HAZE METERS

HAZE METERS

Haze meter is also known as Haze and Transmittance test machine. It is used to measure the amount of light scattered or diffused while passing through the transparent sample. It is capable of measuring fogging degrees in glass or films. Haze meters are crucial in evaluating transparent materials, and are used as an indicator for detecting the quality of optical films on LCDs and tablet surfaces.

LTMET107 HAZE METER

Double standard ISO & ASTM

Easy to operate, faster and more accurate measurement

Dynamic measurement

With compensation port, so that the measurement data more accurate

Easy to measure and widely applicable to samples

Quality control software

SPECIFICATIONS

Model	LTMET107-1	LTMET107-2	LTMET107-3
Optical Geometry	Transmittance: 0/D (parallel illumination, diffuse reflection receiving)		Transmittance:0/D Parallel light illumination, diffuse reflection reception
Standards compliant	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	ASTM D1003/1044,ISO 13468,ISO 14782,GB/T 2410,JJF 1303-2011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136	ASTM D1003/1044, ISO 14782,GB/T 2410, JJF 1303-2011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136
Integrating Sphere Size	Φ154mm		Φ 40mm
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	D65,A,C	
Spectral mode	Concave Grating	/	
Sensor	256 Image Element Double Array CMOS Image Sensor	The PD array detector satisfies CIE V(λ)2 degree visual response	The PD array detector, satisfies 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%		0~100%
Measurement Aperture	Φ20 mm/Φ15 mm/Φ8 mm/Φ4 mm (select single aperture)	Φ20mm/Φ15mm/Φ8mm/Φ4mm(Select a single aperture)	Φ20mm/Φ8mm double caliber
Sample thickness	less than 170 mm		
color space	CIE LAB, XYZ, Yxy, LCh, s-RGB, βxy	/	
Color Difference Formula	ΔEab, ΔE94, ΔEcmc (2:1), ΔEcmc (1:1), ΔE00	/	

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,ISO13468),Transmittance T(ISO),Transmittance T(ASTM)	Haze(ASTM D1003/1044, ISO 13468),Transmittance T(ASTM)
Observer	2° / 10°	2°	
Displayed Data	Spectral graph, sample chromativity value, color difference value/graph, chromaticity graph, color simulation, pass/fail result	Pass/fail result	
Measurement Time	About 1.5s		
Measurement accuracy	0.01		
Repeatability	Φ20 mm caliber, less than 0.08 (after the instrument is warmed up and corrected, test the standard deviation value of the standard deviation value of the standard haze sheet with a haze of about 30 is tested at an interval of 5s)		Φ20mm,within 0.05 (After the instrument is preheated and calibrated, the standard deviation between the standard haze tablet and the reference value is tested at an interval of 5s.)
Inter-instrument agreement	Φ20mm,with 0.4 (After the instrument is preheated and calibrated, the standard deviation between the standard haze tablet and the reference value is tested at an interval of 5s.)		Φ20mm,with 0.4 (After the instrument is warmed up and corrected, the standard deviation of the haze standard Haze film and the reference value is tested at an interval of 5s.)
Operating Environment	0~40°C (32~104°F)		
Storage Environment	-20~50°C (-4~122°F)		
Battery Performance	DC 24V, 3A power adapter		
Lamp life	5 years, more than 30000000 times measurement		
Display	7 inch TFT capacity, Touchscreen display		
Interface	USB, printing port, Bluetooth	USB, printing port	
Data Storage	5,000 samples, 20,000 samples	Standard 1000 pcs,sample 20000 pcs	
Language	Chinese, English, traditional Chinese		
Standard Accessories	Power adapter, user manual, quality management software (download), USB cable, 0% calibration box, measuring aperture	Power Adapter, User Guide,Quality Management Software (download from the official website),USB cable,0% calibration box, measuring aperture.	Power Adapter, User Guide,Quality Management Software (download from the official website),USB cable,0% calibration box, measuring caliber
Optional Accessory	Mini printer, Test Fixture, Standard Haze Sheet, Footswitch		Mini-printer,Test fixture, standard haze sheet, foot switch
Size	290x211x511 mm		-
Weight	About 7.6 kg		
Features	-	-	Double caliber compensation port
Dimension	-	-	290x211x511 mm

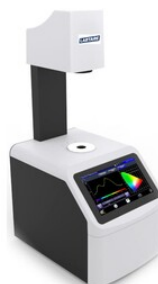| Model	LTMET107-4	LTMET107-5
Optical Geometry	Transmittance:0/D Parallel light illumination, diffuse reflection reception	
Standards compliant	ASTM D1003/1044, ISO 14782,GB/T 2410, JJF 1303-2011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136	ASTM D1003/1044,GB/T 2410,JJF 1303-2011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136
Integrating Sphere Size	Φ 40mm	
Illuminant	D65,A,C	
Spectral mode	/	

