Kenton
Together with Researchers

CM-1000/S/PLUS
Ductless Filtered Storage Cabinet

Chemical Safety Health and Energy Conservation

CM-1000 CM-1000S
CM-1000PLUS

CM-1000 PLUS **CM-100(S)**

Together with researchers

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.

Laboratory Occupational Disease Statistics

Due to the unique working environment, laboratory personnel face significantly increased risks of chemical poisoning, air pollution, biological infections, and psychological hazards. This issue requires serious attention!

5% Psychological Hazards

10% Biological Infections

85% Chemical Damage & Air Pollution

5%
Heavy Workload & Mental Stress (Symptoms: Anxiety, Insomnia

10%
Laboratory infection (Symptoms: Viral Infection)

85%
Chemical Reagents, Disinfectant Vapors & Dust Exposure (Symptoms: Leukemia, Respiratory Diseases, etc.)

Product Advantages

No need for pipeline installation. The top can be optionally equipped with a filtration module system that completely adsorbs and filters harmful gases generated by chemical reagent evaporation, ensuring health, safety, and energy efficiency.

- Room Temperature Diversified Degradation Technology
- Modular Filtration & Adsorption
- Organic & Inorganic Gas Adsorption & Degradation
- Dust Filtration & Adsorption
- Smart Terminal Management
- Real-time Display of Environmental Key Parameters
- Chemical Classification & Storage
- Variable Frequency Control for Environmental Conditions
- Oxidation & Acid-Alkali Corrosion Resistant Structure
- Traceable Chemical Registration & Management

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

Comparison of Operational Costs: Traditional Medicine Cabinets vs. Ductless Filtered Storage Cabinets					
			Traditional Medicine Cabinets	Ductless Filtered Storage	Description
Initial cost	A	Pipeline system			The application of the high-efficiency activated carbon adsorption system replaces the pipeline System
			$700	None	
	B	External exhaust fan			The integrated fan effectively overcomes the pressure drop caused by the airflow passing through the activated carbon filter.
			$150	None	
	C	Air compensation system			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.
			$700	None	
	Initial costs saved : $1550				
Annual operating cost	D	External exhaust fan	$850	None	The integrated fan consumes significantly less energy compared to high-power external exhaust fans.
	E	Internal exhaust fan	None	$150	
	F	Air compensation system			Traditional medicine cabinets continuously discharge the treated airflow outdoors, which increases the energy consumption(such as heating or cooling).
			$500	None	
	G	Activated carbon filter			Assuming the customer replaces the filter every two years, the operating costs remain relatively low.
			None	$200	
	Annual operating cost saved:$1000				

CM-1000（S） CM-1000PLUS
Ductless Filtered Storage Cabinet

1.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.

2.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.

3.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.

4.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.

5.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.

6.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.

7.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.

