Kenton
Together with Researchers

CM-1000/S/PLUS

Ductless Filtered Storage Cabinet

Chemical Safety Management Health and Energy Conservation

CM-1000
CM-1000S
CM-1000PLUS

Together With Reasercher

From Kenton's high-end brand series, this product features an ergonomic design, an intelligent computer management control system, and a specialized gas-phase filter from the American brand Purafil. Originating from European and American manufacturing techniques, it incorporates top-quality imported components to ensure the safe management of chemicals, protect laboratory personnel's health, and reduce laboratory ventilation costs and energy consumption—making your experiments more efficient and effortless.

CM-1000 PLUS

CM-100(S)

Comparison of Operational Costs: Traditional Medicine Cabinets vs. Ductless Filtered Storage Cabinets					
			Traditional Medicine Cabinets	Ductless Filtered Storage Cabinets	Description
Initial cost	A	Pipeline system	￥5000RMB	None	The application of the high-efficiency activated carbon adsorption system replaces the pipeline System
	B	External exhaust fan	￥1000RMB	None	The integrated fan effectively overcomes the pressure drop caused by the airflow passing through the activated carbon filter.
	C	Air compensation system	￥5000RMB	None	With the no external duct design, the treated airflow does not need to be discharged outside the laboratory, eliminating the need for air conditioning (such as heating or cooling) compensation.
	Initial costs saved：￥11000RMB				
Annual operating cost	D	External exhaust fan	￥6000RMB	None	The integrated fan consumes significantly less energy compared to high-power external exhaust fans.
	E	Internal exhaust fan	None	￥1000RMB	

	F	Air compensation system	￥3500RMB	None	Traditional medicine cabinets continuously discharge the treated airflow outdoors, which increases the energy consumption(such as heating or cooling).
	G	Activated carbon filter	None	￥1500RMB	Assuming the customer replaces the filter every two years, the operating costs remain relatively low.
	Annual operating cost saved: ￥7000RMB				

Note: The numerical values and amounts are calculated based on the energy prices provided by the commercial department. The data is for reference only, and the values may vary under different conditions.

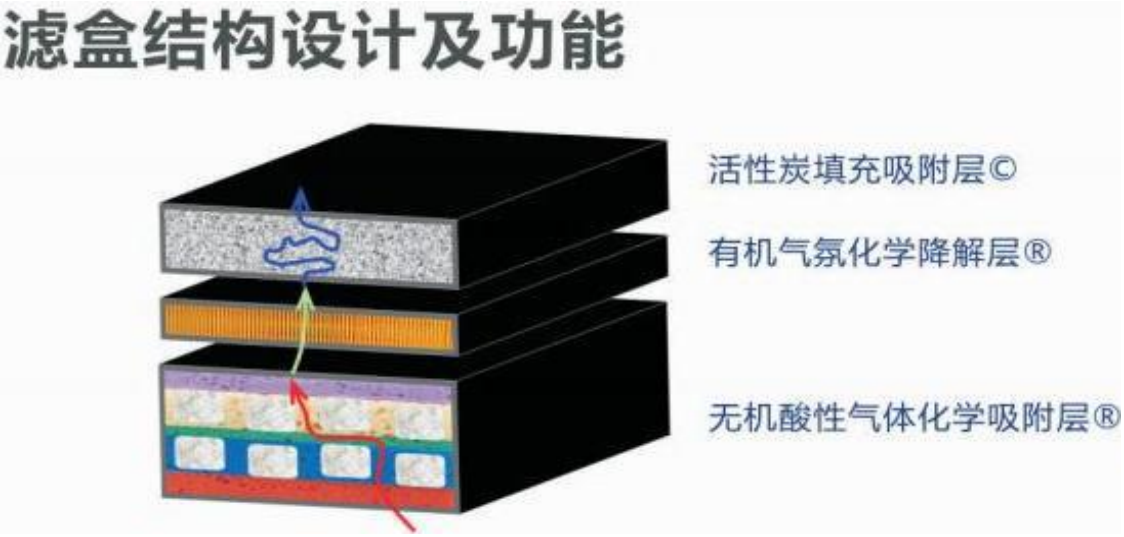
CM-1000/ S / PLUS Ductless Filtered Storage Cabinet