Sensor	The PD array detector, satisfies CIE V(λ)2 degree visual response	
Measurement Wavelength range	/	
Wavelength Pitch	/	
Semi-bandwidth	/	
Measuring range of transmittance	0~100%	
Measurement Aperture	Φ20mm/Φ15mm/Φ8mm/Φ4mm(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°	
Displayed Data	Pass/fail result	
Measurement Time	About 1.5s	
Measurement accuracy	0.01	0.1
Repeatability	Φ20mm,within 0.08 (After the instrument is preheated and calibrated, the standard deviation between the standard haze tablet and the reference value is tested at an interval of 5s.)	Φ20mm,within 0.1 (After the instrument is preheated and calibrated, the standard deviation between the standard haze tablet and the reference value is tested at an interval of 5s.)
Inter-instrument agreement	Φ20mm,with 0.4 (After the instrument is warmed up and corrected, the standard deviation of the haze standard Haze film and the reference value is tested at an interval of 5s.)	
Operating Environment	0~40°C (32~104°F)	
Storage Environment	-20~50°C (-4~122°F)	
Battery Performance	DC 24V, 3A power adapter	
Lamp life	5 years, more than 30000000 times measurement	
Display	7 inch TFT capacity, Touchscreen display	
Interface	USB, printing port	
Data Storage	Standard 1000 pcs,sample 20000 pcs	Standard 1000 pcs,sample 10000 pcs
Language	Chinese, English, traditional Chinese	
Standard Accessories	Power Adapter, User Guide,Quality Management Software (download from the official website),USB cable,0% calibration box, measuring caliber	
Optional Accessory	Mini-printer,Test fixture, standard haze sheet, foot switch	
Size	-	-
Weight	About 7.6 kg	
Features	Photoelectric integration, No compensation port	
Dimension	290x211x511 mm	

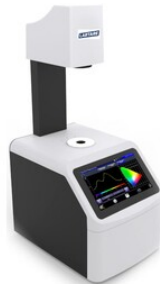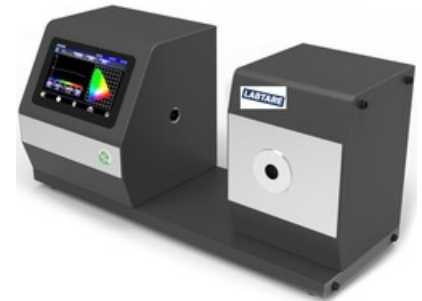LTMET107-1   LTMET107-2   LTMET107-3   LTMET107-4

LTMET107-5

LTMET107 HAZE METER

Double standard ISO & ASTM

Multiple observation light sources

Easy operation and faster and more accurate measurement

Compensation port to make the measurement data more accurate

Dynamic measurement

Convenient measurement and wide sample adaptation

Quality management software

SPECIFICATIONS

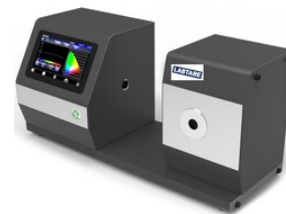| Model	LTMET107-6	LTMET107-7	LTMET107-8
Optical Geometry	Transmittance: 0/D (0-degree viewing angle diffuse illumination)		
Standards compliant	ASTM D1003/1044,ISO 13468,ISO 14782,GB/T 2410, JJF 1303-2011,CIE 15.2,GB/T 3978,ASTM E308,JIS K7105,JIS K7361,JIS K 7136		ASTM D1003/1044,ISO 13468,ISO 14782,GB/T 2410,JJF 1303-2011,CIE 15.2,JIS K7105,JIS K7361,JIS K 7136
Integrating Sphere Size	Φ 154mm		
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		D65,A,C
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 single diameter)		

Sample thickness	Less than 150 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 test, 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), 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°		
Displayed Data	Spectral graph, sample chromativity value, color difference value/graph, chromaticity graph, color simulation, pass/fail result		Pass/fail result
Measurement Time	About 1.5s		
Measurement accuracy	0.01		
Repeatability	Φ20 mm caliber, less than 0.04 (after instrument is warmed up and corrected, the standard deviation of the haze standard haze filmand the reference value is tested at an interval of 5s)		
Inter-instrument agreement	Φ20 mm caliber, less than 0.4 (after instrument is warmed up and corrected, the standard deviation of the haze standard haze filmand the reference value is tested at an interval of 5s)		
Life lamp	5 years, more than 3000000 times measurements.		
Display	7 inch TFT Capacitive Touch screen display		
interface	USB, Printing port, Bluetooth		USB, Printing port
Data Storage	Standard 5,000 samples, 30,000 samples	Standard 5,000 samples, 20,000 samples	Standard 1,000 samples, 20,000 samples
Language	Chinese,English,Traditional Chinese		
Operating Environment	0 to 40°C (32 to 104°F)		
Storage Environment	-20-50°C (-4 - 122°F)		
Battery Performance	DC 24V 3A ,power adapter		
Standard Accessories	Power adapter,manual, quality management software (download from official website), data cable, 0% calibration box, measuring caliber		
Optional Accessory	Mini printer, Test Fixture, Standard haze sheet, Foot switch		
Size	487X260X298 mm		
Weight	About 8kg		

LTMET107-6

LTMET107-7

LTMET107-8

Labtare Analytical Instruments