

# NH310 High Quality Colorimeter

**3nh**  
Focus on Color

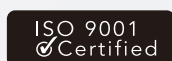
- Patent Technology: camera locating
- Patent Technology: automatic white calibration at startup
- Patent Technology: extended aperture to measure concave surface
- Double Measuring Apertures: 8mm and 4mm apertures which can be switched.
- Configure rechargeable Li-ion battery



With 8mm and 4mm two measurement apertures, NH310 colorimeter is the most popular portable colorimeter used in fabrics, paper, plastic parts, building materials. Double locating (Camera locating and Illumination locating) helps measure kinds of different shape samples, such as small size, or curve.

NH Series High Quality Colorimeter

**Color So Rich in Beauty**



Shenzhen ThreeNH Technology Co., Ltd.

# NH310 High Quality Colorimeter

## 1. Leading Humanity Design and Convenient Operation

- Auto White and Black Calibration at Startup
- Structure Design in line with Ergonomics
- Easy-to-use Operator Interface

## 2. Stable Measurement Performance

- The average fluctuation of  $\Delta E$  is less than 0.06, actually more in 0.03-0.05.
- Portable structure design is more conducive to keeping the instrument stable when using.

## 3. Flexible and Accurate Locating

- Camera locating can solve the problem of locating a small area. The minimum width of locating is 4mm.
- Illumination locating is a fast, simple and convenient locating which is created by 3nh.

## 4. More Measurement Modes

- Three measuring apertures for more circumstances.
- Five color spaces for more color scheme selections.
- Three light sources suitable for more occasions.

## 5. PC Software- Realize More Function Expansion

- 3nh has the intellectual property of PC software. The corresponding software serial number and password protection are configured in 3nh colorimeter.
- Be able to perform color difference analysis, color difference cumulative analysis, chromaticity index, color sample database management, simulating object color, etc.

## 6. Advanced Power Management Design

- 3nh is the first enterprise using high capacity Li-ion battery in colorimeter.
- 3nh Li-ion battery can be repeatedly charged which will save cost. Meanwhile, it can measure more than 3000 times on one charge to ensure the stability of long time measurement.

### $\Delta E$ Total Color Aberration

$\Delta L$  is large stands for the color is partial white.  
 $\Delta L$  is small stands for the color is partial black.  
 $\Delta a$  is large stands for the color is partial red.  
 $\Delta a$  is small stands for the color is partial green.  
 $\Delta b$  is large stands for the color is partial yellow.  
 $\Delta b$  is small stands for the color is partial blue.



Universal  
Test  
Components



Powder  
Test  
Box

## Applicable Industries



Plastics



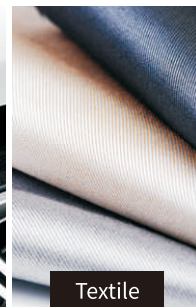
Paints



Printing



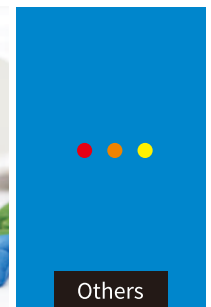
Automobile



Textile



Medicine



Others

## Technical Specifications

Illuminating Viewing Geometry :8/d

Measuring Aperture : $\Phi 8\text{mm}/\Phi 4\text{mm}$

Detector : Silicon photoelectric diode

Color Space : Color Space : CIEL \*a\*b\*C\*h\* CIEL\*a\*b\* CIEXYZ CIERGB CIEL\*u\*v\* CIEL\*C\*h Yellowness & Whiteness Color Fastness

Color Difference Formula: $\Delta E^*ab$   $\Delta L^*a^*b^*$   $\Delta E^*C^*h^*$   $\Delta E_{CIIE94}$  A Hunter

Light Source : D65 D50 A

Light Source Device : LED blue light excitation

Errors Between Each Equipment: $\leq 0.40\Delta E^*ab$

Storage : 100pcs standards 20000pcs samples

Repeatability : Standard deviation within  $\Delta E^*ab$  0.06 Average of 30 measurements of standard white plate

Weight : 500g

Dimension : 205x 70x 100 mm

Power source : Rechargeable lithium-ion battery 3.7V@3200mAh

Lamp Life : 5 years, more than 1.6 million measurements

### Shenzhen ThreeNH Technology Co., Ltd.

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The technical specifications and designs are subject to change without notice.

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