Kenton

Together with Researchers

# HT Series

# Ductless Fume Hood

**HT SERIES**

HT-1200 HT-1500 HT-1800

From Kenton's high-end series — ergonomic design, based on European and American manufacturing craftsmanship, intelligent microcomputer control system, optimized clean solutions, no need for independent purification equipment that requires external exhaust pipes, environmentally friendly design, reducing laboratory ventilation costs and energy consumption, making your experiments more efficient and effortless

# HT Series Ductless Fume Hood

**3-year warranty**

The HT Ductless Fume Hood is designed to provide better safety protection for laboratory personnel and the environment against toxic smoke, corrosive gases, and other harmful substances. Unlike traditional fume hoods, the clean air fume hood uses negative pressure technology to contain pollutants within the hood, preventing them from escaping. It then passes chemical fumes or pollutants through an activated carbon filter and circulates clean, safe air back into the laboratory, reducing ventilation costs and energy consumption while protecting both personnel and the environment. This equipment does not require external exhaust piping, making it widely used in basic education, life sciences, forensic identification, clinical medicine, and industrial clean applications. Due to its easy installation and energy-saving design, it is gradually replacing traditional fume hoods.

**Product Features:**

- Utilizes fluid dynamics design to improve airflow uniformity, avoiding turbulence and enhancing safety while reducing noise and saving energy.
- Counterweight-style sliding front door, adjustable in height and position. The built-in lighting system provides optimal illumination angles and brightness, reducing visual fatigue. The detachable stand is easy to transport, lowering transportation costs.
- Uses internationally advanced activated carbon filtration technology to effectively filter harmful gases and substances without requiring an external exhaust system, reducing installation and indoor ventilation costs. The independent clean air equipment is portable.
- Optional HEPA high-efficiency filters can trap and filter particles generated during operation and recirculate clean air into the laboratory, meeting laboratory purification standards.
- Ergonomically designed front with a 10-degree tilt for more comfortable operation. The work surface is made of corrosion-resistant SUS304 stainless steel, and the sides are equipped with tempered glass observation windows, which are easy to clean.
- Integrated LCD display shows real-time parameters such as lighting, sterilization, and airflow. It features a sterilization and lighting interlock function to protect operators from UV light burns. The fan speed is adjustable in multiple levels, allowing users to set the appropriate airflow. It also has a differential pressure sensor and filter failure indicator function (optional).
- The work area is equipped with a UV sterilization lamp and includes two standard power outlets for convenient access during experiments.

The maintenance-free DC centrifugal fan system, with a reverse curve electric impeller design, provides optimal airflow uniformity, low noise, and reduced energy consumption.

| Comparison Between Traditional Fume Hoods and Clean Air Fume Hoods | | | | | |
|---|---|---|---|---|---|
| | | | **Traditional Fume Hoods** | **Clean Air Fume Hoods** | **Explanation** |
| **Initial cost** | A | Duct system | ￥5000 RMB | None | The application of a high-efficiency activated carbon adsorption system has replaced the external exhaust duct system |
| | B | External Exhaust Fan | ￥1000 RMB | None | The integrated fan effectively overcomes the pressure drop caused by airflow passing through the activated carbon filter |
| | C | Air Compensation System | ￥6500 RMB | None | The design without an external exhaust duct means that the processed airflow does not need to be expelled outside the laboratory. There is no need for air compensation (such as hot or cold air) |
| | **Amount saved on infrastructure costs：￥12500 RMB** | | | | |
| **Annual Operating Costs** | D | External Exhaust Fan | ￥10000 RMB | None | The integrated fan's energy consumption is significantly lower than that of high-power external exhaust fans |
| | E | In-Hood Exhaust Fan | None | ￥600 RMB | |
| | F | Air Compensation System | ￥3500 RMB | None | Traditional fume hoods continuously expel processed airflow outside, increasing the energy consumption of air compensation systems (such as hot or cold air) |
| | G | Activated Carbon Filter | None | ￥3000 RMB | Assuming the customer replaces the filter once a year, the operating costs remain relatively low |
| | **Amount saved on annual operating costs ：￥9900 RMB** | | | | |

