



Introduction

Automatic oxygen transmittance tester is a professional, efficient, intelligent high-end test system, suitable for plastic film, aluminum foil plastic film, waterproof materials, metal foil and other high barrier material water vapor penetration performance.

Product Application

- **Basic application:** It is suitable for measuring the water vapor permeability of high barrier materials such as plastic film, aluminum foil plastic film, waterproof material and metal foil
- **Extensive application:** Test bottles, bags and other containers



Features

- Prepare baseline correction function to measure system error and ensure test accuracy;
- With standard film correction function, sensor calibration function;
- Monitor the test status in real time, realize all the test data curve can be repeated, and facilitate the evaluation of the test process afterwards;
- Each cavity test curve can be displayed separately, or can be displayed as a group comparison, easy to compare; The test curve has the ability of full screen display, local observation, variable ratio display, etc.
- With power outage data saving function, data sampling rate adjustable, automatic repeated test function;
- Open database system, easy to analyze data;
- Electric oxygen sensor, can measure oxygen content as low as ppb level; Pa level micro current measurement, higher measurement accuracy;
- High precision mass flowmeter, precise flow control;
- Professional piping system to ensure the cleanliness of carrier gas;
- Patented pipeline flushing technology, speed up the test speed, higher test efficiency;

Oxygen Permeability Tester Model: ADL-OPT01

- Test specimen anti-leakage sealing installation technology, enhance the sample seal;
- The test humidity can be accurately controlled, and the humidity control accuracy is not affected by changes in the laboratory environment (optional);
- Overall temperature control technology, the test chamber and pipeline overall temperature control, high temperature control accuracy;
- Whole-process monitoring, automatic recording, adjustable sampling rate, automatic repeat testing, power off automatic saving function;
- The test process can be displayed throughout; Powerful graph curve function, easy to compare test, analysis;
- Automatic test: set test parameters, test automatically after the start, automatically judge the end of the test and save the test results;
- Host software encryption database system, data can be exported and data storage, query, print, and other functions. Through the analysis of historical data, it is easy to grasp the historical dynamics of the product.
- Efficient test, low nitrogen consumption, can be tested and verified by national standard;
- Extensible container testing;
- The system has self-detection ability to avoid continuing testing under fault state;
- Gas flow monitoring, automatic alarm when there is little gas or no gas;

Test principle

The sample is installed between the sample gas and the carrier gas chamber, and the temperature of the test chamber is controlled. The oxygen of the sample gas chamber penetrates into the carrier gas chamber, and is carried by the carrier gas to the trace oxygen sensor. Precise measurement of trace oxygen sensors. The current is generated to calculate the oxygen transmission and other parameters of the sample.

Standard:

YBB 00082003、GB/T 19789、ASTM D3985、ASTM F2622、ASTM F1307、ASTM F1927、ISO 15105-2、JIS K7126-B



Technical Parameters

- Test range: 0.01~6500(cc/m².24h)
- Resolution: ratio 0.001
- Permeability surface area: 50 cm² (others should be custom-made)
- Measurement of micronucleus diameter: 108*108mm
- Sample thickness: <3 mm (thicker need to add accessories)
- Sample Qty: 1
- Test mode: Independent sensor
- Temperature range: 15°C ~ 55°C (temperature control device purchased separately)
- Temperature control accuracy: ±0.1°C
- Carrier gas: 99.999% high purity nitrogen (air source user)
- Carrier gas flow: 0~100 mL/min
- Air Source Pressure: ≥0.2MPa
- Size of interface: 1/8 inch metal pipe
- Dimensions: 740mm (L)×415 mm (W)×430mm (H)
- Voltage: AC 220V 50Hz
- Net weight: 50Kg

Configurations

- **System configuration:** Test host, sampler, nitrogen/oxygen cylinder precision pressure reducing valve, Dow Corning vacuum grease, software and computer.
- **Optional accessories:** container test accessories, container temperature control device, thermostat control device. Note: The air source (nitrogen, oxygen) is provided by the user.
- **Note:** The appearance of the equipment is the appearance of the standard equipment, and the appearance of the customized equipment may be different.

