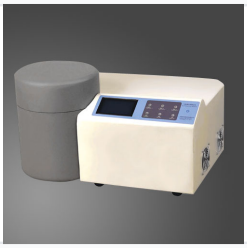
Gas Permeation Analyzer

This gas permeation analyzer tests the gas transmission rate (GTR) of packaging material. It is widely used in the food, pharmaceutical, and flexible packaging industries for quality control and research.

ADDITIONAL IMAGES



Overview

Precision Gas Permeation Analysis

This Gas Permeation Analyzer is a professional-grade instrument designed to measure the gas transmission rate (GTR) of various packaging materials, including plastic films, barrier materials, and sheets. Utilizing the differential pressure method, it provides highly accurate testing for gases such as O2, CO2, and N2. It is an essential tool for quality control and research in the food, pharmaceutical, and flexible packaging industries, ensuring compliance with international testing standards.

Performance Metrics

Measuring Range (Standard)

0.02 cm3/m2·day	5000 cm3/m2·day
Min Range	Max Range

Measuring Range (Expanded)

0.2 cm3/m2·day	50000 cm3/m2·day
Min Range	Max Range

Measuring Accuracy	0.01 cm3/m2·day

Compliance & Standards

Supported Standards	ISO 2556-2001, ISO 15105-1, GB/T 1038-2000, ASTM D1434-82 (2003), YBB00082003

Applications

Industry Applications

- Food Industry
- Pharmaceutical Industry
- Flexible Packaging Materials
- Plastic Film Manufacturing
- Barrier Materials & Sheets
- Academic & Quality Institutions

Technical Details

Differential Pressure Method

The sample is clamped between upper and lower chambers. After vacuuming the system, the lower chamber is sealed, and test gas is introduced into the upper chamber. This creates a constant pressure differential, forcing gas to permeate through the sample. The system monitors the pressure change in the lower chamber to calculate the gas transmission parameters.