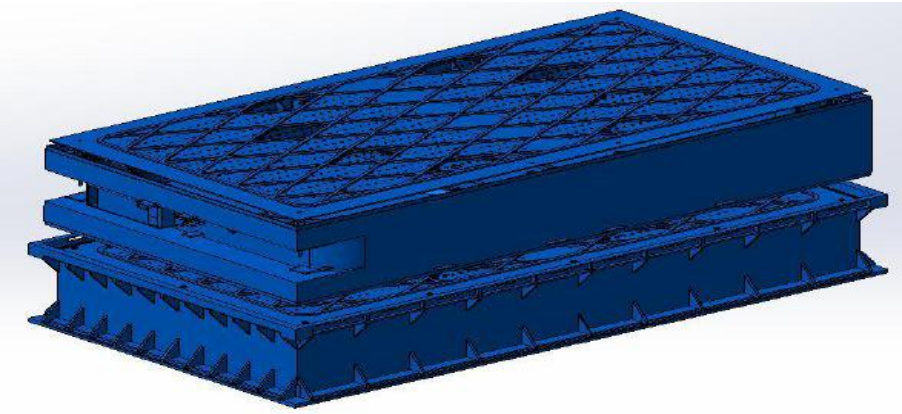
Exclusive 3-year warranty (Note: The warranty does not cover the filter once it reaches the adsorption saturation state).

- The ductless filtered storage cabinet is designed for filtering toxic and harmful chemical gases generated during the storage of liquid or solid organic chemicals. It is used in research institutions, biomedical fields, pharmaceutical testing, environmental monitoring, pharmaceutical, and chemical laboratories for storing and managing chemical and special chemicals.
- The equipment does not require duct installation. Organic, inorganic, and harmful gases pass through optional filters that fully adsorb and degrade them before recirculating back into the room, without consuming air conditioning energy. This reduces laboratory ventilation costs and energy consumption.
- The cabinet has a storage capacity of at least 200 bottles (each 0.50L). The standard version is made of galvanized sheet metal with spray paint. Models with the “S” designation are made of SUS304 stainless steel, offering resistance to oxidation and strong acids and bases. The shelves are made of composite PP materials, which are resistant to strong acids and bases. The cabinet base is equipped with high-strength casters, adjustable in height, and can be fixed to prevent sliding.
- The filtering system can be configured with filters for gases, liquids, or dust experiments. It uses Purafil’s specialized gas-phase filtration material for modular filtration and adsorption, ensuring better sealing and filtration performance.
- The system features a 4.3-inch color LCD screen and an advanced digital self-learning detection function. It effectively adjusts the fan speed based on the concentration of volatile organic compounds inside the cabinet, ensuring sufficient airflow for organic compound adsorption and catalytic degradation. It also includes a USB interface for smart management.
- The cabinet is equipped with dual doors and dual locks to ensure chemical safety, and the intelligent panel displays real-time information on the temperature, humidity, TVOC value, and fan speed/airflow. The “PLUS” model includes a three-door smart electric lock design.
- The upgraded “PLUS” version features a 10.1-inch touchscreen and a fingerprint collection module. The system allows door operation through fingerprint or account login, and it keeps records of various historical data, enabling traceable management of special chemicals. Optional network communication software is available for integration into a laboratory smart management platform. Additionally, the dual-person unlock function provides higher-level management.
- This series has passed the EU CE safety certification and complies with China's JG/T385-2012, US ANSI Z9.5-2012 standards, and comes with a 3-year quality warranty.

Modular Structure Filter and Fan System

- The filter housing is custom-molded and integrally injection-molded to ensure a high level of sealing in the exhaust passage. The filtration layer uses room-temperature multi-catalytic degradation technology, which can quickly and effectively degrade organic chemical gases. The filter cartridge is composed of an activated carbon adsorption layer, an organic chemical degradation layer, and an inorganic acidic gas adsorption layer, among others.
- The filter module configuration can be customized based on the laboratory's needs. Different filtering systems can be selected to address solid, liquid, dust, or mixed chemicals, catering to a wide range of experimental requirements.
- The fan housing is also molded using an integrally injection-molded process, and it is matched with a brushless DC motor and PSC centrifugal impeller. The fan has a long service life of up to 60,000 hours, operates ultra-quietly, and features PWM (Pulse Width Modulation) precise speed control, providing different levels of exhaust airflow as needed.





