

Large Aperture Precision Colorimeter



NR20XE High Cost-effective colorimeter

When normally measuring some products such as fresh meat, the whole body of the product is placed on the measured object, which not only contaminates the instrument, but also pollutes the measured object easily. NR20XE is designed as vertical structure, which ensures that the body is upright when measuring, and only the measuring aperture contacts the measured object. NR20XE is a portable computer colorimeter designed with $45 / 0^\circ$ optical geometry and 20mm large measuring aperture, which has high measuring accuracy and unique performance.



Wet objects
can be measured



Long life LED
light source



Measuring large
aperture



High hardware
configuration



PRODUCT FEATURES

1. 20mm measuring aperture can test objects with surface stripe accurately.
2. Vertical structure can test wet surface object or can be soaked into the liquid for testing.
3. Double Locating: Illuminating locating and cross locating.
4. Adopting new optical path and dynamic integration time can test more stable and accurate.
5. $45^{\circ}/0^{\circ}$ optical geometry structure, considering the effects of surface features.
6. Annular illumination design, suitable for polarizing material.
7. Equipped with rechargeable high-capacity Li-ion battery. No need to purchase battery repeatedly.
8. Configuring CQCS3 software -- connect PC computer to realize more functions.
9. equipped with 2 kinds of accessories; Such as Miniature thermal printer, powder test box, etc.; Meet the needs of more measurement samples.
Powder test box: Easy to use, focusing on powdered target measurement.
Miniature thermal printer: easy to carry, without computer can continuously print out the measurement of various parameters, Easy to save.



Miniature thermal printer



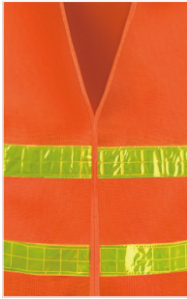
Powder test box

APPLICATION INDUSTRY

NR20XE is widely used in plastics (PET, PE, PP, PTA, ABS, EVA particles and powders), color steel plates, coatings, textiles, fluorescent materials, denim, medicine, food and other industries. to analyze and control the quality of the production process. It can control product color differences, improve product competitiveness, reduce enterprises losses, and control production costs.



Color steel plates



Textiles



Plastics



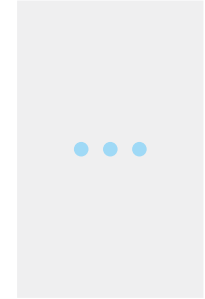
Coating



Food



Laboratory



Others

TECHNICAL SPECIFICATIONS

Model: NR20XE

Illuminating/Viewing Geometry: $45^{\circ}/0^{\circ}$

Standard: CIE No.15, GB/T 3978

Sensor: CMOS dual optical sensor

Measuring Aperture: 20mm

Color Space: CIE LAB, Lch, XYZ

Observer: CIE 10°

Illuminant: D65

Display Data: Chrominance value, color difference value/plot, pass/fail result, color bias

Measuring Time: 1.5s

Dimension: 205*67*80mm

Repeatability: $\Delta E^* ab_{0.08}$ (Average of 30 measurements of standard white plate)

Errors between each instrument: $\Delta E^* ab_{0.4}$ (Average for 12 BCRA series color tiles)

Weight: 400g

Battery: rechargeable lithium-ion battery 3.7V@3200mAh

Lamp Life: 5 years, more than 1.6 million measurements

Screen: TFT 2.4inch(16:9)

Interface: USB

Storage: 100 Standards, 20000 Samples

Operating Temperature: $0-40^{\circ}C(32-104^{\circ}F)$

Storage temperature: $-20-50^{\circ}C(-4-122^{\circ}F)$

Standard accessories: power adapter, data line, instructions, quality control software (download from official website), Whiteboard box, Wristband, Measuring aperture

Optional accessory: miniature thermal printer, powder test box