

Opacity Meter/ Intelligent Reflectometer

The BGD 582 Opacity Meter is our latest next-generation product, designed with a 45° / 0° optical geometry (45° annular uniform illumination, 0° reception) to comply with ISO 6504-3 "aaints and varnishes Determination of hiding power Part 3: Determination of contrast ratio of light-coloured paints at a fixed spreading rate.sures the degree to which light is scattered due to internal or surface irregularities in a material, resulting in a "cloudy" or "milky and ASTM D2805-21 "Standard Test Method for Hiding Power of PaitsbyReflectometrysures the degree to which light is scattered due to internal or surface irregularities in a material, resulting in a "cloudy" or "milkyAdditionally, it automatically calculates the contrast ratio ($C = R_b/R_w$) of samples.

Features

- ◆ Conforms EN ISO 2814, ISO 6504-3, ASTM D2805, ASTM E97, DIN 55984, BS 3900-D6/D7
- ◆ Portable design for easy transport and on-site measurements.
- ◆ 2.4-inch full-color touchscreen with clear display and user-friendly operation.
- ◆ Combined LED light source and dual-channel CMOS spectrophotometric sensor for higher accuracy.
- ◆ No zero calibration required, simple and efficient operation.
- ◆ Special moisture-resistant construction ensures reliable performance in harsh environments.
- ◆ Instant measurement, no warm-up time, stable readings with no drift for fast results.
- ◆ Long-life light source (over 3 million measurements in 5 years) with no replacement needed.
- ◆ Nationally calibrated reference tiles for traceable and accurate measurements.
- ◆ Automatic calibration, self-checks zero point and white standard.
- ◆ Average measurement mode for consistent data.
- ◆ Automatic contrast ratio (C) calculation.
- ◆ USB interface for direct data export, no additional software required.

Main Technical Parameters:

- ★ Optical Geometry: 45° annular illumination, 0° reception
- ★ Light Source: D65
- ★ Observer Angle: 10°
- ★ Measurement Aperture: ϕ 8mm
- ★ Reflectance Range: 0–200.00%
- ★ Reflectance Resolution: 0.01%
- ★ Reflectance Repeatability: $\leq 0.1\%$
- ★ Zero drift: $\leq 0.1\%/10\text{min}$
- ★ IndicationDrift: $\leq 0.1\%/3\text{min}$
- ★ Power supply: Rechargeable lithium battery (supports 8 hours of continuous operation or 5,000 measurements)
- ★ Dimensions: 150mm × 50mm × 75mm
- ★ Net Weight: 300g
- ★ **Ordering Information:** BGD 582---Opacity Meter

