



## VeriColor®

### Non-Contact Color Verification and Identification System

Eliminate costly production line color errors with this automated in-line color sensor that provides non-contact measurement and continuous reporting. Easy to operate, the system works on virtually any material and in the harshest production environments to offer comparisons to specific standards or absolute measurements.

# VeriColor Advantages

- **Multi-Point Measurement.** Ideal for multiple-point color verification and identification, providing large area viewing in sorting and assembly operations
- **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 50 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, PLC Discreet and Ethernet
- **Intuitive Software.** Windows based software and menu based programming for easy operator set-up
- **Easy Set-Up.** Includes the ability to monitor or set up remotely via Ethernet
- **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

- Hub
- Sensor heads (option of 1 to 6 per hub)
- Windows set-up software
- DIN rail mounting kit for hub
- 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
- 12 mm spot sensor head
- 6 mm spot sensor head

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

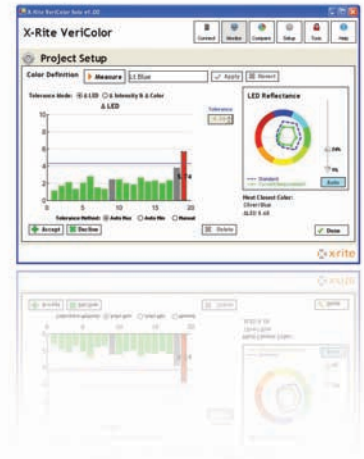
X-Rite is a world leader in providing global color control solutions for manufacturing and quality management requirements.

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](http://xrite.com) for more information about X-Rite products. X-Rite customers worldwide may also call the Applications Support team at [CASupport@xrite.com](mailto:CASupport@xrite.com) or Customer Service at 800-248-9748.

## X-RITE WORLD HEADQUARTERS

Grand Rapids, Michigan USA • (800) 248-9748 • +1 616 803 2100  
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## Specifications:

### General Specifications

**Instrument Type**  
High resolution reflective color system

**Geometry**  
0° / 30° or 30° / 0°

**Measurement Area**  
12 or 6 mm spot sizes

**Color Resolution**  
.25  $\Delta E^*$ , typical

**Illuminant Observer**  
N/A. Reports color differences in DLED (scaled similar to  $\Delta E$ )

**Operating Temperature Range**  
0 to 50°C (32 to 122°F)

**Operating Humidity Range**  
0 to 95% non-condensing

**Enclosure Specification**  
NEMA-12 / NEMA-4 or IP-67 (Hub / Head)

**Hub Size**  
L: 6.9" (17.5 cm)  
W: 4.2" (10.7 cm)  
H: 3.2" (8.1 cm)

**Hub Weight**  
24.6 oz (700 g)

**Sensor Head Size**  
L: 5.1" (13 cm)  
W: 2.9" (7.4 cm)  
H: 1.3" (3.3 cm)

**Sensor Head Weight**  
11.4 oz (325 g)

**Power Source**  
18-30V AC or DC, 3 Amps Max.  
(I<sub>typ</sub> ≤ 1 amp)

### Performance Specifications

**Repeatability — Black**  
.05% Reflectance  
(approx. = 0.3  $\Delta E$ )  
0 to 40°C (32 - 104°F)

**Repeatability — White**  
.15% Reflectance  
(approx. = 0.1  $\Delta E$ )  
0 to 40°C (32 - 104°F)

**Lamp Life**  
25+ years  
(@ 1 measure / sec. 24 x 7)

**Calibration Time**  
Typically 90 days

**Measurement Time**  
250 ms

**Cycle Time**  
<1 sec.  
(time interval between measurements)

**Measurement Distance**  
40 mm from sensor lens ±  
5 mm positional insensitivity

\*In color science,  $\Delta E$  is a color difference in L\*a\*b\* color space where the threshold of human perception is typically 1 $\Delta E$ .