

Datacolor 45G

Portable 45/0 Spectrophotometer



Complete appearance control – color and gloss in one unit

Designed for the inspection and quality control of retail hard goods, large appliances, consumer electronics with plastic parts, painted surfaces and coil coatings, the Datacolor 45G provides confidence in measurement of color and gloss with high repeatability. With its integrated gloss capabilities, this portable device enables complete appearance control for consistent and accurate correlation to visual assessment.

Excellent Repeatability

The Datacolor 45G's unique optical system provides highly efficient light mixing resulting in exceptionally uniform circumferential illumination without any shadowing effects. As a result, you can achieve excellent repeatability, even on highly textured samples, and minimize the need for additional rotational measurements.

Built-in 60o Glossmeter for gloss control

The Datacolor 45G measures 60° gloss and displays the result against your tolerances. This ensures that you can quickly detect an appearance mismatch in production.

Highly reproducible results

The unit's calibration stand also serves as a measurement stand, especially for flat sample with texture or gloss. Its pivoting stage securely locks the instrument in place for precise calibration and consistent measurements, resulting in near identical measurements irrespective of the operator or the measurement site.

Confidence you need to control appearance

The Datacolor 45G comes with a complete standard accessory package. All instruments can be serviced in the field or at one of our many service centers located worldwide.

Datacolor 45G



Easy to Learn and Use

Extensive onboard functionality – displayed on a large color LCD with an intuitive user interface

- 1-click continuous sample measurement.
- Live navigation bar enables easy access to Target, Batch, Tolerance, and other settings.
- Pass/Fail, Auto-Standard, Auto-Naming, Auto-Saving, Indices and more.

Bluetooth® and USB peripheral support allows easy measurement in the lab or on the shop floor

- Connect to Datacolor TOOLS® quality control software (sold separately) with Bluetooth or USB.
- Easy export of data to a USB flash-drive.
- Support for USB keyboards and bar code scanners.

Thoughtfully designed for optimal use

- Sleek design with a low-profile probe for use in hard to access locations.
- Measure buttons on either side allow for left and right-handed usage.

Technical Specifications	Description
Measuring Geometry	45 /0, viewing in conformance with CIE: 2004
Light Source	LED solid-state circumferential illumination
Spectral Range	400 to 700 nm
Effective Bandwidth	10 nm
Wavelength Resolution	2 nm
Spectrometer Principle	Master concave holographic grating
Detector	Dual 256 element diode array
Color Repeatability	< 0.01 E*ab on white ceramic tile
Gloss Repeatability	+/- 0.1 GU from 1-10; +/- 0.2 GU from 10-100
Color Inter-Instrument Agreement	0.15 E*ab avg of 12 BCRA tiles, 0.25 E*ab max on any BCRA tile
Gloss Reproducibility	+/- 0.5 GU from 1-10, +/- 1 GU from 10-100
Aperture Size	11 mm target window (8 mm measurement)
Battery	Rechargeable Li-Ion > 2,000 measures/charge
Operating Environment	10 to 40 C up to 85% RH, non-condensing
Interface	USB, Bluetooth wireless

Physical Specifications	Description
Comes Complete with	Aluminum case, Spectrophotometer with certificate of instrument performance, Switching power supply, Global connectors, USB cable, USB memory-stick with calibration data, User guide, Quick start guide, Black trap, White calibration tile, Precision Calibration Stand, Gloss calibration tile.
Display	Color LCD Backlit (2.8", 240 x 320 pixels)
Weight	1.8 lbs (816 g)

Functional Data	Description
Color Systems	CIELab, CIELch, Lab (h), XYZ, Yxy
Color Difference	E*, E (h), E94, ECMC (2:1, 1:1, adjustable i:c), E2000
Gloss	Absolute, Difference - (60 gloss)
Indices	Metamerism, CIE, Whiteness (CIE an E313), Yellowness (D1925 and E313)
Illuminants	D50, D55, D65, D75, A, C, U3000, Horizon, F2, F7, F11
Data Storage	> 2,000 standards w/ Tolerances, max 10,000 batches
Languages	English, French, German, Portuguese Simplified Chinese and Spanish

For more information, please visit www.datacolor.com/45G