



Precise Measurement. Professional Testing.

Haze Meter

Precise measurement, professional testing
Total transmittance + haze + clarity – one measurement

The KS1210 Haze Meter is a professional instrument for measuring haze, total transmittance, and clarity of materials such as glass, plastics, films, and displays. It supports dual measurement modes: ASTM D1003 non-compensation method and ISO 13468 compensation method, meeting the testing requirements of different standard systems with one instrument.



Full coverage of authoritative standards – results recognized worldwide

Total transmittance + haze + clarity – three core parameters output simultaneously with a resolution of 0.01 units, doubling efficiency.

1. Total Transmittance, Haze, and Clarity – One Synchronous Output

A single measurement simultaneously provides total transmittance, haze, and clarity. Both transmittance and haze resolutions reach 0.01 unit.



2. Dual-Standard Compatibility – One-Click Flexible Switching

Built-in ASTM D1003 non-compensation method and ISO 13468 compensation method. Users can switch as needed to meet testing requirements of different industry standards.



3. Extra-Large Sample Space for Flexible Measurement of Irregular Materials

Open measurement structure supports both vertical and horizontal placement. Maximum sample thickness up to 105 mm, allowing direct measurement of large-size panels, film rolls, and liquid cuvettes without destructive cutting.



4. Massive Storage & Smart Interaction – Worry-Free Data Management

Supports local storage of 5,000 standard samples and 20,000 test samples. Equipped with USB, Bluetooth, and printer serial port. Can connect to an external printer or PC quality control software for convenient traceability and analysis.

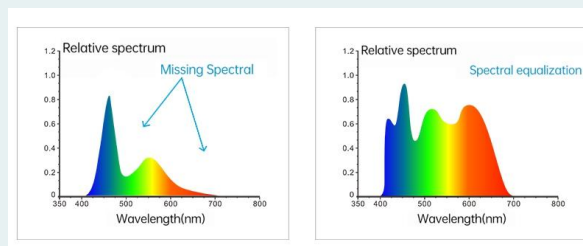


5. Full Coverage of Authoritative Standards – Compliant and Reliable Results

Fully complies with ASTM D1003/1044, ISO 13468/14782, GB/T 2410, JIS K7105/K7361/K7136, and other international and domestic standards.

6. Professional Optical Hardware Architecture – Accurate and Anti-Interference Measurement

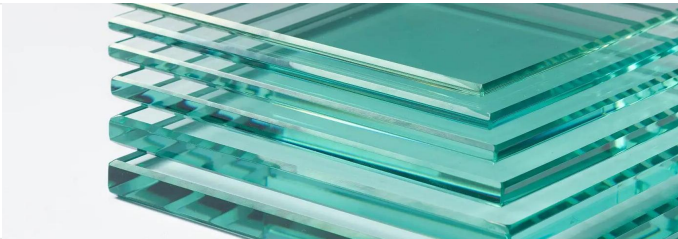
Uses 400–700 nm combined LED light source, $\Phi 154$ mm high-precision integrating sphere, and nano-integrated spectral device, paired with a dual-row 18-set silicon photodiode array sensor. Ensures balanced optical sampling, sensitive signal acquisition, and long-term measurement stability.



APPLICATION FIELDS

Glass Processing

KS1210 is widely used for haze and transmittance testing of transparent glass products such as architectural glass, automotive glass, and photovoltaic glass. High-precision measurement ensures the optical performance of glass meets industry standards, helping companies control product quality and enhance competitiveness.



Plastic Processing

Suitable for optical performance testing of various transparent plastic sheets, plates, and products. Whether PC, PMMA, PET, or other transparent plastic materials, KS1210 provides accurate haze and transmittance data to support both R&D and quality control.



Film Manufacturing

For products such as optoelectronic films, packaging films, and functional films, KS1210 offers fast and accurate haze measurement. 1.5-second rapid measurement combined with large storage capacity meets the high-frequency quality inspection demands of film production lines.