Note: The numerical values are based on energy prices from the commercial sector and are for reference only. The actual values may vary under different conditions

| HT Ductless Fume Hood | | | | |
|---|---|---|---|---|
| **Model** | | HT-1200 | HT-1500 | HT-1800 |
| **External Dimensions (Height x Width x Depth)** | | 2115×1270×755 | 2115×1570×755 | 2115×1870×755 |
| **Internal Dimensions (Height x Width x Depth)** | | 780×1200×595 | 780×1500×595 | 780×1800×595 |
| **Pre-filter** | | Disposable, non-washable polyester fiber, with an efficiency of 85%, complying with EU3 standard requirements | | |
| **Main Filter** | | Nano activated carbon particle medium, with an operating efficiency of over 95% | | |
| **Inlet Airflow Velocity** | | 0.4~0.6m/s | | |
| **Noise Level** | | Under normal environmental conditions, the measured noise level is ≤62dB | | |
| **Fluorescent Lamp Illuminance** | | >1000 Lux (>93 foot-candles) | | |
| **Cabinet Structure** | **Main Cabinet Body** | 1.2mm High-quality Cold-rolled Steel Plate, Surface Electrostatic Powder Coating | | |
| | **Side** | Tempered Glass Observation Window | | |
| | **Back Panel and Work Surface** | 1.0mm 304 Stainless Steel | | |
| **Power Supply** | **Power Supply** | AC220V/110V | | |

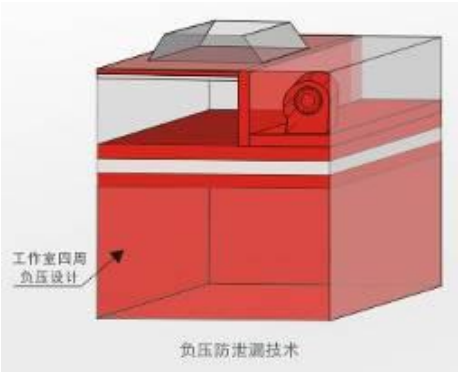
| | | | | |
|---|---|---|---|---|
| **Voltage** | **Voltage** | | | |
| | **Fan** | 9A 245/420W | | |
| | **Dual Waterproof Outlet** | 10A | | |
| | **Rated Power** | 500W | 500W | 500W |
| **Working Environment** | | **Temperature: 10°C - 30°C; Relative Humidity: ≤75% RH** | | |
| **Net Weight** | | 225kg | 245kg | 293kg |
| **Shipping Weight** | | 245kg | 268kg | 318kg |

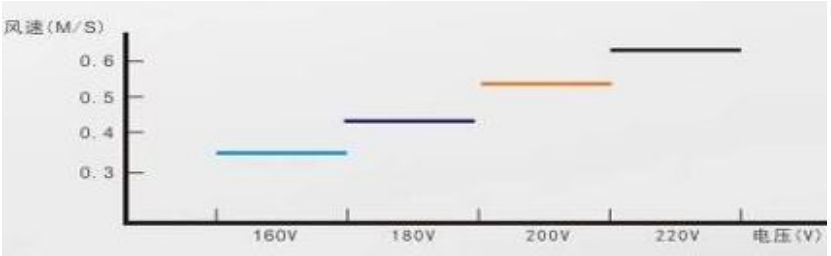
## LCD Screen Microcomputer Smart Control

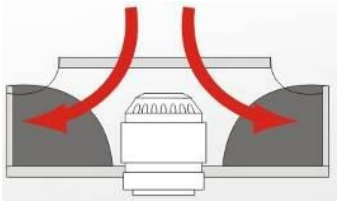
- **LCD Display**: The LCD screen displays parameters such as lighting, sterilization status, airflow, and other relevant system data. It also includes a filter failure reminder (optional), alerting users when maintenance or a filter replacement is necessary.
- **User-Friendly Design**: The system features a sterilization and lighting interlock function, which protects the operator from UV light exposure, ensuring safety during operation.
- **Adjustable Airspeed**: The system allows multiple airflow speed settings, giving users the flexibility to adjust the airflow according to their specific needs.

# CLEANFLOW™ Clean Airflow Technology

- **Centrifugal Fan with Low Energy Consumption Motor**: The system uses a centrifugal fan driven by a low energy consumption motor, designed based on airflow dynamics to reduce turbulence. This ensures the system operates with low noise levels. An optimized clean pressure box, combined with a mini-mesh design of the laminar airflow exhaust panel, ensures uniform and stable airflow.
- **Main Filter (Activated Carbon)**: The primary filter uses activated carbon, which effectively filters harmful gases and substances. The pre-filter blocks larger particles such as dust. Depending on customer requirements, a HEPA high-efficiency filter can be optionally installed to further block and filter particulate matter produced during operation, recycling clean air back into the laboratory, thus meeting laboratory air purification standards.

