

Presenting...
Presenting...

ColorQuest® XE

The Economical Color Measurement Spectrophotometer



- Color measurement of liquids and solids; also transmission haze
- Large transmission compartment open on three sides
- Two reflectance measurement areas of 25mm (1.00 inch) and 9.5mm (.38 inch)
- Retroviewer for viewing position of samples at measurement port
- Automated specular component included/excluded
- Ergonomic sample clamp for supporting a wide range of samples
- Read button for convenient initialization of sample measurement
- Status indicator lights visually indicate selected mode



ISO 9001 Certified

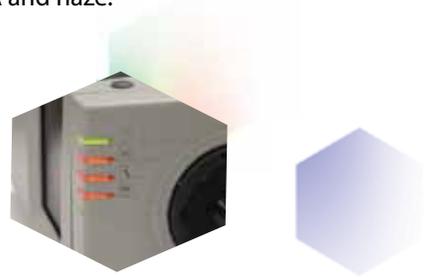
Hunter Associates Laboratory Inc., 11491 Sunset Hills Road, Reston, VA 20190-5280
Tel 703-471-6870 Fax 703-471-4237 sales@hunterlab.com • www.hunterlab.com

ColorQuest® XE

Easily measure reflectance and transmittance

ColorQuest XE is a color measurement spectrophotometer at an economical price. It can be used in production or in the laboratory for inspecting raw materials and evaluating finished product. It is able to measure opaque, transparent and translucent solids and liquids for properties such as reflected color, opacity, strength, transmitted color, APHA and haze.

Precise Precise Measurement



The ColorQuest XE uses $d/8^\circ$ (sphere) optical geometry, which conforms to ASTM, ISO, CIE, DIN and JIS standards for reflectance measurements. Transmission measurements are made using $d/0^\circ$ geometry for regular transmission and $d/8^\circ$ for total transmission. To ensure measurement repeatability and stability, ColorQuest XE uses true double-beam optics that monitor the source light reflected from the sphere wall and

spectrally compensates for any variation. The reflectance standard supplied with the ColorQuest XE has been calibrated using reference standards traceable to the National Physical Laboratory (NPL), and using methods outlined by the National Institute of Standards and Technology (NIST). A wavelength calibration check filter is provided with each instrument to ensure wavelength accuracy is maintained.

Measurement Measurement Versatility

The ColorQuest XE permits color measurement of transparent, translucent and opaque samples. Solid opaque or translucent samples are easily positioned and supported at the reflectance port with the ergonomically designed sample clamp. A quick release button allows you to adjust and set the clamp position. The clamp pulls down a full 180° , and can be pulled out in small steps or removed entirely to accommodate thick samples. For transmission measurement, the sphere geometry virtually eliminates errors introduced by sample turbidity and haze. The large transmission compartment of the ColorQuest XE makes measurement easy. The spacious compartment is open on three sides and has access from either side and from the top. It accommodates thin films, sheets, solids such as performs and transmission cells with path lengths up to 80mm. Samples can be positioned to make regular and total transmission measurements. Total transmission is the most precise way to measure transmitted colors as the effects of sample haze and turbidity on measurement precision are minimized.

Automated Specular Included/Excluded

A motorized port door permits measurement with the specular component included to measure reflected color without the effect of gloss or texture. The specular exclusion mode is used to measure color including the effects of gloss and texture. The multimode function permits automated specular included and excluded measurements to be made with one press of a button.

Two Measurement Areas

Two reflectance measurement area sizes are provided:

- **Large Area View (LAV):** aperture is 25mm (1.00inch), with a respective optical viewing area of 19mm (0.75inch).
- **Small Area View (SAV):** enables the measurement of small sample areas and has a 9.5mm (0.38inch) aperture and a viewing area of 6.3mm (0.25inch).

The user selects the large or small viewing area and the system automatically inserts the appropriate lens. To assure that the proper viewing area has been selected, the system monitors agreement between sample port inserts, lens position, and standardization mode. A sample viewing screen assures the position of small samples at the reflectance port.

For more information, please contact HunterLab at 703-471-6870, sales@hunterlab.com or visit www.hunterlab.com