

DRK103B Brightness Color meter



Product introduction

Brightness Color Meter is widely applied in papermaking, fabric, printing, plastic, ceramic and porcelain enamel, construction material, grain, salt making and other testing department that need to test whiteness yellowness, color and chromatism.



Product features

Menstruate many times and give series of arithmetic measuring result; Digital display and the result can be printed out;

1. Test objects color ,diffuse reflectance factor RX、RY、RZ; stimulus value X10、Y10、Z10, chromaticity coordinate X10、Y10, Lightness L*, Chromaticity a*、b*, Chroma C*ab, hue angle h*ab, dominant wavelength λd ; Chromatism ΔE^*ab ; lightness difference ΔL^* ; Chroma difference ΔC^*ab ; Hue difference H*ab; Hunter system L、a、b;

2. Test yellowness YI

3. Test opacity OP

4 Test light scattting coefficient S

5. Test light absorption coefficient. A

6 Test transparencies

7. Test Ink absorption value

8. Reference can be practicality or data; The meter can maximum store ten references' information;

9. Take the average value; digital display and the test results can be printed out.

10. The testing data will be stored while powering off for a long time.

Product application

1. Test the color and color difference of reflective objects.

2. Test ISO brightness (Blue-ray brightness R457), as well as the degree of fluorescent whitening of fluorescent whitening materials.
3. Test CIE whiteness (W10 Gantz brightness and color cast value TW10).
4. Test Non-metallic mineral products and construction materials whiteness.
5. Test yellowness YI
6. Test non-transparency, transparency, light scattering coefficient and light absorption.
7. Test ink absorption value.

Technical standards

- 1、GB7973: Pulp, paper and paperboard diffuse reflectance factor assay (d/o method).
- 2、GB7974: paper and paperboard whiteness assay (d/o method).
- 3、GB7975: paper and paperboard color measurement (d/o method).
- 4、ISO2470 : paper and board Blue-ray diffuse reflectance factor method (ISO brightness);
- 5、GB3979: object color measurement
- 6、GB8904.2: Pulp whiteness assay
- 7、GB2913: plastics whiteness assay
- 8、GB1840: Industrial potato starch assay
- 9、GB13025.: Salt making industry general test method; whiteness assay. Textile industry standards: pulp of chemical fiber whiteness measurement method
- 10、GBT/5950 construction material and non-metallic mineral products whiteness assay
- 11、GB8425: Textile whiteness test method
- 12、GB 9338: fluorescent brightening agent whiteness test method
- 13、GB 9984.1: sodium tripolyphosphate whiteness determination
- 14、GB 13176.1: test method for brightness of washing powder
- 15、GB 4739: Chroma of ceramic pigment test method

- 16、Gb6689: Dye chromatism Instrumental determination.
- 17、GB 8424: test method for color and chromatism of textile
- 18、GB 11186.1:Coating color test method
- 19、GB 11942: Colorimetric methods for color building materials
- 20、GB 13531.2: color of cosmetics tristimulus values and delta E * chromatism measurement.
- 21、GB 1543: Paper opacity determination
- 22、ISO2471: paper and cardboard opacity determination
- 23、GB 10339: paper and pulp light scating coefficient and light absorption coefficient determination
- 24、GB 12911: Paper and paperboard Ink absorption determination
- 25、GB 2409: Plastic yellow index. test method

Technical parameter

1. Simulate D65 illumination lighting. Adopt CIE1964 supplement color system and CIE1976 ($L^* a^* b^*$) color space color difference formula.
2. Adopt d / o observation geometry lighting conditions. Diffusion ball diameter of 150 mm, 25 mm diameter of test hole, with light absorbers to eliminate the sample mirror reflected light.
3. Repetitive: $\delta(Y10) < 0.1$, $\delta(X10.Y10) < 0.001$
4. Indication accuracy: $\Delta Y10 < 1.0$, $\Delta X10(Y10) < 0.01$.
5. Sample size: test plane no less than $\Phi 30$ mm, thickness no more than 40 mm.
6. Power: 170-250V, 50HZ, 0.3A.
7. Working situation: Temperature 10-30 °C, relative humidity no more than 85%.
8. Sample size: 300×380×400mm
9. Weight: 15 kg.

Main fixtures

1. DRK103A brightness meter;

2. A power line; a black trap;
3. Two pieces of no fluorescent white standard plate;
4. One piece of fluorescent whitening standards board
5. Four light bulbs
6. Printing paper 4 volumes
7. A Power sample
8. Certification
9. Specification
10. Packing list
11. Warranty
12. Optional: constant pressure powder sampler.