

# Datacolor® 45S

Portable 45/0 Spectrophotometer



## Color appearance control with confidence

The Datacolor 45S provides highly accurate control of color appearance to achieve a close correlation to visual assessment. The portable 45S spectrophotometer offers an excellent combination of performance and value. Ideal for inspection/control of color appearance for retail hard goods, building products, office furniture and other plastics, painted surfaces and coil coatings.

## **Excellent repeatability**

The Datacolor 45S's 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.

## **Economical operation with high reliability**

The Datacolor 45S is powered with longer lasting, Lithium Ion rechargeable battery that provides a stable charge for up to 2000 measurements. In addition, the electrical system is optimized to deliver a consistent high intensity illumination. This means that the instrument can be operated economically without compromising on reliability.

## **Highly reproducible results**

The unit's calibration stand also serves as a measurement stand. 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 45S 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 45S**

### **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 or as a bundle) 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
Spectrometer Principle	Master concave holographic grating
Detector	Dual 256 element diode array
Color Repeatability	< 0.01 E*ab on white ceramic tile
Color Inter-Instrument Agreement	0.15 E*ab avg of 12 BCRA tiles, 0.25 E*ab max on any BCRA tile
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 l:c), E2000
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/45S](http://www.datacolor.com/45S)

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