The Next-Generation Solution for On-Line Color Measurement.

SpectraProbe® XE

HunterLab
Measure Color...Measure Quality

SpectraProbe® XE

On-Line Color Measurement System- A cost-effective process tool for color control.

Real-time color measurement lets you react to product color changes when they happen, as they happen.

On-line color measurement gives you a continuous flow of information, which lets you make faster, better informed decisions to optimize your process and improve quality control. With real-time color measurement, costly process upsets are minimized, and your operators can take on-the-spot corrective action without waiting for laboratory results.

HunterLab, the worldwide leader in on-line color measurement, offers SpectraProbe® XE as the next-generation product for on-line color control of your process. SpectraProbe XE is a versatile, rugged, and now even more cost-effective spectrophotometer for continuously measuring, analyzing and reporting product color.

SpectraProbe XE provides accurate, repeatable product color measurements.

The key component of this state-of-the-art color measurement system is a highly accurate spectrophotometer that provides the performance you need to ensure your product meets your customer's color specifications. By use of a high-speed, long-life xenon light source and automatic standardization, this spectrophotometer takes rapid measurements and averages them to provide repeatable color data over both uniform and textured products. When compared to traditional filter colorimeters, the superior performance of SpectraProbe XE makes it unquestionably the on-line color instrument of choice.

Obtain precise, up-to-date color profiles.

SpectraProbe XE automatically and continuously compiles a running record and color profile of each production run. So not only can you make adjustments in real time, you'll also have an up-to-date information archive that can be used to diagnose objectively how other key process variables affect the color of your product.

Measure color virtually as the human eye sees it.

SpectraProbe XE utilizes 0° illumination and 45° circumferential viewing geometry. This, combined with a large (65 mm diameter) or optionally small (25 mm diameter) viewing area, provides the closest agreement possible between instrumental measurement and color appearance. Due to its highly advanced optical design, the SpectraProbe XE spectrophotometer can measure the appearance of color independent of sample surface texture, directionality and gloss.

Measure color both across the product's width and along its length.

The color of a product can vary in shade between width and length, which causes significant product quality concerns. SpectraProbe XE increases your color monitoring capability dramatically. HunterLab's leading-edge technology gives this remarkable color measurement system the ability to simultaneously traverse the product and measure color both across its width and along its length. It then reports any shade variation against a standard, giving you more product color information than has ever been available before. In addition to the commonly used side-center-side configuration, many other traversing patterns are also available.

Correlate results to off-line measurements.

You can tie SpectroProbe XE's continuous on-line performance directly to established lab results for conformance to product specifications. And for monitoring production trends, it's both compatible with and complementary to HunterLab and other laboratory spectrocolorimeter products used for more critical periodic checks.

Engineered for rugged, dependable performance.

SpectraProbe XE system hardware is designed and built to withstand real-world conditions including harsh plant environments. Engineered to stand up to heat, dust or chemicals, both the sensor and its wall-mounted support unit are sealed in a durable NEMA 4/IP 65 enclosure. In the event of upset or product change-over conditions, seam or sheet break detector signals can also move the sensor head automatically off-line so that the instrument doesn't interfere with the moving product.

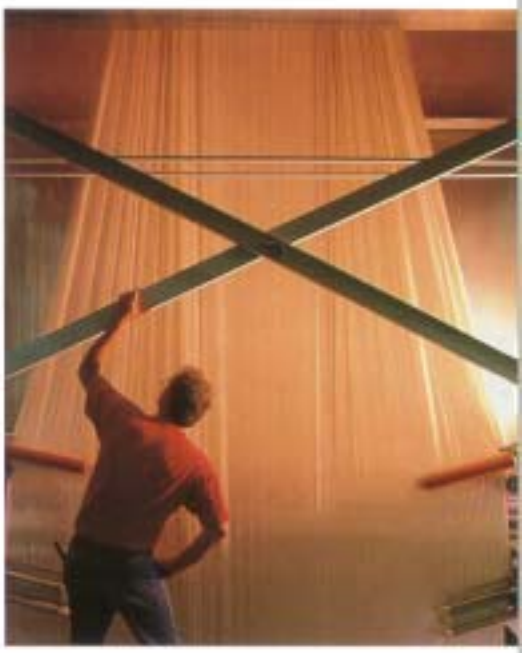
And, just like all HunterLab systems, SpectrProbe XE's performance is backed by a comprehensive support program with a range of service options, including preventive maintenance, operator training and on-site service.

