BioLAB

PRODUCT CATALOG

# HAZE METER

CE ISO9001 CERTIFIED

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# HAZE METER BJH1M1 TO BJH1M5

BENCHTOP HAZEMETER

Haze meter can easily achieve ASTM D1003 noncompensation method, full light transmittance,haze test.Open sample bin can be vertically and horizontally tested to accommodate more samples to be tested.The haze meter uses a PDF array detector to meet the CIE V(λ)2 degree visual response. The compensation method can be used to measure the light transmittance and haze with high precision and repeatability.

Haze Meter BJH1M1
Double standard ISO & ASTM:
Able to meet the test standard requirements of different users, in accordance with ASTM D1003/1044,GB/T 2410,JJF 13032011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136
Easy to operate, faster and more accurate measurement:
Haze meter is equipped with a largesize touch screen for easy operation.With a PD array detector, CIE V(λ)2 degree visual response enables high precision and repeatable transmittance and haze measurements.USB data output device for docking with laboratory systems.
Dynamic measurement:
Independent light source detector and temperature sensor, constantly monitor lig

## SPECIFICATIONS

| Model | BJH1M1 | BJH1M2 |
|---|---|---|
| Old Model | BMET-1201 | BMET-1202 |
| Optical Geometry | Transmission 0/D, Parallel light illumination, diffuse reflection reception | |
| Standards compliant | ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JJF 13032011, CIE 15.2, GB/T 3978, ASTM E308, JIS K7105, JIS K7361, JIS K7136 | ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JJF 13032011, CIE 15.2, JIS K7105, JIS K7361, JIS K7136 |
| Integrating Sphere Size | Φ154 mm | |
| Illuminant (lamp) | 400-700 nm Combined LED Lamp (wavelength can be customized) | 400-700 nm Combined LED Lamp |
| Spectral mode | ConcaveGrating | / |
| Sensor | 256 image element double array CMOS image sensor | PD array detector, meeting CIE V(λ) 2° visual response |
| Measurement Wavelength Range | 400-700 nm (customizable) | / |
| Wavelength Pitch | 10 nm | / |
| SemiBandwidth | 10 nm | / |
| Measuring range of transmittance | 0-100% | |
| Measuring Aperture | Φ20 mm / Φ15 mm / Φ8 mm / Φ4 mm (select a single diameter) | |
| Sample Thickness | Less than 170 mm | |
| Color Space | CIE LAB, XYZ, Yxy, LCh, sRGB, βxy | / |
| Color Difference Formula | ΔE*ab, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*00 | / |
| Other Colorimetric Data | Haze (ASTM D1003/1044, ISO 13468), transmittance T(ISO), transmittance T(ASTM), WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), Absorbance, Cobalt platinum index, Gardner index | Haze (ASTM D1003/1044, ISO 13468), transmittance T(ISO), transmittance T(ASTM) |
| Observer | 2°/10° | 2° |
| Illuminant (conditions) | D65, A, C, D50, D55, D75, F1-F12, CWF, DL, TL83, TL84, TPL5, U30 | D65, A, C |
| Displayed Data | Spectral graph, sample chromaticity value, color difference value/graph, chromaticity graph, color simulation, pass/fail result | Pass/fail result |

| | | |
|---|---|---|
| Measurement Time | about 1.5 s | |
| Measurement Accuracy | 0.01 | |
| Repeatability | Φ20 mm caliber: < 0.08 (after warmup and correction, SD of haze standard sheet =30 tested at 5 s intervals) | |
| Interinstrument agreement | Φ20 mm caliber: < 0.4 (after warmup and correction, SD of haze standard film vs reference at 5 s intervals) | |
| Size | 290 (L) x 211 (W) x 511 (H) mm | |
| Weight | About 7.6 kg | |
| Power / Battery Performance | DC 24 V, 3 A power adapter | |
| Lamp Life | 5 years, >3,000,000 measurements | |
| Display | 7inch TFT capacitive touch screen | |
| Interface | USB, Printing Port, Bluetooth | USB, Printing Port |
| Data Storage | Standard: 5,000; Sample: 20,000 | Standard: 1,000; Sample: 20,000 |
| Language | Chinese, Traditional Chinese, English | |
| Operating Environment | 0-40 °C (32-104 °F) | |
| Storage Environment | 20-50 °C (4-122 °F) | |
| Standard Accessories | Power adapter, manual, quality management software (download from official website), data cable, 0% calibration box, measuring caliber | |
| Optional Accessories | Mini printer, test fixture, standard haze film, foot switch | |
| Alt Name | Benchtop HazeMeter | |

