3nh.com

Dedicated to car surface inspection

MULTI-ANGLE SPECTROPHOTOMETER

Powerful and easy to carry

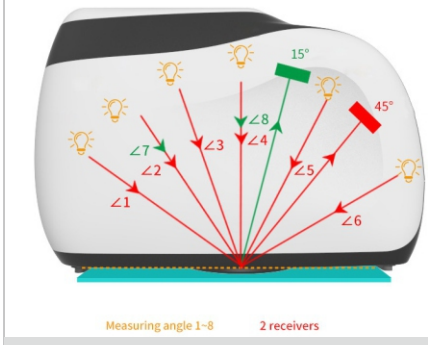
MS3008 Product Introduction

The multi-angle spectrophotometer MS3008 is used to evaluate the effect of the surface finish of the paint. The surface appearance is affected by different observation angles and observation conditions. It can not only measure the multi-angle chromatic aberration, but also measure and characterize the special finish through 8 measuring angles. Characterization, even on curved surfaces, has high measurement accuracy and stability.

ISO 9001 Certified

CE SCM TÜV RoHS FC

Product features



1、Multi-angle measurement

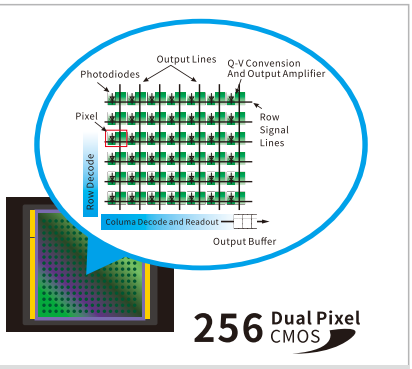
Adopt 6 illumination sources, 2 receivers to measure 8 measurement angles at the same time.

2、More intuitive display

Touch screen can display all Angle measurement results, more intuitive view of the comprehensive data.

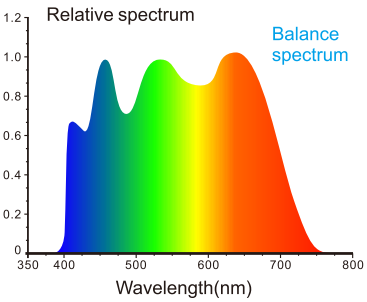
3.Effect measurement discrimination function

Quickly distinguish the sample Sparkle Grade(SG), Diffuse coarseness(DC) and Color Variation(CV), simple and effective quality inspection.



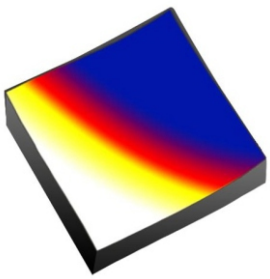
4、256 Image Element Double Array CMOS Image Sensor

The higher optical resolution ensures the measuring speed, accuracy, stability and consistency of the instrument.



5、Adopt Full spectrum LED light source with blue enhancement

This avoids the lack of spectrum of LEDs in specific bands.

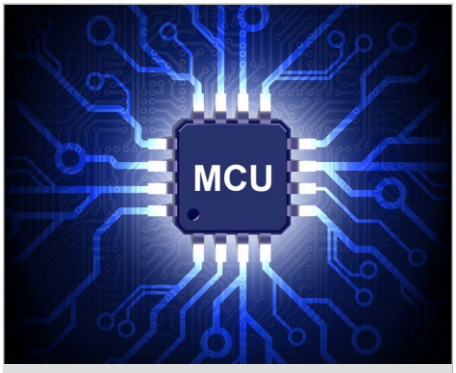


6、Concave grating spectrophotometric technology

Using concave grating spectrophotometric technology, with higher resolution, makes color measurement more accurate.

7、Professional-grade white board

Professional-grade white board, high hardness in the surface, stable optical performance.



8、Higher quality

Industrial grade real-time processing MCU, supports WIFI, Bluetooth 5.0 transferring more stable and reliable.

9、Ergonomics Novel and fashionable appearance design

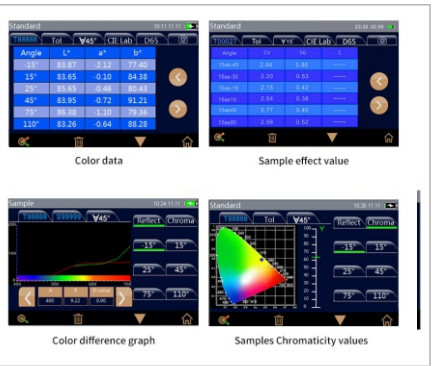
The appearance of the instrument is easy to operate and can meet different holding habits.

