

ColorXRA 45

Measure Paper and Plastic Color
Throughout Production

Fast, Automatic Control During Production for Improved Color Quality

Designed to meet the requirements of industrial paper and plastic environments, the industry-leading non-contact ColorXRA 45 inline spectrophotometer measures color on a variety of paper and plastic materials, including those with textured, finely patterned and glossy surfaces and with the ColorXRA 45F even optical brightening agents. Mounted on a custom frame above the production line, ColorXRA 45 measures at critical points without stopping production.

Adding ESWin Closed Loop Color Control software creates a closed loop solution to carry out color corrections automatically and calculate dye adjustments in one step. This closed loop system enables precise and automatic color adjustments to:

- Reduce rework caused by color variations
- Increase production output
- Enable faster startup times
- Cut shade changes by up to 50%
- Save on dye usage and wasted materials

Creates a Stable Production Environment for a Fast ROI

The ColorXRA 45 is mounted over the production line at the correct distance to detect even the smallest color deviations. It uses dual beam measurement and automatic wavelength calibration to ensure exceptional measurement accuracy and short- and long-term stability. Ambient light, web speed, and normal flutter do not influence measurement accuracy. The automatic internal calibration is performed frequently, an external calibration is only required every four weeks. ColorXRA 45 removes the guesswork around color control for less waste and rework.

Correlates with Lab Measurements to Minimize Variations and Rejections

With a Xenon flash lamp, standardized 45°:0° measurement geometry, 1nm spectral resolution, and 330-730 wavelength range, the ColorXRA 45 maintains tight color tolerances throughout production without cutting a sample. Air purging keeps the unit clean and cool and dirt detection sensors warn of issues that could impact final color. With the ColorXRA 45F base color and optical brighteners can be measured separately for optimal control over each component for stable measurements even when base weight or opacity change.



Reasons to Buy:

- The ColorXRA 45 has built-in dirt detection to ensure correct measurement values. It also helps to shorten maintenance time as cleaning is only required when the instrument is dirty.
- The built-in pyrometer helps investigate color variations and determine if machine temperature is influencing color measurements. Lab corrections should only be done when the machine temperature is in tolerance.
- The new optical design with a circular lamp offers more stable readings in a rough environment, even when the paper is fluttering.
- The precise electronic components are easier to service and support than the ERX50, which is becoming obsolete.

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	ColorXRA 45	ColorXRA 45F
Geometry	45° : 0°	45° : 0°
IIA - DE* avg (SCI)	<0,3	<0,3
Repeatability RMS DE*	0.01	0.01
Wavelength Range	330-730nm	330-730nm
Wavelength Resolution	1nm	1nm
Pyrometer to Measure Sample Temperature	yes	yes
Dirt Detection	yes	yes
400nm Cutoff	no	yes
Reflectance Apertures Std.	10mm	10mm
Distance Aperture - Sample	10mm	10mm
UV Calibration	no	yes
Communications	USB	USB
Ethernet Interface via ECXV2 to PC	yes	yes
Internal Wavelength Calibration	yes	yes
Air Purging To keep the unit clean and cool	yes	yes
Working Temperature	max 60°C, with cooling max. 80°C	max 60°C, with cooling max. 80°C
Dimensions	170 x 110 x 295 mm ³	170 x 110 x 295 mm ³
Measurement Time	1/500 s	1/500 s
Measurement Frequency	3 s	3 s
Lighting Source Xenon flash lamp is close to daylight, tungsten lamps have low radiation in the blue area. Continuous illumination is warming up the instrument this results in measurement drift.	Xenon flash lamp	2 Xenon flash lamps, one with UV cut filter, the other adjusted to D65
D65 UV calibration Necessary if ODB shall be measured correctly	no	optional
Online Backgrounds For opacity measurement and external calibration/measurements	2 (white and black)	2 (white and black)

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: inlinesupport@xrite.com



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