Display Processing

In the manufacturing of touch screens, LCD modules, OLED panels, and other displays, KS1210 is used to test the optical performance of key materials such as transparent conductive films, polarizers, and cover glass, ensuring that display performance meets design standards.



Packaging Industry

Used for haze testing of transparent or translucent packaging materials (e.g., plastic bottles, composite films, stretch films) in food, pharmaceutical, and cosmetic packaging. Ensures good transparency and appearance quality, meeting both food safety and consumer experience requirements.



OPTIONAL ACCESSORIES

Product Name	Material Code	Image	Function
Test Fixtures (Cuvette, Thick Plate, and Film Fixtures)	/	 (Cuvette Fixture)	Conveniently fixes samples onto the instrument for measurement.
Micro Printer	1.609.01.0020		Portable design allows printing of various measurement parameters without connecting to a computer.
Standard Haze Plates	/		Facilitates haze value transfer and self-calibration for haze meter measurements.
Foot Switch	2.002.53.0006		Enables hands-free operation, improving efficiency and safety.

PRODUCT SPECIFICATIONS

Product Model	KS1210 Haze Meter
Geometry	Transmission: 0/D (parallel light illumination, diffuse reception);
Meet The Criteria	ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JJF 1303-2011, CIE 15.2, GB/T 3978, ASTM E308, JIS K7105, JIS K7361, JIS K 7136
Features	The instrument can easily perform ASTM D1003 non-compensation method and ISO 13468 compensation method for total transmittance and haze tests.Open measurement area, supports both vertical and horizontal testing. Widely used for transmittance and haze testing in glass processing, plastic processing, film manufacturing, display processing, packaging industry, etc.
Integrating sphere size	Φ154mm
Light Source	400—700 nm combined LED light source
Spectrophotometric Mode	Nano-integrated spectral device
Sensor	Silicon photodiode array (dual-row, 18 sets)
Wavelength Range	400~700nm
Wavelength Interval	10nm
Half Bandwidth	10 nm
Transmittance Measurement Range	0—100%
Measurement Aperture	Φ20 mm / Φ15 mm / Φ8 mm (single aperture selected)
Sample Size	Thickness < 105 mm
Color Space	/
Color Difference Formulas	/
Other chromaticity index	Haze (ASTM D1003/1044, ISO 13468), Transmittance T (ISO), Transmittance T (ASTM), Clarity
Observer Angle	/
Illuminant	/
Displayed Data	Pass/Fail results
Measuring Time	Approx. 1.5 s
Haze Resolution	0.01 units
Haze Repeatability	For Φ20 mm aperture: less than 0.028 (standard deviation of 30 measurements of a standard haze plate with haze approx. 30, taken at 5 s intervals after warm-up and calibration)
Transmittance Resolution	0.01 units
Transmittance Accuracy	Better than ±1%
Transmittance Repeatability	For Φ20 mm aperture: <0.03 (after warm-up and calibration, standard deviation of 30 measurements of a standard haze plate with haze approx. 30, at 5 s intervals)
Color Difference Repeatability	/
Platinum-Cobalt Resolution	/
Platinum-Cobalt Accuracy	/
Platinum-Cobalt Range	/
Turbidity Range	/
Dimensions	487 × 260 × 298 mm (L × W × H)
Weight	Approx. 8.0 kg
Power Supply	24 V DC, 3 A power adapter
Light Source Lifespan	5 years or >3 million measurements
Display	TFT true color, 7-inch capacitive touchscreen
Interfaces	USB, serial print port, Bluetooth
Data Storage	5,000 standard samples, 30,000 test samples
Languages	Simplified Chinese, Traditional Chinese, English
Operating Temperature Range	0—40°C (32—104°F)
Storage Temperature Range	—20—50°C (—4—122°F)
Standard Accessories	Power adapter, user manual, quality management software (download website: http://www.3nh.com/en/client_en_14.html), data cable, 0% calibration box, measurement aperture
Optional Accessories	Micro printer, test fixtures, standard haze plates, foot switch