

Portable 45/0 Spectrophotometer



Complete Appearance Control – Color and Gloss in One Unit

The Datacolor 45G provides simultaneous control of color and gloss with best-in-class repeatability. With its integrated gloss capabilities, the portable Datacolor 45G spectrophotometer enables complete appearance control for consistent and accurate correlation to visual assessment. Ideal for inspection and control of total color appearance for retail hard goods, large appliances, and consumer electronics involving plastic parts, painted surfaces and coil coatings.

Measure With Confidence

Excellent Repeatability, even on Textured Samples

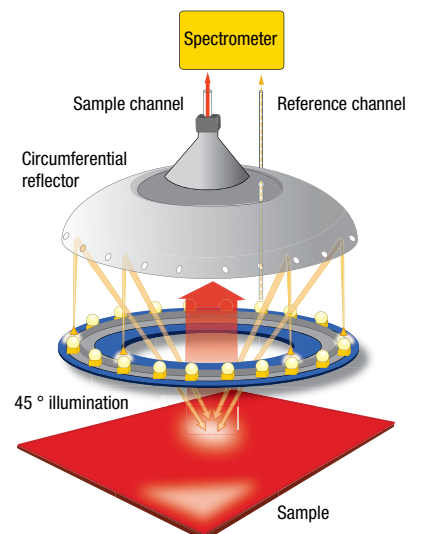
The Datacolor 45G's patented illuminator uses a diamond-turned reflector positioned over a circular array of full spectrum LEDs. This optical system provides highly efficient light mixing resulting in exceptionally uniform circumferential illumination without any shadowing effects. This means that you can achieve excellent repeatability, even on highly textured samples, and minimize the need for additional rotational measurements.

Reproducible Results across Different Operators and Different Sites

The Datacolor 45G calibration stand serves a dual purpose as a measurement stand, especially for flat samples with texture or gloss. Its pivoting stage securely locks the instrument in place for precise calibration and consistent measurements. As a result, measurements are identical, irrespective of the operator or the measurement site

Built-In 60° Glossmeter for Simultaneous Gloss Control

The Datacolor 45G CT measures color and 60 degree gloss at the same time and displays the results against your tolerances. This ensures that you can quickly detect an appearance mismatch in production.



Datacolor 45G measurement principle

45G COMPLETE APPEARANCE CONTROL COLOR AND GLOSS IN ONE UNIT



Everything You Need to Control Appearance

- Comes with the most complete standard accessory package and powerful Datacolor TOOLS quality control software for analysis and data management.
- All instruments can be serviced in the field or at one of our many service centers located worldwide.

TECHNICAL SPECIFICATIONS	DESCRIPTION
Measuring Geometry	45°/0°, viewing in conformance with CIE: 2004
Light Source	LED solid-state circumferential illumination
Spectral Range	400 to 700nm
Effective Bandwidth	10 nm
Wavelength Resolution	2 nm
Spectrometer Principle	Master concave holographic grating
Detector	Proprietary Dual 256 element diode array
Color Repeatability	< 0.01 ΔE*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 ΔE*ab avg of 12 BCRA tiles, 0.25 ΔE*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

Easy-to-Learn, Easy-to-Use

Extensive Onboard Functionality - In Color

Large color LCD with an intuitive user interface makes the instrument easy-to-learn and easy-to-use.

- 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 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 usage in hard to access locations.
- Measure buttons on either side allow for left and right handed usage.

FEATURES COMPARISON	DATACOLOR 45G CT	DATACOLOR 45G	DATACOLOR 45S
Close Tolerance (Color and Gloss)	✓	-	-
Built-in 60° Glossmeter	✓	✓	-
Bluetooth Wireless	✓	✓	✓
Precision Calibration / Measurement Stand	✓	✓	✓
Rechargeable Li-Ion Battery	✓	✓	✓
Datacolor TOOLS QC Software	✓	✓	✓

FUNCTIONAL DATA	DESCRIPTION
Color Systems	CIELab, CIElch, Lab (h), XYZ, Yxy
Color Difference	ΔE*, ΔE (h), ΔE94, ΔECMC (2:1, 1:1, adjustable t:c), ΔE2000
Gloss	Absolute, Difference - (60° gloss)
Indices	Metamerism, CIE, Whiteness (CIE and 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

PHYSICAL SPECIFICATIONS	DESCRIPTION
Display	Color LCD Backlit (2.8", 240 x 320 pixels)
Weight	1.8 lbs (816 g)
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
	QC Software Datacolor TOOLS 2.0.6 or higher

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

STANDALONE SYSTEM REQUIREMENTS

System Requirements: Intel I3 processor or higher; 4 GB RAM; 500 GB HDD; 17" Monitor at 1280x720 resolution; 128 MB true graphics card; CD drive; USB/Serial Port; Windows 7, Windows 8 and Windows Server 2008