

elcometer® 6065-1 8200 Benchtop Spectrophotometer

Economical high performance benchtop spectrophotometer for use in the laboratory.



- 400 nm UV and illuminant A simulation exclusion filters
- Repeatability (white) $0.02\Delta E^*$ average
- Inter-instrument agreement: $0.15 \Delta E^*$ avg. (19.0 mm aperture); $0.35 \Delta E^*$ max (13-BCRA tiles)

See also the **Elcometer 6065/2 8400 Benchtop Spectrophotometer**

Features

Accurate sample positioning via image capture – save time and eliminate the need for remeasuring

The Premier 8000 Series is the first benchtop spectrophotometer line to introduce built-in image capture technology. This innovative capability lets you capture an image of a sample digitally and view and verify it on your computer monitor before measuring. X-Rite has a patent pending on this technology.

Horizontal and Vertical Positioning

This benchtop spectrophotometer is built to work in two positions – vertical and horizontal. In its standard, front-loading position, you can present and measure samples in vertical orientation. In its top-loading position, you can present samples such as powders and liquids horizontally, on the aperture.

Easy-access Transmission Measurement Chamber – Achieve maximum flexibility

The instrument has an extra-wide transmission chamber to accommodate larger samples, including various sized sample holders and cuvettes. In addition, the unit is capable of both direct and total transmission measurement. Whether you're working with transparent plastics, glass, dyes, petroleum or other liquids, you'll find it easy to get precise, accurate measurements of transmitted and absorbed light – without time consuming adjustments.

Inter-instrument Agreement – Share colour data across the supply chain

The Premier 8400 model complements all X-Rite industrial colour measurement solution. It provides excellent inter-instrument agreement with X-Rite portable sphere instruments. This allows you to share colour data throughout your enterprise – from lab to lab or lab to production floor. For a global corporate standard solution, choose the Premier 8400.

User Selectable Illumination Filters – Attain maximum flexibility

UV exclusion filters (400nm and 420nm) and Illuminant A simulation filters are standard on the 8400 (only the 400nm filter is standard on the 8200). UV exclusion filtration identifies the presence of fluorescent materials, while Illuminant A simulation filters ensure agreement on fluorescent samples with X-Rite portable spectrophotometers.

Durable, Maintenance Free Spectralon® Sphere – Save on maintenance, improve measurement capability

This is the only benchtop spectrophotometer whose sphere interior is made of machined Spectralon. Patented by X-Rite, Spectralon is a rugged, scientific-grade reflectance material – not a coating. It won't corrode, flake, peel or yellow with age, and it eliminates the need for costly, time-consuming recoating. Spectralon also offers the highest level of reflectance available, maximising measurement results.

Versatile Sample Holder – Appreciate the convenience

The sample holder offers a number of intelligent features to make your job easier:

- Dampening Action: Controlled closing action protects the sample and the instrument.
- Adjustable Sample Alignment Platform: Provides support that helps you place repetitive samples consistently.
- Detent Lever: Allows you to prop the holder open, if necessary

Internal and External Protection – Prevent costly contamination

The instrument has built-in protection from contamination. An optically pure glass plate shields the lamp from damage. And a second, optional protection plate is available to guard against spills when the instrument is in horizontal position.

USB Interface- Enjoy the convenience

This is the first benchtop with a USB interface to the software, providing plug-and-play convenience.

Auto UV Calibration for Fluorescence - Save setup time and eliminate errors

X-Rite software allows you to include automatic UV calibration points for measuring fluorescence. This timesaving feature is valuable for industries that control fluorescence.



Multiple Aperture Accommodation - Achieve exceptional accuracy

The Premier 8000 Series gives you the flexibility to choose from three view aperture sizes with their corresponding illumination spot sizes. This allows you to match the aperture to the sample size, maximising your accuracy in fewer measurements. You'll especially like this feature when measuring several different sized samples.

User-defined Instrument Configurations - Save time each time you measure

X-RiteColour® Master Software - which manages both quality assurance and colour formulation - controls all premier 8000 Series functions, so there's no need to interact with an instrument keypad. The software lets you save and store frequently used instrument configurations for quick selection. This timesaving feature allows you to measure samples under various settings. It is also valuable for companies whose instruments are used by multiple people.

Technical Specifications

	Elcometer 6065/1 (Mid-Range Unit)
Spectrophotometer	Horizontal and Vertical
Geometry	d/8°
Sphere Diameter	152.4mm/6" (Spectralon®)
Specular Component	Included / excluded
Detector	Photodiode array with holographic grating (x2)
Light Source	Pulsed Xenon
Photometric Range	0 – 200%
Spectral Range	360 – 740nm
Wavelength Interval	10nm
Reflectance Resolution	0.00%
Inter-Instrument Agreement	0.15 ΔE^* average (19mm aperture) 0.35 ΔE^* maximum (13-BCRA tiles)
Repeatability (white)	0.02 ΔE^*
Status Indicator	LED
Measurement Time	Approximately 2 seconds
Weight	47lbs
Software Interface	USB
Transmission Measurement	Direct and Total
Fluorescent Measurement	Auto UV Calibration
UV Exclusion Filtration	400nm
View Aperture Size	4.0 / 8.0 / 19.0mm
Illumination Spot Size	6.5 / 12.7 / 25.4mm
Required Computer	IBM compatible
Required Software	X-RiteColor® Master
Sample Holder	Dampening, with adjustable sample alignment platform
Sample Positioning	Computer imaging with physical reticle
Sphere Protection	Internal sphere protection plus optional cover for horizontal sample presentation
Power	110V 50/60Hz : 230V 50/60Hz
Environment	Operating Temperature 10° to 40°C 85% RH non-condensing

Part Numbers

Model	Description	Part Number
Elcometer 6065/1	XRITE X-RiteColor Premier 8200	K0006065M001

