



VeriColor Solo

Single-Point, Non-Contact Color Verification and Identification

Take control of in-line color quality in assembly and sorting operations with this powerful automated color identification tool that provides non-contact color measurement and consistent reporting. Easy to set up, the system works on a wide range of materials and in the harshest production environments.

VeriColor Solo Advantages

- **Single-Point Measurement.** Ideal for single-point color verification and identification
- **Spectral Resolution.** 8-band high resolution for more accurate color discrimination than RGB sensors and color cameras
- **Unaffected by Ambient Light.** Repeatable, accurate measurements are produced under all types of production lighting conditions with no special plant lighting or shrouding required
- **Quick, Consistent Measurement.** The system stores information on up to 30 active colors at once, eliminating the need for constant reprogramming
- **Industrially Hardened.** Designed to tolerate heat, cold, humidity, shock, and typical industrial containments. Meets NEMA 4/IP 56 requirements
- **Flexible System Interface.** Supports multiple interfaces: RS-232, RS-485, and PLC Discreet
- **Intuitive Software.** Windows based software and menu based programming for easy operator set-up
- **Standard Measurement History.** Allows for easy adjustments when generating a standard after initial set-up by adding, hiding, or deleting new measurements at any time
- **Visual Tolerancing.** Tolerances that are critical for determining pass/fail are presented in quick-to-read graphs
- **Visual Color Difference.** Intuitive color graphs enhance determination of color differences
- **Log-File Access.** Easy to view and maintain data functionality

System Components

- Sensor heads
- Windows set-up software
- Calibration kit
- Interface cables (5 meter RS-232, 5 meter PLC)
- Operation manual

Options

- 1 meter, 3 meter, 10 meter, RS-232 and PLC cables

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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Specifications

Instrument Type

High resolution reflective color system

Geometry

0°/30° or 30°/0°
(results below based on 30°/0°)

Measurement Area

12 mm (.5")

Color Difference Resolution

.25 Δ LED, typical (Δ LED is a proprietary color difference calculation, which is based on VeriColor LED color response and is scaled similar to CIE ΔE^* for small color differences)

Operating Temperature

0 to 50°C (32°–122°F)

Operating Humidity

0 to 90% non-condensing

Enclosure Specification

Designed to meet NEMA 4/IP56

Size

L: 5.1" (13 cm)
W: 2.9" (7.4 cm)
H: 1.3" (3.3 cm)

Weight

12.2 oz. (347 g)

Power Source

24VDC \pm 10% @ 250mA Max.

Performance Specifications

Black Repeatability

0.3 Δ LED 0–40°C (32°–104°F)1
(10 measurements at 3 sec. intervals on a 1% reflectance black)

White Repeatability

0.1 Δ LED 0–40°C (32°–104°F)1
(10 measurements at 3 sec. intervals on a 99% reflectance white)

Measurement Distance

35 mm \pm 5 mm (1.4" \pm .2")

Measurement Time

250 ms

Cycle Time

1 sec. (time interval between measurements)

Warm-Up Time

30 sec. typical @ 23°C

Calibration Interval

Validation recommended—
90 days/.5 million reads
(whichever comes first). More
frequent verifications may be
required if cleanliness of the
system is not maintained

LED Illuminator Life

Life of the unit

Product Life

5 years minimum

Vibration

5–10 Hz 0.200" displacement
pk–pk
10–100 Hz at 1G

Shock

Operational at 15 g amplitude
18 ms duration
Non-operational at 30 g amplitude
11 ms duration

Environmental Usage

Indoor only

Altitude

2000 m

Pollution Degree

2

Overvoltage

Category II

Safety Compliance

Underwriters Laboratories
UL 61010-1

Canadian Standards Assn. CSA

22.2 No. 1010.1-92

International Electrotechnical Committee

IEC (EN) 61010-1

