

## YOUR CHIEF COLOR EXPERTS

[www.3nh.com](http://www.3nh.com)

### PRECISION COLORIMETER NR110

Since 1998, from import to domestic, 3nh NR110 precision colorimeter is an iconic milestone in color test industry. NR110 precision colorimeter features with 8/d structure that is very precise. This cheap colorimeter is spoken highly of by many customers, and the small size 4mm measurement aperture makes it popular used in many applications, such as fabrics, paper, plastic parts, building materials.



## PRODUCT FEATURES

1. Built-in white plate parameters. No need to calibrate each time which realize rapid measurement.
2. Double Locating: Illuminating locating and precise cross locating.
3. Switchable Double Measurement End Face: Large stable end face and small concave-convex end face.
4. New Integrating Sphere Optical Path Design: Eliminating the stray light of main optical path and auxiliary optical path. Possessing the highest measurement stability and precision.
5. 4mm Measuring Aperture.
6. Equipped with rechargeable high-capacity Li-ion battery. No need to purchase battery repeatedly.
7. Configure CQCS3 software. Connect PC computer to realize more functions.
8. Having got SCM Metrological Certification, CE Certification, and ISO9001 Quality Management System Certification.



## APPLICATION INDUSTRY

NR110 colorimeter spectrophotometer is widely used in plastic, electronic, paint, ink, textile, garment, printing and dyeing, food, medical, cosmetic industries, scientific research institutes, schools and laboratories. It not only can help to perform color matching and color management studies, but also can control product quality management. NR110 colorimeter is equipped with high-end color management software that can connect to PC to achieve more extension functions.



## SPECIFICATION PARAMETER

**Illuminating/Viewing Geometry:**8/d

**Measuring Aperture:**Φ4mm

**Detector:**Silicon photoelectric diode

**Locating:**Illuminating Locating/Cross Locating

**Measurement End Face:**Large stable end-face and small concave-convex end-face

**Color Space:**CIEL\*a\*b\*C\*h\* CIEL\*a\*b\*CIEXYZ

**Color Difference Formula:** $\Delta E^*ab$   $\Delta L^*a^*b^*$   $\Delta E^*C^*h^*$

**Light Source:**D65

**Light Source Device:**LED blue light excitation

**Errors Between Each Equipment:** $\leq 0.50\Delta E^*ab$

**Storage:**100pcs standards 20000pcs samples

**Repeatability:**Standard deviation within  $\Delta E^*ab$  0.08  
Average of 30 measurements of standard white plate

**Language:**English/Chinese

**Weight:**450g

**Dimension:**205×67×80 mm

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

**Lamp Life:**5 years, more than 1.6 million measurements

**Charging Time:**8 hours--100% electricity

**PC Software:**CQCS3 Software

**Printer (optional):**Miniature thermal printer