



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 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.

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 ΔE^* , typical

Illuminant Observer
N/A. Reports color differences in DLED (scaled similar to ΔE)

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.
($I_{typ} \leq 1$ amp)

Performance Specifications

Repeatability — Black
.05% Reflectance
(approx. = 0.3 ΔE)
0 to 40°C (32 - 104°F)

Repeatability — White
.15% Reflectance
(approx. = 0.1 ΔE)
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 \pm
5 mm positional insensitivity

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