



<0.03

Transmittance
Repeatability

25

standard observation
light sources

ISO & ASTM

Dual-Mode
Compatibility

SEMI-TRANSPARENT NO LONGER 'BLURRY', MAKING QUALITY CONTROL EVIDENCE-BASED

The preferred device for basic quality control of general transparent materials.

KS1300 Color Haze Meter

Ks1300 Color Haze Meter is a spectrophotometric haze meter specifically designed for color and haze measurement of transmission samples. It adopts transmission 0/D optical geometry and nano-integrated spectral technology to precisely capture haze, transmittance, color difference, whiteness, yellowness, platinum-cobalt index, turbidity, and other parameters of transparent and semi-transparent materials such as glass, plastics, films, and liquids. It can also display transmittance spectra, chromaticity diagrams, and various colorimetric data.

One measurement reveals all for transparent materials, eliminating visual guesswork.

Accurately captures haze and transmittance — reliable data you can trust.



Ks1300 Color Haze Meter features a 7-inch TFT true-color capacitive touchscreen for simple and convenient operation. It adopts an open measurement area, supporting both vertical and horizontal testing, and can measure samples up to 170mm in thickness. It is equipped with optional single apertures of $\Phi 20\text{mm}$, $\Phi 15\text{mm}$, and $\Phi 8\text{mm}$ to adapt to different sample sizes. The instrument comes with quality management software and supports USB, Bluetooth, and other interfaces for data storage, export, and report printing. It is widely used in industries such as glass, plastics, display processing, packaging, and liquid pharmaceutical analysis, making it the preferred device for basic quality control of general transparent materials.

KEY FEATURES

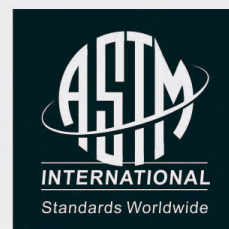
I. Dual-Standard Compatibility – Simultaneously Supports ASTM and ISO Standards

Dual Measurement Methods: Compatible with both ASTM D1003 (non-compensation method) and ISO 13468 (compensation method) to meet the testing standard requirements of different industries.

Compliance with Multiple Standards: Conforms to 12 domestic and international standards including ASTM D1003/1044, ISO 13468/14782, GB/T 2410, JJF 1303-2011, and CIE 15.2.



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II. Multi-Parameter Full-Range Measurement

Measures color difference, haze, transmittance, transmittance spectrum curve, and liquid/ pharmaceutical color.

For various transparent and semi-transparent materials such as plastics, glass, films, displays, packaging, and liquid pharmaceuticals, it provides one-stop measurement of haze, total transmittance, color difference, yellowness, whiteness, absorbance, platinum-cobalt index, Gardner index, CMYK, Tint (ASTM E313-00), metamerism index MI, turbidity, transmittance spectrum curve, and liquid color.

Professional Transmittance Curve — Accurately presents the optical performance of materials.

The measurement results display the 400–700nm full-band transmittance curve of the transmission sample, synchronously outputting precise colorimetric data, allowing comprehensive evaluation of material optical properties based on transmittance performance.

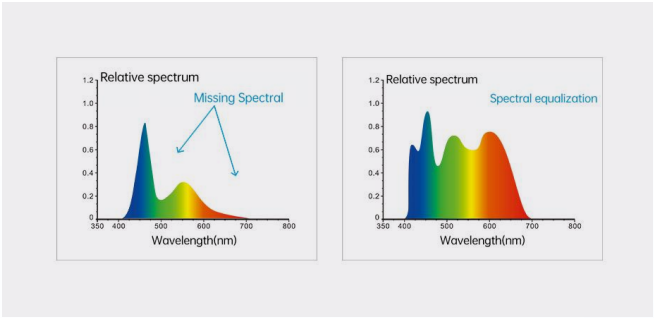
III. Full-Band Spectral Hardware Configuration – Accuracy Comparable to Imported Brands

Optical System Configuration

Illumination Source: 400–700nm combined LED light source covering the full visible spectrum.

Spectrophotometry Method: Nano–integrated spectral device ensuring spectral measurement accuracy.

Sensor: Dual–row 18–set silicon photodiode array for high–resolution data acquisition.