| Model | BJH1M3 | BJH1M4 | BJH1M5 |
|---|---|---|---|
| Old Model | BMET-1203 | BMET-1204 | BMET-1205 |
| Features | Double caliber, with compensation port | Photoelectric integration, no compensation port | |
| Optical Geometry | Transmission 0/D, Parallel light illumination, diffuse reflection reception | | |
| Standards compliant | ASTM D1003/1044, ISO 14782, GB/T 2410, JJF 13032011, CIE 15.2, JIS K7105, JIS K7361, JIS K7136 | | ASTM D1003/1044, GB/T 2410, JJF 13032011, CIE 15.2, JIS K7105, JIS K7361, JIS K7136 |
| Integrating Sphere Size | Φ154 mm | | |
| Illuminant (lamp) | 400-700 nm Combined LED Lamp | | |
| Spectral mode | / | | |
| Sensor | PD array detector, meeting CIE V(λ) 2° visual response | | |
| Measurement Wavelength Range | / | | |
| Wavelength Pitch | / | | |
| SemiBandwidth | / | | |
| Measuring range of transmittance | 0-100% | | |
| Measuring Aperture | Φ20 mm / Φ8 mm (Double caliber) | Φ20 mm / Φ15 mm / Φ8 mm / Φ4 mm (select a single diameter) | |
| Sample Thickness | Less than 170 mm | | |
| Color Space | / | | |
| Color Difference Formula | / | | |
| Other Colorimetric Data | Haze (ASTM D1003/1044, ISO 13468), Transmittance T(ASTM) | | Haze (ASTM D1003/1044), Transmittance T(ASTM) |
| Observer | 2° | | |
| Illuminant (conditions) | D65, A, C | | |
| Displayed Data | Pass/Fail result | | |
| Measurement Time | about 1.5 s | | |
| Measurement Accuracy | 0.01 | | 0.1 |

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|---|---|---|---|
| Repeatability | Φ20 mm caliber, 0.05 (after the instrument is warmed up and corrected, the standard deviation value of the standard haze sheet with a haze of about 30 is tested at an interval of 5s) | Φ20 mm caliber, 0.08 (after the instrument is warmed up and corrected, the standard deviation value of the standard haze sheet with a haze of about 30 is tested at an interval of 5s) | Φ20 mm caliber, 0.1 (after the instrument is warmed up and corrected, the standard deviation value of the standard haze sheet with a haze of about 30 is tested at an interval of 5s) |
| Interinstrument agreement | Φ20 mm caliber, < 0.4 (after warmup/correction; SD of haze sheet ~30 tested at 5 s intervals) | | |
| Size (LxWxH) | 290 x 211 x 511 mm | | |
| Weight | About 7.6 kg | | |
| Power / Battery | DC 24 V, 3 A Power Adapter | | |
| Lamp Life | 5 years, >3,000,000 measurements | | |
| Display | 7inch TFT Capacitive Touch Screen | | |
| Interface | USB, Printing Port | | |
| Data Storage | Standard: 1,000; Sample: 20,000 | | Standard: 1,000; Sample: 10,000 |
| Language | Chinese, Traditional Chinese, English | | |
| Operating Environment | 0-40 °C (32-104 °F) | | |
| Storage Environment | 20-50 °C (4-122 °F) | | |
| Standard Accessories | Power adapter, manual, quality management software (download from official website), data cable, 0% calibration box, measuring caliber | Power adapter, manual, quality management software (download), data cable, 0% calibration box, measuring caliber | |
| Optional Accessories | Mini printer, test fixture, standard haze film, foot switch | | |
| Alt Name | Benchtop HazeMeter | | |

BJH1M1 BJH1M2

BJH1M1 BJH1M2

BJH1M1 BJH1M2

BJH1M1 BJH1M2

BJH1M3 BJH1M4 BJH1M5

BJH1M3 BJH1M4 BJH1M5

## FEATURES BJH1M1 BJH1M2

Double standard ISO & ASTM:
Able to meet the test standard requirements of different users, in accordance with ASTM D1003/1044,GB/T 2410,JJF 13032011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136
Easy to operate, faster and more accurate measurement:
Haze meter is equipped with a largesize touch screen for easy operation.With a PD array detector, CIE V(λ)2 degree visual response enables high precision and repeatable transmittance and haze measurements.USB data output device for docking with laboratory systems.

