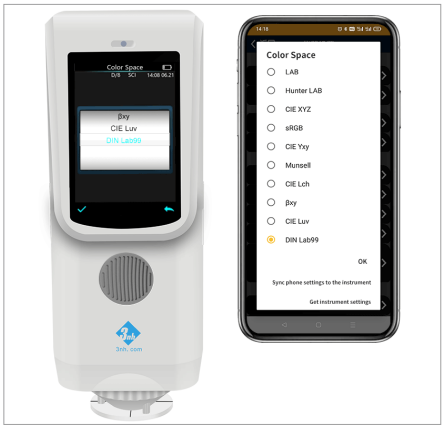
Spectrocolorreader CR9 (Advanced) is equipped with Ø8mm and Ø4mm platform measuring apertures, which can meet the measurement needs of most special samples.

9.Camera locating, can clearly observe the measured area

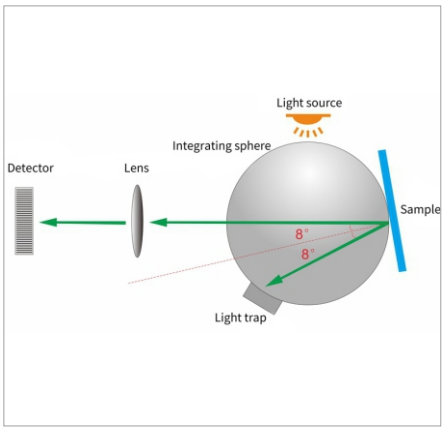
Spectrocolorreader CR9 (Advanced) has a built-in camera for framing and positioning. Through the real-time framing of the camera, it can accurately determine whether the measured part of the object is the center of the target, which improves the measurement efficiency and accuracy.

10.Massive color card database
The instrument stores 1000 standard and 30,000 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. You don't need to carry a heavy color card. You can use CR9 colorreader to find the closest color in multiple color cards anytime and anywhere.

11.Excellent inter- instrument error and repeatability to ensure the consistency of measurement data of multiple equipment.

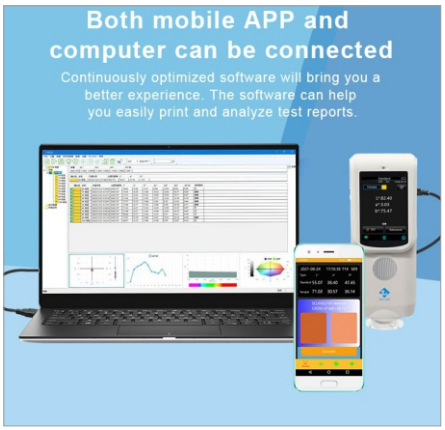


12.Multiple color spaces, multiple observation light sources
Provide CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,βxy, DIN Lab9,DIN Lab99 Munsell(C/2) color space, and D65,A,C,D50,D55,D75,F1,F2(CWF), F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84), F12(TL83/U30) a variety of observation light sources, can meet the special measurement requirements under different measurement conditions.



13.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 standardCIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7.

14.Diversified data display
SpectrocolorreaderCR9 (Advanced)can intuitively display reflectance graph/value , sample chromaticity value, color difference value/graph, pass/fail result, color simulation, color offset and other data .It is convenient to view and also greatly improves the user's work efficiency.



15.Use whatever you want
It can be used alone, 3.5inch true color screen can check data at any time, cooperate with SQCX quality management software to facilitate quality monitoring and color data management, with APP to synchronize data at any time, and more application scenarios are waiting for you to discover.

APPLICATION INDUSTRY

Dual measurement aperture, wider adaptability; used for accurate color measurement and quality control in plastic and electronic, paint and ink, textile and garment printing and dyeing, printing, ceramics and other industries

paint

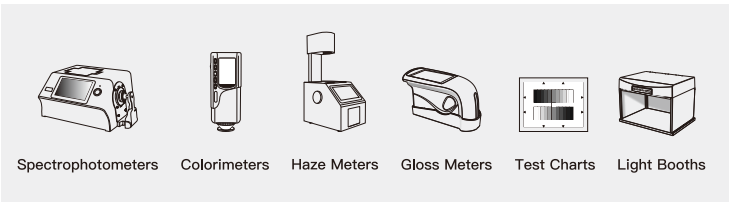
plastic

ceramics

PRODUCT PARAMETERS

Model :	CR9 (Advanced)
Optical geometry :	D/8 (diffuse illumination, 8° direction reception) SCI/SCE measurement Comply with standard CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1, ASTM E1164,DIN5033 Teil7
Characteristics :	Customized single measurement aperture, wider adaptability; used for accurate color measurement and quality control in plastic and electronic, paint and ink, textile and garment printing and dyeing, printing, ceramics and other industries
Integrating sphere size :	Φ40mm
Light source :	Combined full-spectrum LED light source
Spectroscopic method :	Planar grating
Sensor :	Silicon photodiode arrays (dual row 32 groups)
Wavelength range :	400~700nm
Wavelength interval :	10nm
Semiband Bandwidth :	10nm
Measurement range :	L:0~120 Reflectivity: 0~200%
Measurement aperture :	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 :	ΔE*ab,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, DINΔE99
Other colorimetric indexs :	WI(ASTM E313, CIE/ISO,AATCC,Hunter). YI(ASTM D1925, ASTM 313), Metamerism index Mt staining fastness,color fastness, strength, opacity,color card search
Observer angle :	2°/10°
Illuminant :	D65,A,C,D50,F2(CWF),F7(DLF),F10(TPL5),F11(TL84),F12(TL83/U30)
Displayed data :	Spectrogram/data, chromaticity value, color difference value/graph, pass/fail result, color simulation, color offset
Display Accuracy :	0.01
Measurement time :	Approx. 1.5s (Measure SCI & SCE about 3.2s)
Repeatability :	Chromaticity value: MAV/SCI, ΔE*ab within 0.04 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Inter-instrument error :	MAV/SCI, within ΔE*ab 0.35(Average for 12 BCRA Series II color tiles)
Measurement method :	Single measurement, average measurement (2~99 times)
Locating method :	Camera locating,stabilizer locating
Size :	LxWxH=81X71X214mm
Weight :	About 460g
Battery power:	Lithium battery, 6000 times in 8 hours
Illuminant life span:	5 years, more than 3 million times measurements
Display :	TFT true color 3.5inch, capacitive touch screen
Data port :	USB, Bluetooth®
Data storage :	1000 standard samples, 20,000 samples (a piece of data can include SCI/SCE at the same time), APP mass storage
Language :	Simplified Chinese, English, Traditional Chinese
Operating temperature range :	0~40℃, 0~85%RH (no condensation), altitude< 2000m
Storage temperature range :	-20~50℃, 0~85%RH (no condensation)
Standard Accessories :	Power adapter, data cable, manual, SQCX quality management software (official website download), black and white calibration box, protective cover, wrist strap, three aperture: Ø8mm + Ø4mm platform aperture, MOBCCS APP (official website download)
Optional Accessories :	USB micro printer, powder test box, Bluetooth micro printer
Notes :	Technical parameters are for reference only, subject to the actual sales of products

GUANGDONG THREENH TECHNOLOGY CO., LTD.



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The specifications and design may be changed without notice.