

## Multifunction Whiteness Meter

### BGD 584

#### Product Description

BGD 584 Multi-function Whiteness Meter adopts liquid crystal display, integrates light, mechatronics and micro-computer measurement and control technology, and has the function of test data statistics processing, which can quickly and accurately measure the whiteness (brightness) of various objects. It can be widely used in the determination of whiteness of pigments, fillers or other powders in coatings, as well as in papermaking, textile, printing and dyeing, plastics, ceramics, enamel, grain, building materials and other industries. The instrument can measure not only ISO brightness (R457 whiteness), but also the fluorescent whiteness of fluorescent materials, and also the brightness stimulation value Y10, transparency, opacity, light scattering coefficient and absorption coefficient of coating, paper and other thin page materials.



BGD 548 complies with CIE 15 and CIE S 005 (standard illuminants and geometric condition), simulating D65 illuminant lighting adopting d / 0 lighting observation geometry conditions, diffusion ball diameter is  $\phi 150$  mm, with two test hole diameter,  $\phi 30$  mm and  $\phi 19$  mm, equipped with light absorber, eliminating the influence of specular reflection light (SCE). The peak wavelength of spectral power distribution of R457 whiteness optical system is 457 nm, half height and width is 44 nm.

#### Standards

- GB/T 23774 (Inorganic chemicals for industrial use-General method for the determination of whiteness)
- GB/T 5950 (Method for measurement of whiteness of building materials and non-metal mineral products)
- ISO 105-J02 (Textiles-Tests for color fastness-Part J02: Instrumental assessment of relative whiteness)
- ISO 2470-2 2008(Paper, board and pulps — Measurement of diffuse blue reflectance factor — Part 2: Outdoor daylight conditions D65 brightness))
- ISO 2471 2008 (Paper and board — Determination of opacity (paper backing) — Diffuse reflectance method)

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### **Technical Specification**

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- Supplied with powder sampler for powder measurement
- Supplied with thermal printer
- Can measure continuously sample many times and calculate automatically the arithmetic mean value.
- With power-off protection, zero adjustment, alignment, standard value and other data, even if the power is lost for a long time, the data will not be lost.

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#### **Main Technical Parameters**

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- Measurement Range 0.0-120.0
- Zero Drift  $\leq 0.1 \%$
- Indication Drift  $\leq 0.1 \%$
- Indication Error  $\leq 0.5 \%$
- Repeatability  $\leq 0.1 \%$
- Specular Reflectance Error  $\leq 0.1\%$
- Sample Size test plane  $\geq \varnothing 30\text{mm}$  thickness  $\leq 40\text{mm}$
- Power Supply 220V  $\pm 10\%$  50Hz 0.3A
- Working Condition temperature 0-40 °C, relative humidity 85%
- Overall Dimension (L  $\times$  W  $\times$  H) , mm 365  $\times$  260  $\times$  425
- Net Weight About 11kg
- Ordering Information BGD 584 - Multi-function Whiteness Meter

#### **Disclaimer**

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