10、Color camera preview, can clearly observe the measured area

Camera framing and positioning, can accurately determine the measured part of the object

11、Multiple color measurement space, multiple observation light sources

Provide 6 color spaces, multiple observation light sources



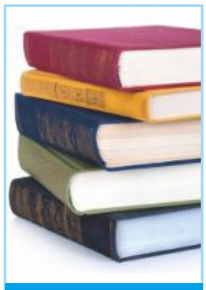
12、Easily analyze data

Multiple functions, the screen can display various data intuitively

APPLICATION INDUSTRY


Plastic


Ink & Coating


Print


Car


Cloth


Food & Medicine

Other

MS3008 Product parameter

Measurement Geometry	8 measurement angles (6 illumination sources, 2 receivers)
Measuring angle	45°Receiver：45as-15°,45as15°,45as25°,45as45°,45as75°,45as110° 15°Receiver：15as-45°,15as-15°
Conform to the standards	ASTM D2244,E308,E1164,E2194, E2539,DIN 5033,5036,6174,6175-1,6175-2;ISO 7724, 11664-4, SAE J1545
Application	Provide accurate and consistent color measurement for metallic, pearlescent and other complex special effect color products
Lighting source	Full spectrum LED light source with blue enhancement
Lamp Life	5 years, 3 million times measurements
Spectrophotometric Mode	Concave grating
Sensor	256 Image Element Double Array CMOS Image Sensor
Wavelength Range	400nm-700nm
Wavelength Interval	10nm
Measurement Range	0~600%
Semiband Width	10nm
Measuring Aperture	Illumination size Φ23mm / Measuring spot 9X12mm (Customized: Illumination size Φ10mm / Measuring spot 6X8mm)
Color Space	CIE LAB,XYZ,Yxy,LCh,βxy,DIN Lab99
Color Difference Formula	ΔE*ab,ΔE*94,ΔE*cmc(2:1),ΔE*cmc(1:1),ΔE*00, DINΔE99,ΔE DIN6175，,color difference formulas of multiple car brands
Other Colorimetric Index	Flop Index, Int-Em
Observer Angle	2°/10°
Illuminant	D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84),F12(TL83/U30)
Displayed	Spectral graph/value, sample chromaticity value, color difference value/graph, pass/fail result, color simulation, sample effect value, effect difference value
Measuring Time	Single angle measurement time is about 1s, all angle measurement takes about 12s, (not including the effective color measuring time)
Repeatability	Reflectance: standard deviation within 0.08%, chromaticity value: 0.03 ΔE*ab (after the instrument is warmed up and corrected, the average value of 30 measurements on the whiteboard at an interval of 5s)
Reproducibility	ΔE*<0.10,avg on the gray tile of BCRA tile set ΔE*<0.25,avg on the color BCRA tile set
Inter-instrument Error	0.18ΔE*00 (avg on reference Series II BCRA tile set)
Effect Parameters	Sparkle Grade(SG),Diffuse coarseness(DC) and Color Variation(CV)
Effect Measurement	6 angles Sparkle Grade(SG),Color Variation(CV):15as-45°,15as-30°,15as-15°,15as15°,15as45°,15as80° 15d Diffuse coarseness(DC)
Effect Repeatability	Sparkle Grade(SG) Short-term repeatability: 0.12% (10 times standard deviations) (When a color plate is measured 10 times at 10 second intervals after white calibration) Diffuse coarseness(DC) Short-term repeatability:e0.09% (10 times standard deviations) (When a color plate is measured 10 times at 10 second intervals after white calibration)
Effect Reproducibility	Sparkle Grade(SG) Reproducibility: 1.9% (10 times standard deviations) (avg on reference Series II BCRA tile set) Diffuse coarseness(DC) Reproducibility: 1.4% (10 times standard deviations)(avg on reference Series II BCRA tile set)
Trigger mode	Pressure sensing trigger, key trigger, software trigger
Measuring Mode	Single measurement, average measurement (1-99), continuous measurement (1-99)
Locating Method	Color camera preview
Dimension	Length x width x height=195X83X128mm
Weight	about 1Kg
Power	lithium-ion battery, 3.7V,3200mAh, Continuous test 6000 times within 8 hours of full charge
Display screen	3.5-inch TFT color LCD, Capacitive Touch Screen
Interface	USB, Bluetooth
Data Storage	Standard 1000 Pcs, Sample 4000 Pcs
Language	Simplified Chinese, English, Traditional Chinese
Calibration	Built-in white board parameters, external white board, black light trap, color board
Calibration interval	4 hours, 8 hours, 24 hours, Startup calibration
Standard accessories	Power Adapter, USB Cable, User Guide,PC Software(download from the official website), Calibration Board, black light trap, Protective cap, wristband
Optional accessories	Micro Printer

GUANGDONG THREENH TECHNOLOGY CO., LTD.


Spectrophotometers


Colorimeters


Haze Meters


Gloss Meters


Test Charts


Light Booths

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