Dynamic measurement:
Independent light source detector and temperature sensor, constantly monitor light source and environmental change, ensure the reliability of test data.
Easy to measure and widely applicable to samples:
Open measuring area, vertical and horizontal testing, suitable for more samples to be tested.
Quality control software:
It provides powerful software for measuring and analyzing haze and light transmittance, which is suitable for quality monitoring and tabulated management of haze and light transmittance data in various industries.The management of users will be digitized at the PC end, the difference of haze and light transmittance will be compared, and the test report form will be generated to facilitate customer customization and management.

## FEATURES BJH1M3 BJH1M4 BJH1M5

Double standard ISO & ASTM:
Able to meet the test standard requirements of different users, in accordance with ASTM D1003/1044,GB/T 2410,JJF 13032011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136
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Compensation port:
The instrument can easily implement ASTM D1003 noncompensation method, ISO 13468 compensation method, total transmittance and haze test.

Multiple measurement methods:
The hardware configuration is high, the measurement area is open, and the vertical and horizontal tests can be performed.

Auxiliary measuring tool:
Foot switch can help you make measurements easier and faster

## APPLICATIONS

The color haze meter is widely used in glass processing, plastic processing, film, display processing, packaging industry, liquid chemical analysis, etc.

Protective Film

Glass

Liquid

Film

Transparent Plastic

Laboratory

# HAZE METER BJH1L1 BJH1L2 BJH1L3

BENCHTOP COLOR HAZE METER

Color Haze Meter has full light transmittance, haze test, clarity test.With the precision concave grating and 256 pixel CMOS detector, it can accurately collect the transmittance curve of the transmitted sample, accurately output the various chromaticity data of the transmitted sample, and realize the high precision and repeatable measurement of the transmittance, haze and chromaticity data.

Multiple observation light sources:
The color haze meter provides CIE LAB,XYZ,Yxy,LCh,sRGB,βxy color space, as well as D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, DLF, TL83, TL84, TPL5, U30 observation light sources, which can meet the special measurement needs under different measurement conditions.
Easy operation and faster and more accurate measurement:
The color Haze Meter is equipped with a largesize touch control screen, which is easy and convenient to operate. The 256 pixel dual array CMOS image sensor can realize high accuracy and repeatable transmittance and haze measurement. USB data output unit that interfaces with the laboratory system.
Compensation port to make the measurement data more accurate:
Meet the standard of ASTM D1003 noncompensation method, ISO 13468 compensation m

## SPECIFICATIONS

| Model | BJH1L1 | BJH1L2 | BJH1L3 |
|---|---|---|---|
| Old Model | BMET-1206 | BMET-1207 | BMET-1208 |
| Features | Spectroscopy, with compensation port | | Photoelectric integration, with compensation port |
| Optical Geometry | Transmittance: 0/D (0° viewing angle, diffused illumination) | | |
| Standards Compliant | ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JJF 13032011, CIE 15.2, GB/T 3978, ASTM E308, JIS K7105, JIS K7361, JIS K7136 | | ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JJF 13032011, CIE 15.2, JIS K7105, JIS K7361, JIS K7136 |
| Integrating Sphere Size | Φ154 mm | | |
| Illuminant | 400-700 nm Combined LED Lamp (Wavelength can be customized) | | 400-700 nm Combined LED Lamp |
| Spectral Mode | Concave-Grating | | / |
| Sensor | 256-image-element double array CMOS image sensor | | PD array detector, meeting CIE V(λ) 2-degree visual response |
| Measurement Wavelength Range | 400-700 nm (Wavelength can be customized) | | / |
| Wavelength Pitch | 10 nm | | / |
| Semi-Bandwidth | 10 nm | | / |
| Measuring Range of Transmittance | 0-100% | | |
| Measuring Aperture | Φ20 mm / Φ15 mm / Φ8 mm / Φ4 mm (select a single diameter) | | |
| Sample Thickness | Less than 105 mm | | |