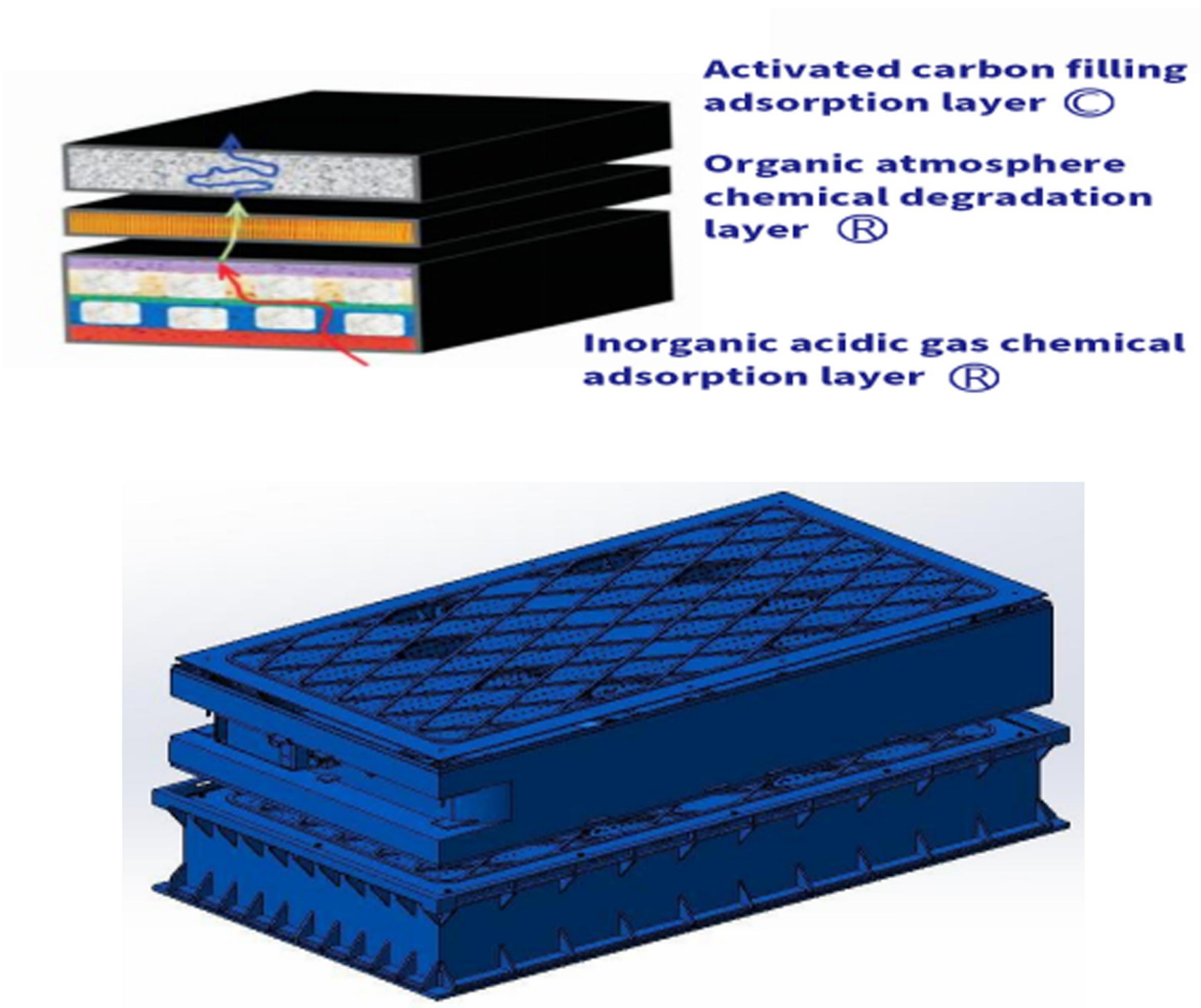
8.This series has passed the EU CE safety certification and complies with China's JG/T385-2012, US ANSI Z9.5-2012 standards, and comes with a 3-year quality warranty.

Modular structure filter and fan system

1.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.

2.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.

3.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

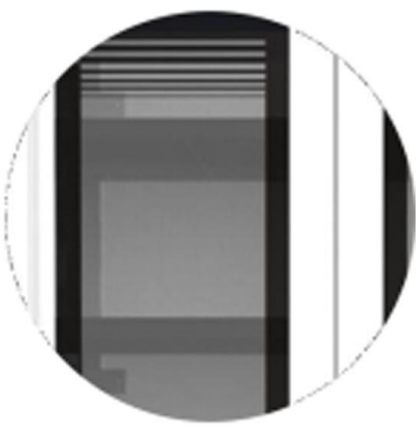
Uses globally renowned Purafil adsorption materials from the United States

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.

Working Light

LED display screen

Dual lock safety design



Dark transparent PC door panel

CM-1000/S Intelligent LCD Control System

1.CM-1000/S is equipped with a 4.3-inch LCD display.

2.The electronic control module consists of a PCBA circuit board, sensor probes, and a power supply.

