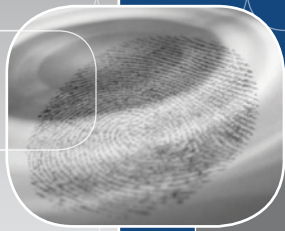


# Powdermax®



*Esco Powdermax 5 Powder Weighing Balance Enclosure: Model PW5-3A\_*

## Powder Weighing Balance Enclosure

Esco Powdermax 5 Powder Weighing Balance Enclosure is our new and improved product which offers you the very best combination of performance, quality and cost-effectiveness in the market today. It is the ideal workstation to protect researchers, lab technicians and production workers during weighing, measuring, pouring, mixing and performing all operations that may involve dust, particulates and powders.

### Designed for Enhanced Usability and Efficiency

The Powdermax 5 is designed specifically to provide the operator with a high level of usability, comfort and visibility.

- A 13-degree sloped front allows easy access to the work zone, eliminating operator fatigue and increasing productivity.
- Transparent 6 mm (0.2") frame-less acrylic windows on the front and sides provide a high level of visibility and operational efficiency. The self-supporting pre-tensioned hinges on the front window provide easy access during loading and start-up.
- Ergonomically designed apertures for hands simultaneously provide maximum movement within the work zone whilst protecting the operator from chemical spillage. The curved front edge minimizes airflow turbulence and improves user comfort.
- Electronic ballast for the fluorescent lighting provides zero-flicker with increased energy efficiency, reliability and service life with a lower heat output.

- Two electrical pass throughs on the back wall of the unit provide convenient access to power sources for equipment.
- The spacious interior dimensions will easily accommodate large analytical and micro balances.

### Enhanced Filtration System

Unique features within the cabinets filtration system ensure the highest level of protection for the operator.

- The Powdermax 5 provides enhanced safety to laboratory personnel by drawing air across the front opening in the hood at a controlled rate, preventing the escape of powders and particulate matters into the general laboratory environment.
- A unique filter mounting system eliminates bypass leaks inherent in conventional clamping systems.
- The Powdermax 5 is equipped with a generously sized HEPA filter system, rated at >99.99% efficiency for 0.3 micron sized particles.
- The state-of-the-art baffle system constructed of 1.2 mm epoxy powder-coated electrogalvanized steel delivers maximum containment by ensuring airflow uniformity throughout the main chamber of the cabinet.
- With HEPA filtered air returning to the laboratory, these enclosures have the added benefit of no ducting, giving you low installation costs and increased portability.

## User-Friendly Control System

The user-friendly Esco Sentinel Microprocessor Control system is fully configurable according to operator's requirements and comes equipped with a number of enhanced features to promote cabinet usability.

- Esco Sentinel™ Microprocessor Control system ensures superior operation and protection by monitoring all critical cabinet airflow parameters. Built in audible and visual alarms ensure product and operator protection by alerting the user in case of malfunction.
- Password-protected administration can be set to restrict access to main menu.
- Through Esco's Sentinel Microprocessor Control system, cabinet airflow is constantly displayed on the LCD display allowing for constant monitoring of the cabinets operation.
- Variable speed controllers with built in RFI and noise filters offer superior control over conventional "step" controllers.

## Highest Quality Cabinet Construction

All Esco cabinets are constructed to the highest quality using the finest materials.

- The cabinets main body is constructed of electrogalvanized steel with abrasion-resistant powder-coated finish.

- Isocide™ antimicrobial coating on the cabinets external structure prevents surface contamination and inhibits bacterial growth.
- The Powdermax 5 comes fitted with a chemical and abrasion resistant removable phenolic worktop.

## Blower Efficiency

The Powdermax 5 incorporates an energy efficient external rotor motor design which reduces operating costs and has extremely low noise and vibration levels. The cabinet blower system creates an inflow of air from the ambient environment into the cabinet with an average velocity of 0.4 m/s (80 fpm).

## Designed and Built to Exceed Safety Criteria

All components used in Esco products meet or exceed all the applicable safety requirements and are UL listed/recognized. The Powdermax 5 is compliant with International Standards. The cabinet is designed to meet the general safety requirements of EN 61010-1, EN 61326 Class B.

## Options and Accessories

The Powdermax 5 is available with a number of options and accessories to meet your needs. These include:

- A transparent glass back-wall – making the cabinet ideal for use in classrooms and educational demonstrations.
- Optional retrofit kits™ – 710 mm (28") support stand with either wheels for enhanced mobility or leveling feet for greater stability.

Further customization specifications are available upon request.

## Warranty

The Powdermax 5 is warranted for 3 years excluding consumable parts and accessories. Contact your local sales representative for specific warranty details.