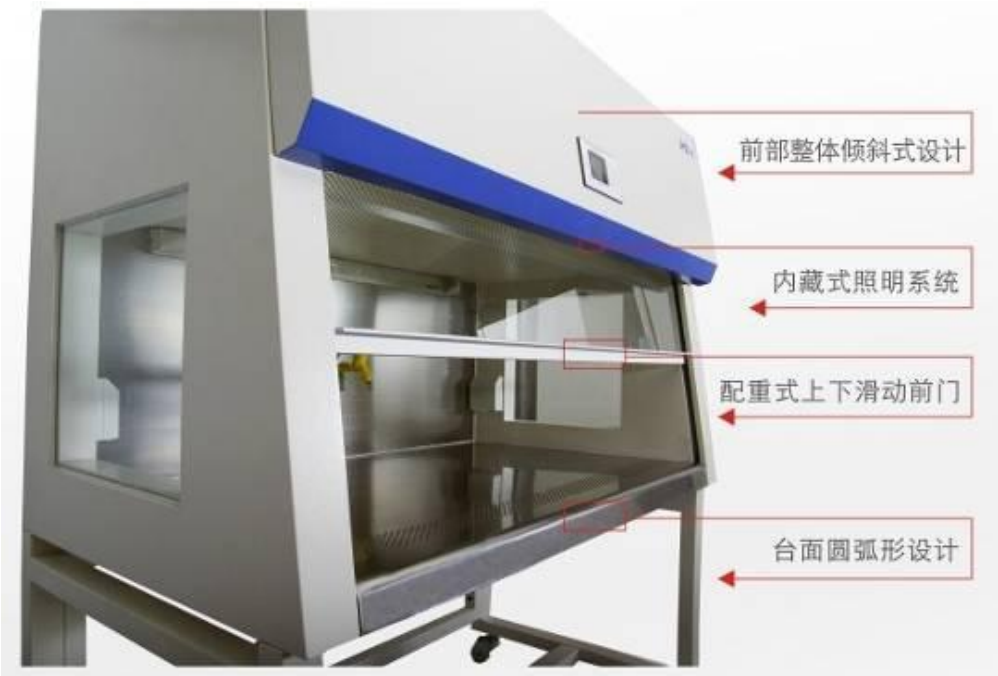


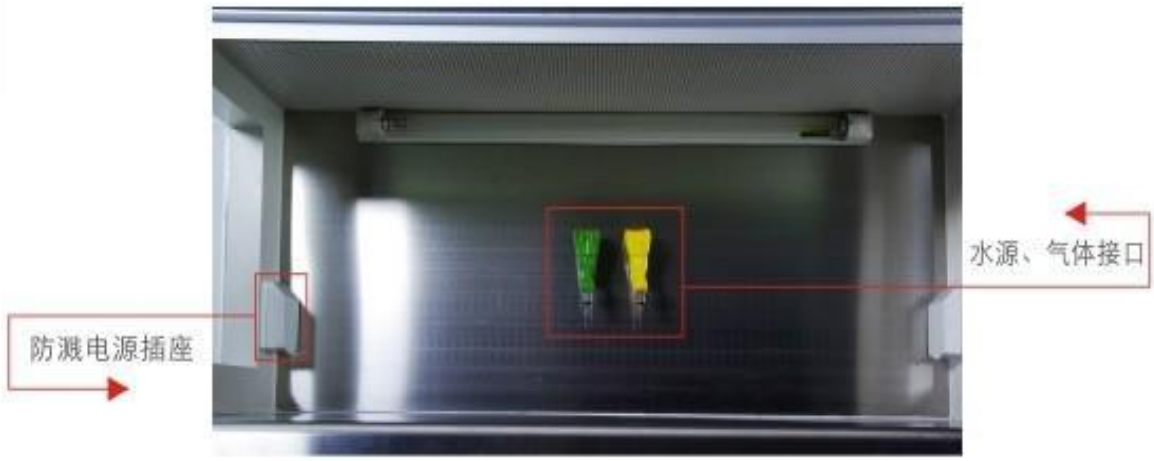



# Ergonomic Design

- **Ergonomic Front Inclined Design**: The front of the unit is designed with an overall incline, reducing noise during operation and enhancing user comfort during use.
- **Standard Gas and Water Interfaces, Splash-Proof Power Outlets**: The operation area is equipped with standard gas and water source interfaces, along with splash-proof power outlets, ensuring that experiments proceed smoothly and safely.
- **Counterbalanced, Adjustable Sliding Front Door**: The front door is counterbalanced and can be moved up and down with ease, allowing for flexible positioning according to user needs.
- **Built-in Lighting System**: The internal lighting system is designed to provide optimal lighting angles and brightness, reducing visual fatigue for the user.
- **Double-Layer Transparent Glass Side Windows**: The sides of the unit feature double-layer glass windows that enhance light transmission and clarity. The design avoids convex surfaces, dead zones, or turbulence within the workspace, improving visibility and airflow.
- **Corrosion-Resistant SUS304 Stainless Steel Work Surface**: The work surface is made from a one-piece, corrosion-resistant SUS304 stainless steel plate with a curved front design, enhancing comfort during operation.






