



ACS Material Equipment Series

MetriTec™ Light Transmittance Meter

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I. Product Overview

ACS Material offers a comprehensive range of light transmittance testing instruments designed to accurately measure the visible light transmittance of a wide variety of materials. These meters are essential for ensuring product consistency, quality control, and compliance with industry standards—eliminating the variability of subjective visual assessments. By providing precise and repeatable measurements, our light transmittance meters help manufacturers maintain uniformity in optical properties, making them ideal for applications in glass, film, plastics, coatings, and other transparent or translucent materials.

II. Product Features of the MetriTec™ Light Transmittance Meter Series

MetriTec™ Light transmittance Meter M110 is designed with a split-type structure, this model is ideal for testing automotive glass. Its compact, two-part design allows for easy placement on car windows, ensuring accurate measurements even in confined spaces.



MetriTec™ Light transmittance Meter M116 features a parallel optical and detachable design that specializes in regular transmission materials such as optical glass, acrylic sheets, and coated films. It provides precise transmittance readings for industries requiring high optical clarity and minimal distortion.



MetriTec™ Light transmittance Meter M155 plays a crucial role in ensuring that transparent materials meet industry standards for clarity, light transmittance, and optical performance, making it an essential tool in quality control and material development.



MetriTec™ Light transmittance Meter M117 is a precision instrument designed for measuring optical density, making it ideal for evaluating tinted glass, coated films, and lens inks. As an optical density meter (densitometer), the M117 is particularly well-suited for testing the light transmittance of opalescent translucent materials and matte surfaces, providing reliable data for both quality control and research applications.



III. Product Specification

Model/SKU #	MetriTec™ Light Transmittance Meter M110 ELLTM110	MetriTec™ Light Transmittance Meter M116 ELLTM116	MetriTec™ Light transmittance Meter M117 ELLTM117	MetriTec™ Light transmittance Meter M155 ELLTM155
Light source	380nm-760nm, conform to CIE photopic luminosity function			

Test parameters	Visible light transmittance (VLT)		Visible light transmittance (VLT) , Optical density (OD)	Haze, Transmittance, CIE Lab, LCh, Yxy, Spectral transmittance, Clarity, Turbidity, Pt-Co(Hazen)
Principle	Regular transmission		Diffuse transmission	D/0°
Application	Car windshield, window and glass	Glass, PC and other transparent materials	Lampshades, zirconia and other opalescent , translucent, frosted materials	Glass, PC, Lampshades, opalescent , translucent, frosted materials, liquid
Measurable material size	>40*40mm	Diameter>10mm	Diameter>2mm	Diameter>5mm
Accuracy	VLT: ±2%	VLT: ±1%	VLT: ±1% (0%-50%); ±2% (50%-100%) OD: ±0.02 (0-2.00OD); ±2% (2.00-6.00OD)	Haze/Clarity:±2% VLT: Better than ±1%
Resolution	VLT: 0.1%	VLT: 0.001%(0%-10%), 0.01%(10%-100%)	VLT: 0.0005% (0%-10%), 0.005% (10% -100%); OD: 0.001OD (0.00-2.00OD); 0.01OD (2.00-4.00OD); 0.1OD (4.00-6.00OD)	0.01%

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