**Technical Data Subject to change without notice.*

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Our Skill

At AdLab, we combine expertise in precision engineering with advanced laboratory technology to create innovative and reliable testing instruments. Our team of skilled professionals continuously works on improving product designs, integrating the latest advancements in technology, and ensuring compliance with international quality standards. With a strong focus on research and development, we provide customized solutions that cater to the unique needs of our customers worldwide.

Our Products

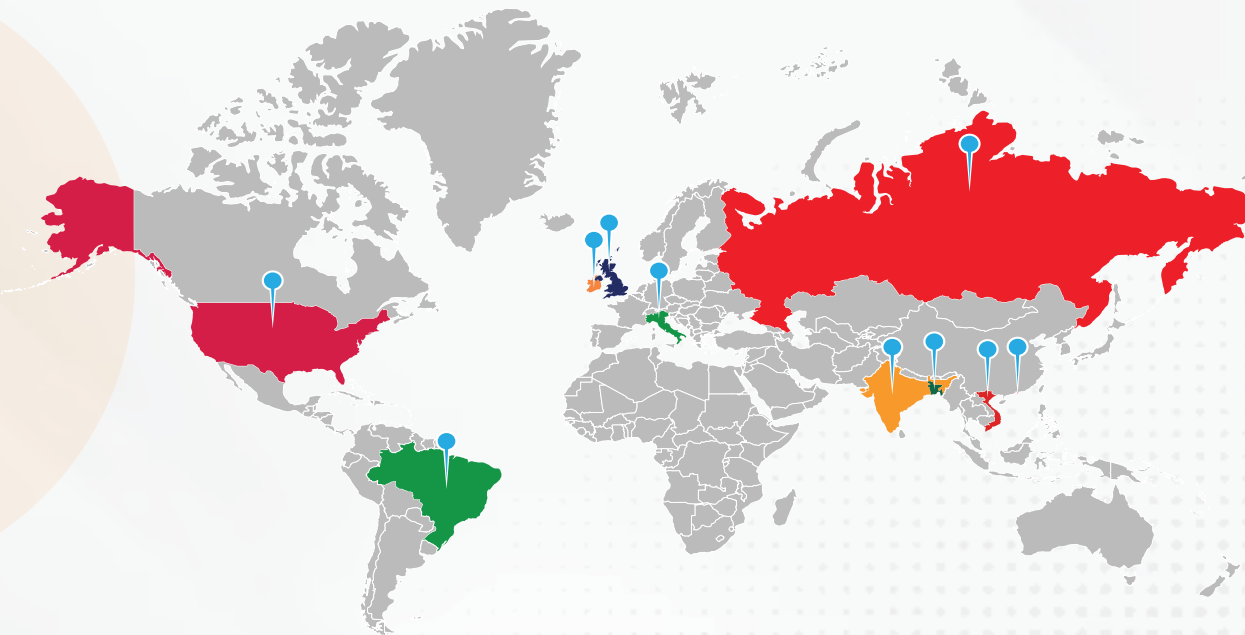
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- ✓ Installation & Training – We offer professional installation services and hands-on training to help users operate our equipment efficiently.
- ✓ Calibration & Maintenance – Regular calibration and maintenance services ensure that your laboratory instruments remain accurate and in optimal working condition.
- ✓ Customized Solutions – We provide tailored solutions to meet specific industry requirements, helping our clients achieve maximum efficiency in their operations.

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AdLab Instruments Co., Ltd

★ RM 602, 6/F, Kaiyue Comm Building, No.2C, Argyle Street, Mongkok Kowloon, Hong Kong

🇮🇪 20A Cuil Na Carriage, Ballymakeera, Co-Cork, Ireland (EU)

✉ info@adlabinstruments.com 🌐 www.adlabinstruments.com