## Modern Manufacturing Process

- **Box Body Construction**: The box body components are made using **laser cutting** and **CNC bending** technology. The cold-rolled steel is treated with three stages of acid oxidation for rust prevention, and the surface is coated with an **electrostatic powder coating**, enhancing both aesthetics and durability.

## Easy to Clean:

- The pre-filter core and air intake mesh panel are made as a single piece, making it easier to remove and clean the pre-filter regularly.
- The work surface is designed with a smooth, polished finish, without pits or grooves, and the sides are free of dead zones. The minimal joint design makes it easier to clean and disinfect.

## Convenient Maintenance:

- The **removable and movable frame legs** make it easy to transport and relocate the equipment. The height of the casters is adjustable, and they come with a **braking and positioning function**.
- The **front control panel** has a flip-open design, allowing easy access for the maintenance and replacement of electrical components.
- To maintain cleanroom standards, it is recommended that users follow the **failure reminder** displayed on the instrument (optional) or regularly clean or replace the equipment's filters.

| HT Ductless Fume Hoods Main Configuration Table | | | |
|---|---|---|---|
| **Serial Number** | **Name** | **Specifications** | **Quantity** |
| 1 | Cabinet | HT | 1 |
| 2 | LCD Screen Intelligent Controller | | 1 |
| 3 | Maintenance-Free Centrifugal Fan | YY-J/0.4KW | 1 |
| 4 | Sterilization Lamp Tube | MW10-Y18W | 1 |
| 5 | T5 Energy-Saving Fluorescent Tube | 21W | 1 |
| 6 | Aluminum Frame Activated Carbon Filter | Fiberglass Filter Cartridge | 1 |
| 7 | Pre-filter | | 1 |
| 8 | 304 Stainless Steel Work Surface | HT | 1 |
| 9 | Counterbalanced Front Door | | 1 |
| 10 | Waterproof Two-Three Sockets | | 1 |
| 11 | Fuse | 10A | 1 |
| 12 | Power Cable with Plug, 3×0.75mm² | 1.8m 10A | 1 |
| 13 | Detachable and Assembled Stand/Legs | | 1 |
| 14 | Swivel and Brake Casters | 2.5 inches | 2 |
| 15 | Water and Gas Interface/Ports | | 1 |

**The above configuration is for reference only. The manufacturer reserves the right to change the components and their parameters at any time without prior notice**

# KENTON APPARATUS LTD.

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

Kenton is a laboratory instrument manufacturer. In 1999, Kenton produced the first batch of 101 series drying oven and launched them on the market. Later, it successively launched incubator, biochemical incubator and other series. In 2005, we obtained ISO: 9001 quality certification, and in 2008-2012, we successively obtained CE certification. In 2013, a new generation of product series was introduced, and its functions and uses were comprehensively upgraded. The liner material was upgraded to SUS 304 stainless steel. In 2011, we expanded the global market, and now our products are sold to Europe, America, Southeast Asia major markets. Kenton manufactures laboratory equipment under our own brand. Our product line includes biological safety cabinets, artificial climate chambers, drying ovens, incubators, high temperature chambers, humidifiers, water baths, industrial air ovens, laminar flow cabinet, biochemical incubators, vacuum ovens, constant temperature and humidity chambers, and light incubators, among other series. The 30,000 sets produced annually are expected to expand at a pace of 20% annually. It has emerged as South China's biggest and most significant equipment manufacturer. The business has launched Kenton Technology Ltd. to concentrate on the development of supporting equipment in the disciplines of biological research and life sciences, in response to changes in worldwide market demand. We increased the new product series, which includes: blood oscillator, anaerobic oven, (Ultra)low temperature refrigerator, non-pipeline clean gas fume hood, sterile isolation cabinet, drug testing safety cabinet, etc., via independent research and development and technical advancement. Numerous scientific research departments, medical preservation, genetic vaccination, and other businesses make extensive use of our goods. In the meanwhile, we have expanded our recognition and support and have sold to Europe, America, Southeast Asia, Australia, the Middle East, and other international markets thanks to consistent investment, research and development, and advancements in workers, equipment, and technology. To supply top-notch goods and services to reputable laboratories and scientific research centers, as well as to mining and industrial companies both domestically and internationally.

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