

C180M Air Permeability Tester

C180M Air Permeability Tester is based on the principle of differential pressure method and is professionally suitable for air permeability tests of cigarette papers, filter plug wrap, filter joining paper and materials with an oriented permeable zone.



Product Features Note 1

Fully-automatic & High-precision Measurement

- Fully automatic measurement without manual intervention.
- Imported pressure regulating module is adopted with good pressure stabilization.
- Automatic sample feeding function is available; the measurement times and intervals can be set freely.
- The single point measurement time of samples with the same specification is less than 10 seconds, which improves the test efficiency.

Safe Design & Automatic Clamping

- Pneumatic sample clamping saves time and labor, and the clamping strength is consistent with better sealing performance.
- Anti-clamping design is safer for operation.
- Vertical structure and LED observation lamp are convenient for sample observation.

Intelligent Control & Reliable Performance

- 12.1" industrial-grade touch screen is equipped with tiled operation interface.
- Two measurement modes: Automatic and Manual.
- Multi-unit display: CU and ml/min.
- Automatic statistics of Max. value, Min. value, Ave. value, standard deviation and coefficient of variation.
- Automatic data storage and automatic memory when power off.
- The tester is equipped with a micro-printer and a network port for data transmission.
- Core components are all from world-renowned manufacturers with low failure rate and long service life.
- Multi-level authority management, audit tracking and other software functions are available.

(Optional)

Test Principle

Under a certain pressure, the sample to be tested is clamped at a suitable measuring position, and the total air flow passing through the surface of the sample is measured.

Reference Standards ^{Note 1}

ISO 2565, YC/T172, GB/T 12655, and JJG (Tobacco) -1998

Applications ^{Note 1}

Basic Applications	It is suitable for the air permeability tests of cigarette papers, filter plug wrap and filter joining paper.
Extended Applications	It is suitable for permeability tests for materials with an oriented permeable zone.

Technical Parameters

Table 1: Test Parameters ^{Note 2}

	Parameters/Model	C180M
Test Ranges	Coresta	0 ~ 20000
	mL / min	0 ~ 40000
Resolution	Coresta	0.1
Pressure Range	kPa	0 ~ 2
Pressure Accuracy	kPa	±0.25%FS
Measurement Interval	mm	30~999
Extended Functions	GMP computer system requirements	Optional
	CFR21Part11	Optional

Table 2: Technical Specifications

Test Cell	1 set
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Test Area	2cm ² (2 cm×1 cm)
Sample Size	≥1" x 1" (3cm×3cm)
Sample Thickness	≤120 Mil (3mm)
Gas Specifications	Dry air (Air source is to be provided by the user)
Gas Source Pressure	87PSI / 600kPa
Port Size	Φ 8mm Polyurethane tube
Dimension	18.5" (H) x 18.5"(W) x 17.7" (D) (47cm× 47cm× 45cm)
Power	120VAC±10% 60Hz / 220VAC±10% 50Hz (Selecting one from the two)
Net Weight	55Lbs (25kg)

Table 3: Product Configuration

Standard Configuration	Tester mainframe, 12.1" touch screen, micro printer, power cord, Φ 8 mm polyurethane tube
Optional Parts	Computer, software, air compressor, CFR21Part11, GMP computer system requirements
Note	The compressed air inlet of the tester is a Φ 8 mm polyurethane tube (with a pressure of 87 PSI / 600 kPa); the air source is provided by the user.

Note 1: Reference standards, test applications and product characteristics are subject to the specifications in "Technical Parameters". "Reference Standards" refers to the test method is basically consistent with that described in the standards.

Note 2: The parameters in the table are measured in the Labthink laboratory by professional operators according to the requirements and conditions of the relevant laboratory environmental standards.

Note: Labthink is always committed to innovation and improvement in product performance and function, and for this reason, the product technical specifications and appearance are subject to change accordingly without notice. The Company reserves the right of modification and final interpretation.