# YH1600 Haze Meter





## Introduction:

YH1600 Haze Meter can easily realize ASTM D1003 non-compensation method, ISO 13468 compensation method, full transmittance and fog test. Through precise concave grating and 256-pixel CMOS detector, the transmittance curve of transmitted sample can be accurately collected, various chroma data of transmitted sample can be accurately output, and high-precision and repeatable transmittance, fog and chroma data measurement can be realized.

# **Advantages of YH1600 Haze Meter**

Can meet the test standard requirements of different users; meet the standards: ASTM D1003/1044, ISO 13468, ISO 14782, GB/T 2410, JJF 1303-2011, CIE 15.2, JIS K7105, JIS K7361, JIS K 7136

## 2. Multiple observation light sources

The YH1600 colorimeter provides CIE LAB, XYZ, Yxy, LCh, s-RGB, βxy color space, as well as D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11 and F12 observation light sources, which can meet the special measurement needs under different measurement conditions.

# 3. Easy operation and faster and more accurate measurement

The YH1600 Haze Meter is equipped with a large-size 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.

#### 4. Compensation port to make the measurement data more accurate

Meet ASTM D1003 uncompensated method, ISO 13468 compensated method, full transmittance, haze test, provide more accurate test results

#### 5. 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



## 6. Convenient measurement and wide sample adaptation

Open measurement area for vertical and horizontal testing to accommodate more samples under test

## 7. Quality management software

It provides powerful software for measuring and analyzing fog, color and light transmittance, which is suitable for quality monitoring and tabulating management of fog, light transmittance and color data in various industries. Data the management of users on the PC computer, compare the fog, transmittance and color differences, generate test report forms, facilitate customer customization and management.

# **Application of YH1600 Haze Meter**

YH1600 Haze Meter is widely used in glass processing, plastic processing, film, display screen processing, packaging industry, liquid analysis and other aspects.

Product model	YH1600 Haze Meter DAGHIGH PARTO	شرکت دقیق پرتو ین کننده تجهیزات آرمایشگاهی و کنترل کیفی ۲۱–۶۶۹۳۷۲۱۴ ه
Illumination mode	Transmittance: 0/D (parallel illumination, diffuse receiving)	in accordance with
	standards: ASTM D1003/1044, ISO 13468, ISO 14782, GB/T	2410, JJF 1303-2011, CIE
	15.2, JIS K7105, JIS K7361, JIS K 7136	
Characteristic	The instrument can easily realize ASTM D1003 uncompens	ated method, ISO 13468
	compensation method, full transmittance, fog test. The ins	trument can accurately
	collect the transmittance curve of the transmitted sample,	and can accurately output
	various chroma data of the transmitted sample. High hard	ware configuration, open
	measurement area, vertical, horizontal testing. It is widely	used in glass processing,

	plastic processing, film, display screen processing, packaging industry, liquid analysis
	and other aspects.
Integrating sphere	Φ 154 mm
size	
Illumination source	400 ~ 700 nm combined LED light source (wavelength scalable customized)
Light splitting	
mode	Concave grating
Inductor	256 pixel dual array CMOS image sensor
Measuring	
wavelength range	400 ~ 700 nm (wavelength scalable customization)
Wavelength	
interval	10 nm
Half bandwidth	10 nm
Determination	
range of	0-100%
transmittance	
Measuring aperture	Φ20 mm/Φ15 mm/Φ8 mm/Φ4 mm (select single aperture)
Sample size	Thickness less than 170 mm
Color space	CIE LAB, XYZ, Yxy, LCh, s-RGB, βxy
Chromatic formula	ΔEab, ΔE94, ΔEcmc (2:1), ΔEcmc (1:1), ΔE00

Other chromaticity indicators	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		
Observer angle	2 °/10 °		
Observation light			
source	D65, A, C, D50, D55, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12		
	Spectrogram, sample chroma value, color difference/graph, color graph, color		
Display	simulation, pass/fail result		
Measurement time	About 1.5s		
Resolution of fog	0.01 unit		
	Φ20 mm aperture, less than 0.08 (after instrument preheating and correction, test		
Repeatability of	the standard nebulizer with the nebulization of about 40 at an interval of 5s for 30		
nebulization	times of standard deviation)		
Inter-stage	Φ20 mm aperture, less than 0.4 (after instrument preheating and correction, test the		
	standard deviation between the standard nebulizer of nebulization and the reference		
difference	value at an interval of 5s)		
Dimensions	Length X Width X Height = 290X211X511 mm		
Weight	Approx. 7.6 kg		
Power supply mode	24 V DC, supplied by 3A power adapter		
Illumination light			
source lifetime	> 3 million measurements in 5 years		
Display screen	TFT True Color 7 inch, Capacitive Touchscreen		
Interface	USB, Print Serial , Bluetooth		
	شرکت دقیق پرتو		



Stored Data	5,000 samples, 20,000 samples	
Language	Simplified Chinese, Traditional Chinese, English	
Operating		
Temperature	0 to 40 ° C (32 to 104 ° F)	
Range		
Storage		
Temperature	- 20 - 50 ° C (-4 - 122 ° F)	
Range		
Standard Annex	Power adapter, instruction for use, quality management software (download), data	
Standard Armex	cable, 0% calibration box, measuring caliber	
Optional	Microprinter, Test Fixture, Standard Fog Disk, Footswitch	
Accessories	imeroprinter, restricture, standard rog bisk, rootswiten	
Notes:	Subject to change without notice	