The filter and fan housing are integrally injection-molded

Uses globally renowned Purafil adsorption materials from the United States.

- Efficiently removes formaldehyde, ozone, sulfur dioxide, reactive sulfur compounds, organic acids, nitrogen oxides, hydrogen sulfide, ammonia, hydrocarbons, TVOCs, and more than 230 types of irritating, corrosive, volatile, toxic, and harmful gaseous pollutants.

	**Purafil SP** 高效广谱去除多种氧化物污染物,UL认证阻燃		**PurafilChemisorbant** 高效去除硫化氢、二氧化硫、二氧化氮、一氧化氮,甲醛
	**Purafil Purakol** 高效广谱去除臭氧、碳氢化合物、氮氧化物、挥发性有机化合物(VOCs)等		**Purafil CSO** 推荐用于去除氯气和二氧化硫气体
	**Purafil Puracarb** 专为去除工业酸性气体设计包括硫化氢、二氧化硫等		**Odoroxidant SP** 在水/废水处理应用中,广谱高效去除包括硫化氢、二氧化硫、醛类和许多有机化合物在内的气态污染物
	**Purafil Puracarb AM** 去除氨气		**Odorkol** 与其他普拉飞滤料混合使用,有效提高广谱去除空气污染物能力
	**Purafil CP Blend** 高效广谱去除气味性和腐蚀性气态污染物,包括碳氢化合物、挥发性有机化合物(VOCs)、硫氧化物、甲醛、氮氧化物、硫化氢、醛类和有机酸等		**Odormix _ Sp** 广谱气味控制、包括硫醇、胺类、乙醛、有机物和二氧化硫气体
	**Chlorosorb _ Ultra** 去除氯气,在冻结温度以下工作无需特别加热		**Odorcarb _ Ultra** 主要用于去除硫化氢,含有滤料寿命指示器小球,用于显示滤料剩余寿命
	**Purafil SP Blend** 高效广谱去除气味性和腐蚀性气态污染物,包括硫醇,碳氢化合物、硫化氢和氮氧化物等		**Purafil Select CP Blend** 高效广谱去除气味性和腐蚀性气体,包括碳氢化合物、挥发性有机化合物(VCs)、硫氧化物、氮氧化物、硫化氢、甲醛、硫化氢、醛类和有机酸等

CM-100(S)