More SpectraProbe XE Color Measurement System Features:

- Comprehensive software manages and presents information with point-and-click simplicity.
  - Establish product and roll/run number set-ups, standards, and tolerances
  - Report data in a variety of color scales
  - Plot color trends graphically
  - Archive run data and events logs
  - Perform system diagnostics
- In addition to color measurement, the optional UV control feature measures the amount of fluorescence in textiles, paper, and plastic products to track how fluorescent brightening agents affect product color.
- The opacity compensation feature will detect the effects of opacity on the appearance of lightweight paper and textiles.
- SpectraProbe XE integrates easily into plant control systems via analog outputs that function as the color signal output for closed-loop control or plant data acquisition systems.

The versatility and on-line measurement capabilities of SpectraProbe XE are ideally suited to a wide range of process applications.

- *Textiles: piece or continuously dyed products including apparel, automotive fabrics, home furnishings and, industrial fabrics*
- *Paper: fine printing and writing, food board, and specialty coated paper*
- *Plastics: pellets and extruded products such as vinyl siding and trim*



SpectraProbe®XE On-Line Color Measurement System. The real-time link to world-class color management.

Specifications

Operating Requirements:

Ambient temperature: 0°-50°C (32°-122°F)

Input/Output (I/O):

Analog outputs: Four (4) isolated 4-20 mA; user-definable tristimulus color scales plus optional color difference scale or index (optional)

Alarm relays: Four (4) contact closures (optional)

Digital: RS485/RS232 /RS422 serial link for bidirectional communica- tions to operating software

Physical:

Sensor Unit Enclosure Dimensions (w/mounting yoke): 701 mm (27.6") H x 525 mm (20.7") W x 292 mm (11.5") D

Support Unit Enclosure Dimensions: 610 mm (24")H x 508 mm (20") W x 254 mm (10") D

Weight: Sensor Unit-27.3 kg (60 Ibs); Support Unit- 20.5 kg (45 Ibs)

Maximum Traversing Speed: 125 cm/sec (50"/sec)

Photometric:

Sensor: Spectrophotometer w/pulsed xenon light source

Optical Geometry: Degrees illumination/viewing: 0°/45° (circumferential)

Viewing Area: Large Area View (LAV)-65 mm (2.5")dia.; Small Area View (SAV)-30 mm (1.25") dia.

Measurement Performance:

Repeatability: ≤ 0.02 peak-to-peak change from first reading in L*, a*, or b* over 20 consecutive readings

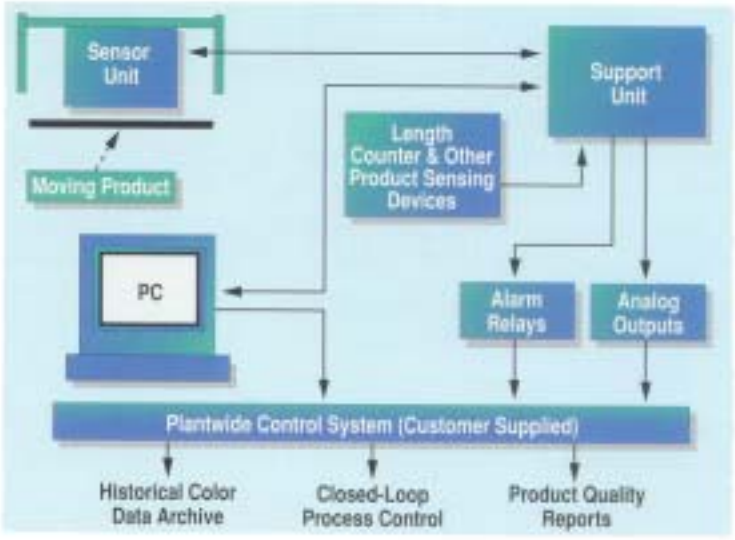
Short Term Stability: ≤ 0.05 peak-to-peak change from first reading in L*, a*, or b* over 30 minutes

Long Term Stability: ≤ 0.15 peak-to-peak change from first reading in L*, a*, or b* over 4 hours

Electrical:

Power input: 120V ± 10%; 220V ± 15%; 48-62 Hz

Specifications subject to change without notice.



The SpectraProbe® XE Color Measurement System is available with fixed or traversing mounting frame with automatic drive controls, automatic standardization with colored tile standards, analog outputs, and operating and control software.

HunterLab - providing color measurement solutions worldwide.

Dedicated to worldwide support through local respresentation, HunterLab provides over 50 years of experience to meet the color management needs of customers in 70 countries. We offer the industry's most comprehensive set of end-to-end solutions - an integrated package of resources, from the complete array of instrumentation, software, and support services to training, education and decades of know-how.

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ISO 9001 Certified

Hunter Associates Laboratory, Inc., 11491 Sunset Hills Road, Reston, VA 20190-5280
Phone: 703-471-6870 Fax: 703-471-4237 sales@hunterlab.com www.hunterlab.com

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