



964
Portable

Portable Spectrophotometer



## **Consistent Color Quality**

The 964 is an intermediate level 0/45 handheld spectrophotometer that allows you to obtain absolute and differential measurements in the lab, plant or field for a wide range of colorimetric systems. The 964 includes a JOBS feature that displays a programmed sequence of specific steps to guide an operator through the color measurement process, ensuring consistency regardless of operator skill level.

The 964 features an easy-to-read graphical LCD display and a pass/fail mode for fast evaluation of color accuracy against an established standard. When paired with Color iQC or Color iMatch software, it offers increased quality control and color formulation.

## **Address a Wide Range of Industry Specific Color Needs**

- Collects multiple color standards through an identified project when using the PROJECT mode.
- Stores up to 1,024 standards with tolerances for easy pass/fail measurement.
- Captures color data to identify variation in incoming materials and production batches to reduce the color approval cycle and speed time to market.
- Meets CIE certifications including CIE XYZ, CIE Yxy, CIE LAB, Hunter LAB, CIE LCH, CME, CIE94, Whiteness and Yellow.
- Accommodates measurements on a variety of samples with interchangeable apertures.

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## Make it a complete solution

#### Color iQC

A unique, job-oriented upgradeable color quality control software solution designed to meet evolving color measurement and management requirements in all industrial market segments. Color iQC adapts to existing workflows for fast, easy, and accurate color control. Color iQC is available in a variety of configurations to meet specific industry and quality control requirements.

#### Color iMatch

A job-oriented color formulation software solution for paint, plastics and textiles, enables accurate color analysis and formulation for a variety of applications. It is PantoneLIVE-enabled, allowing users to retrieve digital color standards from a cloud-based library in addition to or instead of using physical reference standards, which can deteriorate or be measured inconsistently. Color iMatch is available in a variety of configurations to meet most, if not all, industrial color formulation needs.

## **Specifications**

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Measurement Time	Approximately 2 seconds	
Measurement Geometry	0°/45°, DRS spectral engine, interchangeable apertures: 4mm measurement area/6.5mm target window 7mm measurement area/9mm target window 15mm measurement area/21.5mm target window	
Lamp Life	Approximately 500,000 measurements	
Power Supply	Removable (Ni-metal hydride) battery pack	
AC Adapter Requirements	90 –130VAC or 100-240VAC, 50 – 60Hz, 15W max	
Light Source	Gas-filled tungsten lamp	
Charge Time	Approximately 4 hours – 100% capacity	
Illuminant Types	C, D50, D65, D75, A, F2, F7, F11 & F12	
Standard Observers	2° & 10°	
Data Interface	Patented bi-directional RS-232, 300 57,600 baud	
Spectral Range	400 – 700nm	
Detector	Blue-enhanced silicon photodiodes	

Operating Temperature Range	50° to 104°F (10° to 40°C) 85% relative humidity maximum (non-condensing)		
Spectral Interval	1,024 standards with tolerances, 2,000 samples		
Weight	2.4 lbs. (1.1 kg)		
Inter-Instrument	CIE L*a*b*: 7mm/15mm Avg. 0.15 E*ab based on avg. of 12 BCRA Series II tiles Max. 0.30 E*ab on any tile		
Agreement	CIE L*a*b*: 4mm Avg. 0.20 E*ab based on avg. of 12 BCRA Series II tiles Max. 0.40 E*ab on any tile		
Dimensions	4.3"H 3.3"W 7.7"L (10.9 cm 8.4 cm 19.6 cm)		
Short-Term Repeatability	0.05 E*ab on white ceramic (Standard deviation)		
Measurement Range	0 to 200% reflectance		
Accessories Provided	Calibration standards, operation manual on CD-ROM, AC		

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Full list of specifications available at www.xrite.com/964

## **Service Support & Warranty**

X-Rite's color analysis and measurement solutions are engineered and manufactured to the most rigorous quality standards. These standards are backed by comprehensive global service, superior phone and web support, and preventative maintenance options to optimize your long-term investment. We have developed service support and warranty plans that are unique to your organization's specific products and needs.

Learn more by reviewing our service offerings on our website at: **www.xrite.com/page/service-warranty**. Still unsure of what you need? Contact us directly at: **servicesupport@xrite.com** 



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