Illuminated LED strip indicates operational status

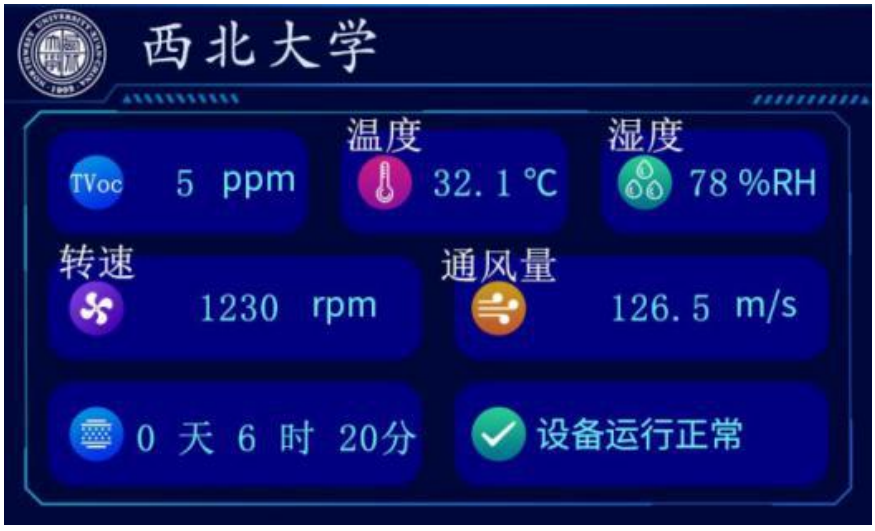
LED display screen

Dual-lock

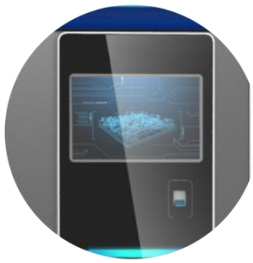
Dark transparent PC door panel

CM-1000/S Intelligent LCD Control System

- CM-1000/S is equipped with a 4.3-inch LCD display.
- The electronic control module consists of a PCBA circuit board, sensor probes, and a power supply.



CM-100PLUS



Touch LCD screen with fingerprint recognition

Arc-shaped design

Dark transparent PCdoor panel

Alloy handle

CM-1000PLUS Intelligent LCD Control System

- CM-1000PLUS is equipped with a 10.1-inch touch display and an optical fingerprint module. The touch screen supports over 50 million touches, has 8GB of internal storage, and can store at least 365 days of historical records. It features a built-in wireless network card and an optional customizable 4G communication module.
- The electronic control module consists of a PCB control board, sensor probes, and a power supply. The sensor probe integrates TVOC, temperature, and humidity monitoring, providing real-time data analysis to assess air quality inside the cabinet. It precisely regulates the fan speed to achieve optimal air exchange and pollutant purification.
- The fingerprint recognition module utilizes advanced DSP and AVR technology, featuring powerful floating-point computation, ensuring fast fingerprint matching speed. The module uses a USB interface for easy plug-and-play connectivity.
- Supports single-fingerprint and dual-fingerprint authentication modes, allowing seamless switching between them. This ensures the safe usage

of regulated chemicals. The system also automatically records and tracks chemical retrieval data, enabling traceable drug usage management.

Technical Parameters

Product Specifications	CM-1000(Applicable for Conventional and Organic Chemicals)	CM-1000S(Applicable for Inorganic Acids and Strong Acids/Bases)	CM-1000PLUS(Applicable for Controlled Substances, Hazardous Chemicals, and Highly Toxic Materials)
Control System	4.3 Inch LCD Screen	4.3 Inch LCD Screen	10.1 Inch touch LCD screen
Voltage /Frequency	100-240V/50-60HZ		
Operating Environment Temperature	5℃~40℃； Relative Humidity: 45% ~`75%		
Cabinet Material	Galvanized steel plate with surface coating	304 stainless steel plate with surface coating	Galvanized steel plate with surface coating
Number of Doors	Dual doors with dual locks	Dual doors with dual locks	Three-door with dual fingerprint locks
Internal Dimensions (Height * Width * Depth)	1600*900*500 mm	1600*900*500mm	1800*900*500mm
External Dimensions (Height * Width * Depth)	2000*1000*530mm	2000*1000*530mm	2200*1000*540mm

Number of Shelves	10
Maximum Shelf Layers:	At least 5 shelves on each side
Single Shelf Weight Capacity	≥80kg/m²
Storage Capacity	At least 200 bottles (each 0.50L)
Air Handling Capacity	≥220m³/h
Air Exchange Rate	At least 180 times/hour

Note: To facilitate logistics and transportation, the top filter component of the medicine cabinet is designed to be detachable from the cabinet body. The standard packaging for factory shipment is disassembled, and assembly will be completed at the user's location upon arrival.

Optional Accessories:

1. Laboratory intelligent management software with network communication (available only for the PLUS model)
2. Dust particle purification grade filter
3. Special chemical gaseous pollutant filter

Main Configuration Table for CM Series Ductless Medicine Cabinets

	Name	Specification	Quantity
1	Main Cabinet Body		1
2	LCD Color Screen or LCD Touchscreen Controller		1

3	High Precision Temperature Sensor Probe	PT-100	1
4	Integrally Injection-Molded Modular Fan		1
5	Integrally Injection-Molded Modular Filter		1
6	PP Material Shelves		10

Note: The above configurations are for reference only. The manufacturer reserves the right to change accessories and their parameters at any time without prior notice.