

Clean Bench/ Laminar Airflow Cabinet



Vertical Laminar Flow Cabinet - Model MSMDCW1300SWISS

General Overview:

The MSMDCW1300SWISS Vertical Laminar Flow Cabinet is designed to provide a sterile working environment for applications such as plant tissue culture, media preparation, and other laboratory processes requiring contamination-free conditions. It ensures sample protection by maintaining a vertical, unidirectional airflow.

Technical Specifications:

1. Dimensions:

- External Size (WxDxH): 1322x712x1851 mm
- Internal Size (WxDxH): 1221x616x626 mm
- Work Surface Height: 750 mm

2. Airflow and Filtration:

- Airflow Velocity: Adjustable, 0.2~0.5 m/s

- HEPA Filter: 1 pcs, Efficiency: > 99.995% at particle size of 0.3µm
- Pre-Filter: 1 pcs, Polyester fiber, washable
- Cleanliness Grade: ISO Class 5 (formerly Class 100)
- Partial Air Circulation: Perforations at the back wall to eliminate air turbulence and dead air corners

3. Cabinet Construction:

- Main Body: Electro-galvanized steel with antimicrobial powder coating
- Work Surface: 304 stainless steel
- Front Window: Manual sliding sash (5 mm UV-resistant tempered glass) with counter-balance system and ergonomic handle
- Side Windows: 5 mm UV-resistant tempered glass

4. Electrical System:

- UV Lamp: 30W (253.7 nm wavelength) with timing function (0 to 999 minutes), interlocked with front sliding sash
- LED Lamp: 9.6W
- Power Consumption: 285W (excluding socket load)
- Power Supply: AC220V±10%, 50/60Hz; 110V±10%, 60Hz

5. Noise and Illumination:

- Sound Emission: ≤ 65 dB(A)
- Illumination: ≥ 900 Lux

6. Accessories:

- Standard Accessories:

1. Base Stand

1. LED Lamp

1. UV Lamp

1. Waterproof Socket x2

- Optional Accessory: Gas Tap

7. Shipping Details:

- Gross Weight: 255 kg
- Shipping Size (WxDxH): 1460x990x1325 mm
- Shipping Volume: 1.92 m³

Product Features:

1. Ergonomic Design:

- Centrally located control panel with downward angle for easy reach and viewing
- Brushed stainless steel work surface for easy cleaning
- Non-direct lighting to reduce operator eye strain while maintaining proper illumination

2. Control System:

- Microprocessor controller with LCD display
- Displays operating status of airflow, filter life, and UV lamp life

3. Safety and Reliability:

- Front sliding sash interlock with fan and UV lamp to prevent exposure
- UV sterilization with timer control
- UV-resistant tempered glass for enhanced protection
- Independent capacitors for host and sockets to prevent overload

- Memory function to resume operation after power failure

4. Convenience:

- HEPA filter and UV lamp life indicators for timely replacements
- Side glass windows for easy experiment observation
- Easily replaceable pre-filter to extend HEPA filter lifespan
- Built-in temperature sensor to display real-time conditions
- Waterproof sockets for convenient use of small instruments

This vertical laminar flow cabinet offers an optimal balance of affordability and performance, ensuring a clean and controlled environment for laboratory applications.