| | | | |
|---|---|---|---|
| Color Space | CIE LAB, XYZ, Yxy, LCh, s-RGB, βxy | | / |
| Color Difference Formula | ΔE*ab, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*00 | | / |
| Other Colorimetric Data | Haze (ASTM D1003/1044, ISO 13468), transmittance T(ISO), transmittance T(ASTM), clarity, WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), absorbance, cobalt-platinum index, Gardner index | | Haze (ASTM D1003/1044, ISO 13468), transmittance T(ISO), transmittance T(ASTM) |
| Observer | 2° / 10° | | |
| Illuminants | D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, DLF, TL83, TL84, TPL5, U30 | | D65, A, C |
| Displayed Data | Spectral graph; sample chromaticity value; color-difference value/graph; chromaticity graph; color simulation; pass/fail result | | Pass/fail result |
| Measurement Time | About 1.5 s | | |
| Measurement Accuracy | 0.01 | | |
| Repeatability | Φ20 mm aperture: 0.05 (after warm-up and corrected; SD of a ~30 haze standard sheet tested at 5 s interval) | | |
| Inter-Instrument Agreement | Φ20 mm aperture: < 0.4 (after warm-up and corrected; SD between haze standard film and reference value at 5 s interval) | | |
| Size (LxWxH) | 487 x 260 x 298 mm | | |
| Weight | About 8 kg | | |
| Battery / Power | DC 24 V, 3 A power adapter | | |
| Lamp Life | 5 years; >3,000,000 times measurements | | |
| Display | 7-inch TFT capacitive touch screen | | |
| Interface | USB, Printing Port, Bluetooth | | USB, Printing Port |
| Data Storage | Standard: 5,000; Sample: 30,000 | Standard: 5,000; Sample: 20,000 | Standard: 1,000; Sample: 20,000 |
| Language | Chinese; Traditional Chinese; English | | |
| Operating Environment | 0-40 °C (32-104 °F) | | |
| Storage Environment | 20-50 °C (4-122 °F) | | |
| Standard Accessories | Power adapter; manual; quality management software (download from official website); data cable; 0% calibration box; measuring caliber | | |
| Optional Accessories | Mini printer; test fixture; standard haze film; foot switch | | |
| Alt Name | Benchtop Color Haze Meter | | |

## FEATURES

Multiple observation light sources:

The color haze meter provides CIE LAB,XYZ,Yxy,LCh,sRGB,βxy color space, as well as D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, DLF, TL83, TL84, TPL5, U30 observation light sources, which can meet the special measurement needs under different measurement conditions.

Easy operation and faster and more accurate measurement:

The color Haze Meter is equipped with a largesize touch control screen, which is easy and convenient to operate. The 256 pixel dual array CMOS image sensor can realize high accuracy and repeatable transmittance and haze measurement. USB data output unit that interfaces with the laboratory system.

Compensation port to make the measurement data more accurate:

Meet the standard of ASTM D1003 noncompensation method, ISO 13468 compensation method, it can do full light transmittance, haze test, definition test, and provide more accurate test results
Dynamic measurement:
Independent light source detector and temperature sensor to monitor the light source and environmental changes at all times to ensure reliable test data
Convenient measurement and wide sample adaptation:
Open measurement area for vertical and horizontal testing to accommodate more samples under test
Quality management software:
It provides powerful software for measuring and analyzing haze, color and light transmittance, which is suitable for quality monitoring and tabulating management of haze, light transmittance and color data in various industries. Data the management of users on the PC computer, compare the haze, transmittance and color differences, generate test report forms, facilitate customer customization and management.

Compensation port:
The instrument can easily implement ASTM D1003 noncompensation method, ISO 13468 compensation method, total transmittance, haze test, and clarity test.

Multiple measurement methods:
The hardware configuration is high, the measurement area is open, and the vertical and horizontal tests can be performed.

Auxiliary measuring tool:
A variety of measuring fixtures help you easily measure various samples.

## APPLICATIONS

The color haze meter is widely used in glass processing, plastic processing, film, display processing, packaging industry, liquid chemical analysis, etc.

Protective Film

Glass

Liquid

Film

Transparent Plastic

Laboratory

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