

Haze Meter / Color Haze Meter

Haze refers to the ratio of scattered light flux deviating from the incident light direction to the total luminous transmitted light flux through a sample, expressed as a percentage (%). It measures the degree to which light is scattered due to internal or surface irregularities in a material, resulting in a "cloudy" or "milky" appearance.

For transparent or semi-transparent materials (e.g., Clear coatings), the haze value directly reflects the extent of light scattering caused by internal or surface defects (such as particles, micro-cracks, or unevenness). This helps engineers diagnose formulation or production issues (e.g., poor additive dispersion).

BGD offers two types of haze meters: **Basic Haze Meter**- Measures haze value and luminous transmittance only. **Color Haze Meter**- Combines haze measurement with spectrophotometric color analysis (measuring Lab, yellowness, whiteness, Gardner index, Pt-Co color, and dozens of other color parameters).

Both types are widely used for haze and luminous transmittance testing in industries such as coatings, glass, plastics, films, displays, and packaging.

Standards

ASTM D1003 *Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics*

ISO 13468 *Determination of the Total Luminous Transmittance of Transparent Materials-Part 2: Double-Beam Instrument*

ISO 14782 *Plastics-Determination of Haze for Transparent Materials*

Features

- ◆ 7-inch color touchscreen + Android OS for intuitive operation
- ◆ Dual-beam technology minimizes light source fluctuations, ensuring high precision and stability
- ◆ Compensation method for more accurate transmittance results
- ◆ Horizontal & vertical sample placement for versatile testing
- ◆ Open measurement area accommodates samples of any size
- ◆ Long-life LED light source (10 + years without replacement)
- ◆ Instant measurement—No warm-up needed, results in 1.5 seconds
- ◆ PC software included— Advanced data analysis and report generation for haze, color, and transmittance



BGD 550/1 Haze Meter



BGD 550/2 Color Haze Meter



Plastic film



Plastic sheet



Clear varnish coating



Glass panel



LCD screen

Technical Parameters	Ordering Information	
	BGD 550/1 Haze Meter	BGD 550/2 Color Haze Meter
Illuminating/Viewing Geometry	Transmittance: 0° /d (Parallel illumination, diffuse reception)	
Light Source	CIE-A, CIE-C, CIE-D65	Haze/Transmittance: CIE-A, CIE-C, CIE-D65 Color: A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CMF, U30, DLF, NBF, Tl83, Tl84
Measure Targets	Haze and Luminous transmittance under ASTM & ISO standards	HAZE, Luminous Transmittance, Spectral Luminous Transmittance, CIE Lab, Lch, CIE, Luv, XYZ, Yxy, Hunter Lab MunsellMI, CMYK, Whiteness Index/WI (ASTM E313-00, ASTM E313-73, CIE/ISO, Hunter, Taube Berger Stensby), Yellowness Index/YI (ASTM D1925, ASTM E313-00, ASTM E313-73), Tint(ASTM E313-00), Metamerism Index (Milm), APHA, Pt-Co Index, Gardner Index, Color Difference (ΔE^*ab , ΔE^*CH , ΔE^*uv , ΔE^*cmc (2:1), ΔE^*cmc (1:1), ΔE^*94 , ΔE^*00)
Measuring Aperture	7mm & 21mm	21mm
Wavelength Range/Interval	---	400nm~700nm (@10nm), LED
Integrating Sphere Dia.	φ 154mm	
Measurement Range	0~100%	
Measurement Repeatability	Haze repeatability $\leq 0.05\%$ (Haze < 10%) , Haze repeatability $\leq 0.1\%$ (Haze $\geq 10\%$) ; luminous transmittance repeatability $\leq 0.1\%$	
Resolution	0.01%	
Sample Requirement	No limitation for sample area, thickness $\leq 145\text{mm}$	
Data Storage Capacity	Cloud-based unlimited storage	
Interface	USB	USB-A, USB-B
Power Supply	310mm × 215mm × 540mm	598mm × 247mm × 366mm
Overall Size (L × W × H)	DC12	220V (with power source line)
Optional Accessories	Film Holder, Cuvette Holder, Panel Holder, Custom Apertures, Haze Standard Plates, Transmittance Standard Plates, etc.	