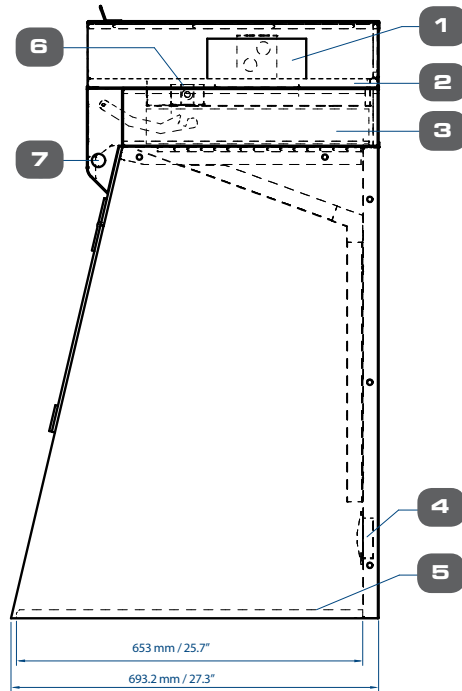
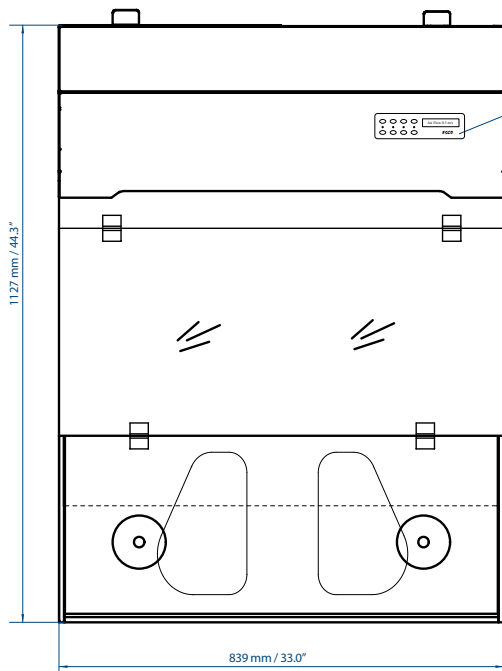
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Powdermax®

Weighing Balance Enclosures • Powder Weighing Balance Enclosures

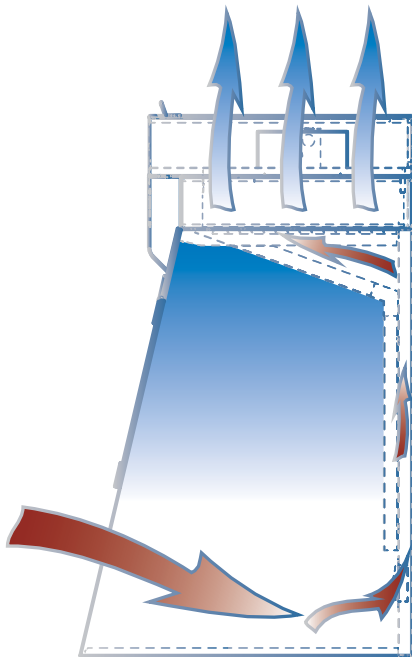
## Powdermax 5 Powder Weighing Balance Enclosure Technical Specifications



1. Blower
2. Electrical Panel
3. HEPA Filter
4. Service Fixture Hole Cover

5. Phenolic Work Top
6. Sensor Box
7. Fluorescent Light
8. Sentinel Microprocessor Control

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### Airflow

- Room air is drawn in across the front of the cabinet with an average velocity of 0.5 m/s (100 fpm).
- Air is drawn up through the cabinets work zone and forced through the HEPA filter (>99.99% typical efficiency for 0.3 micron sized particles).
- The state-of-the-art baffle system ensures airflow uniformity throughout the cabinets main chamber.
- The HEPA filtered air then returns to the laboratory striped of all airborne contaminates or is vented through the optional exhaust collar to exhaust ducting for enhanced safety.

**ESCO**

WORLD CLASS. WORLDWIDE.

## General Specifications, Model PW5-3A\_ Powder Weighing Balance Enclosure

| External Dimensions (W x D x H)          |                                    | 840 x 693 x 1127 mm (33" x 27.3" x 44.3")  |                            |
|--|------------------------------------|--|----------------------------|
| Air Volume (at Initial Velocity)         |                                    | 234 m <sup>3</sup> /h (138 cfm)  |                            |
| Inflow Velocity                          |                                    | Initial setpoint: average of 0.5 m/s (100 fpm) measured in plane of work aperture                                    |                            |
| HEPA Filter Efficiency                   |                                    | >99.99% at 0.3 microns   |                            |
| Sound Emission                           |                                    | <57 dB at initial blower speed setting measured at typical operator work position                                    |                            |
| Fluorescent Lamp Intensity               |                                    | >300 Lux (> 28 ft.candle)  |                            |
| Construction                             | Main Body & Internal Baffle System | 1.2 mm (0.05") 16 gauge electro-galvanized steel with white Isocide oven-baked epoxy polyester powder-coating finish |                            |
|  | Front Panel & Side Panels          | 6 mm (0.2") Acrylic  |                            |
| Electrical                               |                                    | Model  | Voltage                    |
|  |                                    | PW5 - 3A1  | 220-240V, AC, 50Hz 1 phase |
|  |                                    | PW5 - 3A2  | 110-130V, AC, 60Hz 1 phase |
|  |                                    | PW5 - 3A3  | 220-240V, AC, 60Hz 1 phase |
| Power Rating                             |                                    | 225W (230V, AC units)<br>270W (115V, AC units)   |                            |
| Shipping Dimensions, Maximum (W x D x H) |                                    | 956 x 864 x 560 mm (37.6" x 34" x 22")   |                            |
| Shipping Volume                          |                                    | 0.46 m <sup>3</sup> (16.2 cu.ft.)  |                            |

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### Esco Biotechnology Products

Laminar Flow Cabinets, Vertical, Horizontal, PCR  
 Biological Safety Cabinets, Class II, III  
 Cytotoxic Process Cabinets  
*In-Vitro* Fertilization Enclosures  
 Weighing Enclosures  
 Animal Containment Workstations  
 Custom Clean Air and Containment Workstations

Esco products are sold and serviced by more than 200 distributors in over 70 countries. For the name of your local sales representative visit [escoglobal.com/sales](http://escoglobal.com/sales).

NSF Standard 49 Biological Safety Cabinets • Animal Containment Workstations • Fume Hoods • Clean Benches

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