Excellent Measurement Repeatability

The instrument offers good repeatability: haze resolution of 0.01 units, haze repeatability ≤ 0.03 ($\Phi 20\text{mm}$ aperture), transmittance repeatability ≤ 0.03 , and color difference repeatability ≤ 0.03 , comparable to imported brands.



IV. Rich Colorimetric Analysis – Adapts to Industry-Specific Color Standards

Multiple Color Spaces: Supports 9 color spaces including CIE LAB, XYZ, Yxy, LCh, s–RGB, βxy , CIE LUV, Munsell, and HunterLab.

Comprehensive Color Difference Formulas: Supports ΔE_{ab} , ΔE_{94} , ΔE_{cmc} (2:1), ΔE_{cmc} (1:1), ΔE_{00} , ΔE_{uv} , and ΔE^*CH .

Specialized Ranges: Platinum–cobalt color range 0–1000 with resolution 0.01; turbidity range 0–1000 NTU.

V. Open Measurement Area – Efficient Adaptation to Multiple Scenarios



VI. Large-Screen Smart Operation + PC Management Software – Intuitive and Convenient Data Display

Control System: 7-inch TFT true-color capacitive touchscreen, buttonless design for user-friendly interaction.

Data Display: Simultaneously presents spectral graph, colorimetric values, color difference values/graph, chromaticity diagram, color simulation, and pass/fail results — easy for beginners to interpret.



PC Software: The instrument comes with PC-based quality management software suitable for optical and appearance quality monitoring and color data management across various industries. It can be connected via USB or Bluetooth for online measurement, supports data export, and allows test report printing.

- Data Printing
- Data Transfer
- Data Analysis
- Data Management

APPLICATION FIELDS

The KS1300 Color Haze Meter is widely used in glass processing, plastic processing, film manufacturing, display panel processing, packaging industry, liquid pharmaceutical analysis, and other fields. It is suitable for optical performance testing of transparent and semi-transparent materials, including transmittance, haze, colorimetry, etc. It is an ideal choice for laboratory quality control and online process inspection.



OPTIONAL ACCESSORIES

Product Name	Material Code	Image	Function
Test Fixtures (Cuvette,Thick Plate, and Film Fixtures)	2.006.01.0221	 (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	KS1300 Color Haze Meter
Geometry	Transmission: 0/D (parallel light illumination, diffuse reception);
Meet The Criteria	ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JF 1303–2011, CIE 15.2, GB/T 3978, ASTM E308, JIS K7105, JIS K7361, JIS K 7136
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 less than 170 mm
Color Space	CIE LAB, XYZ, Yxy, LCh, sRGB, βxy, CIE LUV, Munsell, HunterLab
Color Difference Formulas	ΔEab, ΔE94, ΔEcmc (2:1), ΔEcmc (1:1), ΔE00, ΔEuv, ΔE*CH
Other chromaticity index	Haze (ASTM D1003/1044, ISO 13468), Transmittance T (ISO), Transmittance T (ASTM), WI (ASTM E313, CIE/ISO, AATCC, Hunter, Taube, Berger, Stensby),YI (ASTM D1925, ASTM 313), Absorbance,Platinum—Cobalt Index, Gardner Index, CMYK, Tint (ASTM E313—00), Metamerism Index MI, Turbidity
Observer Angle	2°/10°
Illuminant	D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, DLF, TL83, TL84, TPL5, U30, NBF
Displayed Data	Spectral graph, sample colorimetric values, color difference values/graph, chromaticity diagram, color simulation, pass/fail results
Measuring Time	Approx. 1.5 s
Haze Resolution	0.01 units
Haze Repeatability	For Φ20 mm aperture: less than 0.03 (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: less than 0.03 (standard deviation of 30 measurements of a standard haze plate with haze approx. 30, taken at 5 s intervals after warm—up and calibration)
Color Difference Repeatability	For Φ20 mm aperture: less than 0.03 (standard deviation of 30 measurements of white glass taken at 5 s intervals after warm—up and calibration)
Platinum—Cobalt Resolution	0.01
Platinum—Cobalt Accuracy	≤ ±(5%H + 1), where H is the standard value
Platinum—Cobalt Range	0—1000
Turbidity Range	0—1000 NTU
Dimensions	290X211X511 mm (L × W × H)
Weight	Approx. 7.6 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, 20,000 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 from official website), data cable, 0% calibration box, measurement aperture
Optional Accessories	Micro printer, test fixtures, standard haze plates, foot switch