CM-1000PLUS

Touch LCD screen with fingerprint recognition

Arc-shaped design

Dark transparent PC door panel

Alloy handle

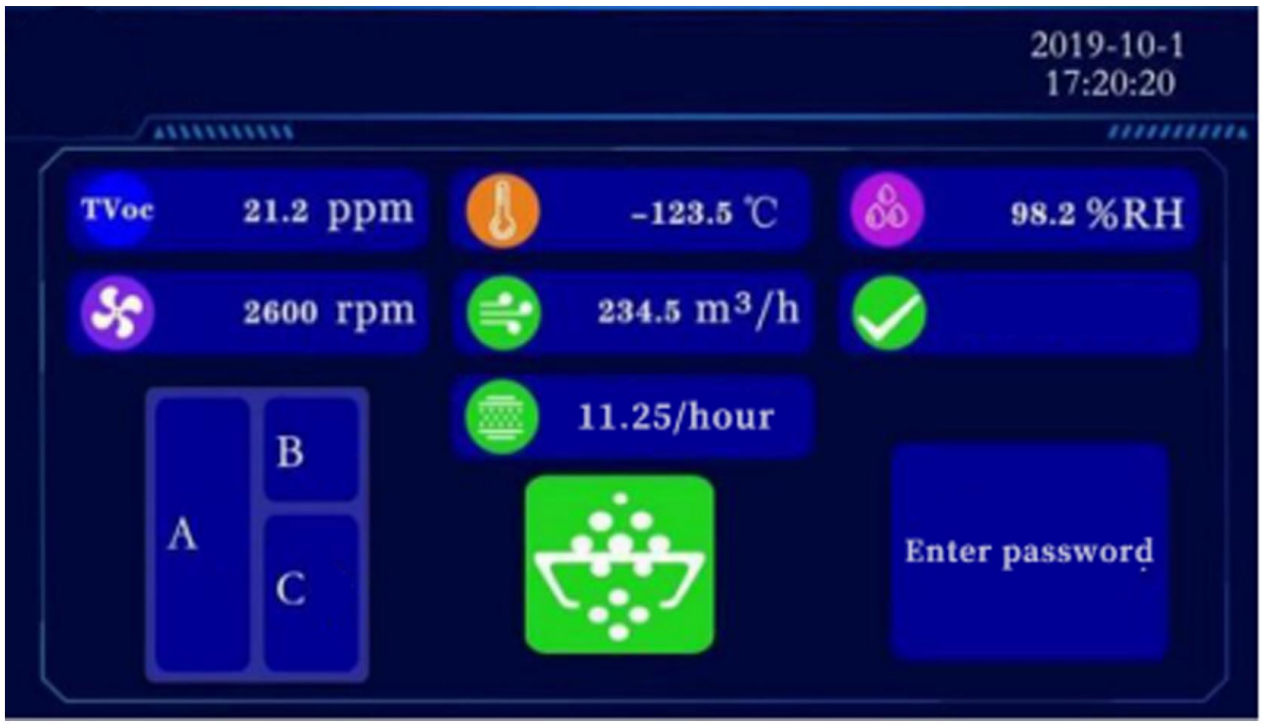
CM-1000Plus Intelligent Touch LCD Control System

1. 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.

2.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.

3.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.

4.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



Technical Parameter

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		
Environment Temp.	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 (H * W* D)mm	1600*900*500	1600*900*500	1800*900*500
External Dimensions (H * W * D)mm	2000*1000*530	2000*1000*530	2200*1000*540
Number of Shelves	10		
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 LCDTouchscreen Controller		1
3	High Precision Temperature Sensor Probe	PT-100	1
4	Integrally Injection-Molded Modular Fan		1
5	Integrally Injection-Molded Modular Fan		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.

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Together with Researchers

Manufacture of drying oven, lab incubator, climate chamber, laminar flow cabinet, biological safety cabinet(OEM,ODM)

KENTON APPARATUS LIMITED

KENTON Apparatus Limited was found in 1999, production plant was set in Guangzhou, China. It is mainly engaged in production, sales and export of laboratory thermostatic equipment and biological scientific equipment,and has provided high-quality products and services for professional laboratories and scientific research .institutions at domestics and abroad for many years.We relies on an international professional R&D team to keep the design and technology of products in step with the world and constantly seek breakthroughs.Since its establishment, the company has been focusing on thermostatic equipment products in related fields. Now it is a high-tech enterprise integrating science, industry and trade. Its business covers China, Southeast Asia, America, Europe, Australia and other countries.At the same time, based on the business philosophy of "walking with scientific researchers", and taking advantage of the company's geographical advantages, the company has carried out extensive communication and exchange with scientific researchers in different regions for many years, and carried out long-term follow-up services to users, constantly improving the function and quality of products, so that products can better meet the requirements of users.

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