



SP64

Portable Sphere Spectrophotometer

The SP64 is a spherical hand held spectrophotometer, with a special PROJECT and JOBS mode and switchable apertures, designed to meet the performance and feature capabilities necessary for diverse color measurement applications.

SP64 Advantages

- **Versatile.** Use for lab, plant or field operation
- **Easy to Read.** Large, graphical LCD display
- **Quick Color Compare.** Permits quick measurement and comparison of two colors without need to create tolerances or store data
- **Special PROJECT Mode.** Multiple color standards can be collected under an identified project as part of corporate color standards programs
- **Special JOBS Mode.** A programmed sequence of specific steps to guide an operator through a color measurement process, assuring consistency
- **Switchable Apertures.** The internal apertures can be quickly changed with the flip of the switch for 4mm to 8mm aperture sizes. Also available in a 14mm fixed aperture
- **Pass/Fail Mode.** Up to 1,024 standards with tolerances can be stored for easy pass/fail measurement
- **Inter-Instrument Agreement.** Superior agreement capabilities ensures integrity of multiple instrument color control
- **Measuring Functions and Indices.** Absolute and difference measurements are obtained for the following colorimetric systems: CIE XYZ, CIE Yxy, CIE L*a*b*, Hunter Lab, CIE L*c*h*, CMC, CIE94, Whiteness and Yellowness per ASTM E313-98, Metamerism Index and DIN 6172 + AATCC Gray Scale
- **Opacity, Color Strength and Shade Sorting.** Device measures opacity, color strength in chromatic, apparent, and tri-stimulus calculations, and 555 shade sorting for precise color control of products involving plastic, painted, or textile materials
- **Texture and Gloss Influence.** To determine the influence of the specular component, the SP64 allows simultaneous measurement of both specular-included (color) and specular-excluded (appearance)
- **User-Friendly Ergonomics.** A wrist strap and tactile side grips facilitate holding and a flip back target shoe adds flexibility
- **Rechargeable Battery.** Allows for remote use

X-Rite: Your source for accurate color. On time. Every time.

X-Rite is a world leader in providing global color control solutions for manufacturing and quality management requirements.

We lead the industry in offering service options to ensure uninterrupted performance of all X-Rite products. Training and educational resources are available globally and online for both new and experienced users to optimize their color measurement capabilities.

Visit xrite.com for more information about X-Rite products. X-Rite customers worldwide may also call the Applications Support team at CASupport@xrite.com or Customer Service at 800-248-9748.

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L10-155 (04/12)



Specifications

Measuring Geometrics

d/8°, DRS spectral engine, switchable 4mm measurement area/6.5mm target window or 8mm measurement area/14mm target window (optional fixed 14mm measurement area/20mm target window)

Light Source

Gas-filled tungsten lamp

Illuminant Types

C, D50, D65, D75, A, F2, F7, F11 & F12

Standard Observers

2° & 10°

Receiver

Blue-enhanced silicon photodiodes

Spectral Range

400 – 700nm

Spectral Interval

10nm – measured
10nm – output

Storage

1,024 standards with tolerances, 2,000 samples

Inter-Instrument Agreement

8mm/14mm
CIE L*a*b*:
Avg. 0.13 ΔE^*_{ab} based on avg. of 12 BCRA Series II tiles (specular component included)
Max. 0.25 ΔE^*_{ab} on any tile (specular component included)
CMC equivalent:
Avg. 0.10 ΔE_{cmc} based on avg. of 12 BCRA Series II tiles (specular component included)
Max. 0.20 ΔE_{cmc} on any tile (specular component included)
4mm
CIE L*a*b*:
Avg. 0.20 ΔE^*_{ab} based on avg. of 12 BCRA Series II tiles (specular component included)
Max. 0.40 ΔE^*_{ab} on any tile (specular component included)
CMC equivalent:
Avg. 0.15 ΔE_{cmc} based on avg. of 12 BCRA Series II tiles (specular component included)
Max. 0.30 ΔE_{cmc} on any tile (specular component included)

Short-Term Repeatability¹

.05 ΔE^*_{ab} on white ceramic (Standard deviation)

Measurement Range

0 to 200% reflectance

Measuring Time

Approx. 2 seconds

Lamp Life

Approx. 500,000 measurements

Power Supply

Removable (Ni-metal hydride) battery pack; 7.2 VDC rated @ 1650 mAh.

AC Adapter Requirements

90 – 130VAC, 50 – 60Hz, 15W max

Charge Time

Approx. 4 hours – 100% capacity

Measurements Per Charge

1,000 measurements within 8-hour period

Display

128 x 256 pixel graphical LCD

Data Interface

Patented bi-directional RS-232, 300-57,600 baud

Operating Temperature Range

50° to 104°F (10° to 40°C)
85% relative humidity maximum (non-condensing)

Storage Temperature Range

-4° to 122°F (-20° to 50°C)

Weight

2.4 lbs. (1.1 kg)

Dimensions

4.3" H 3.3" W 7.7" L
(10.9 cm 8.4 cm 19.6 cm)

Accessories Provided

Calibration standards, operation manual, AC adapter, carrying case

Options

Optional remote battery charger and replacement rechargeable battery packs available

¹Based on 20 measurements on a white tile.

* Specifications and design subject to change without notice. X-Rite standards are traceable to National Institute of Standards and Technology, Gaithersburg, Maryland, USA.

