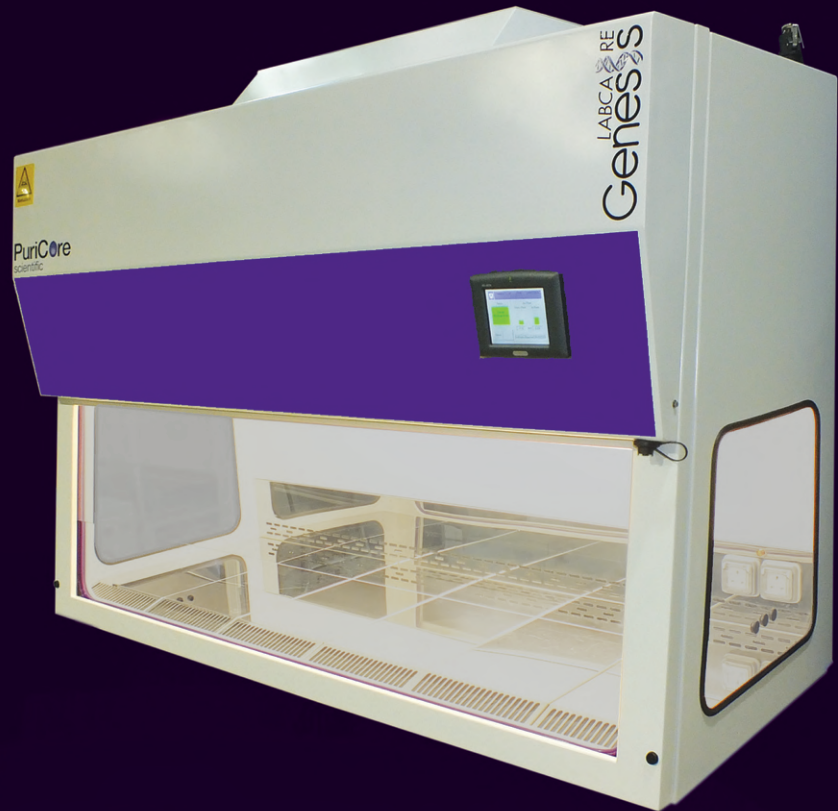




# THE BEGINNING OF A NEW ERA IN BIO SAFETY

CLASS II MICROBIOLOGICAL SAFETY CABINET



Made in UK

**PuriCore**  
scientific

**LABCAIRE**  
For Tomorrow's Environment 

Leaders in Containment Technology

# WHY LABCAIRE GENESIS?

The **LABCAIRE Genesis** Class II Microbiological Safety Cabinets will revolutionise the Class II market, offering customers a new and innovative product with truly unique features.

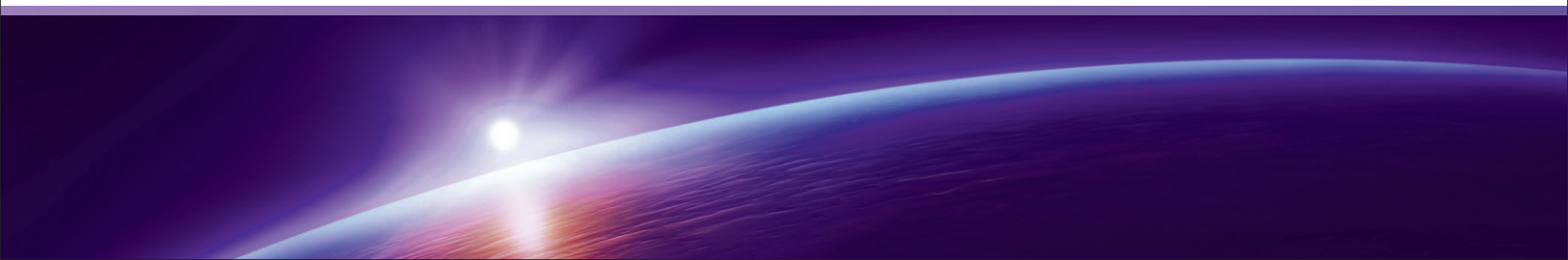
Designed and tested to conform to and exceed the requirements of the latest British & European Standards. The units provide full compliance to:

- BS 5726:1992
- BS 5295
- Exceeds BSEN 12469:2000
- HPA (Porton Down) Type Test Approved to BSEN 12469:2000

Low energy consumption, ultra low noise fans, combined with an ergonomically and aesthetically modern design, ensures enhanced operator comfort during prolonged usage.

The unique inflatable gas tight pressure seal effects a new level of simplicity in door sealing, ensuring no crevices or channels around the electronically operated glass sash.

The full colour touch screen display enables clear user interface, and display of parameters, plus increased functionality and control never before seen in Class II Cabinets.





Available in four sizes (900mm, 1200mm, 1500mm & 1800mm wide) the Labcaire Genesis is suitable for all Laboratory applications.

**Your Choice (Ducted, Recirculating or VAV / Thimble By-Pass)** When used in conjunction with the anti-blow back valve, the unit can easily be connected to exhaust ductwork or a VAV / Thimble By-Pass extract system to exhaust air externally.

Wherever ducting a cabinet is not practical, easy installation is achieved with the recirculating version of the cabinet which has two further features:

- An extra HEPA filter that ensures full protection
- An extra fan to ensure all airspeeds are maintained within the cabinet

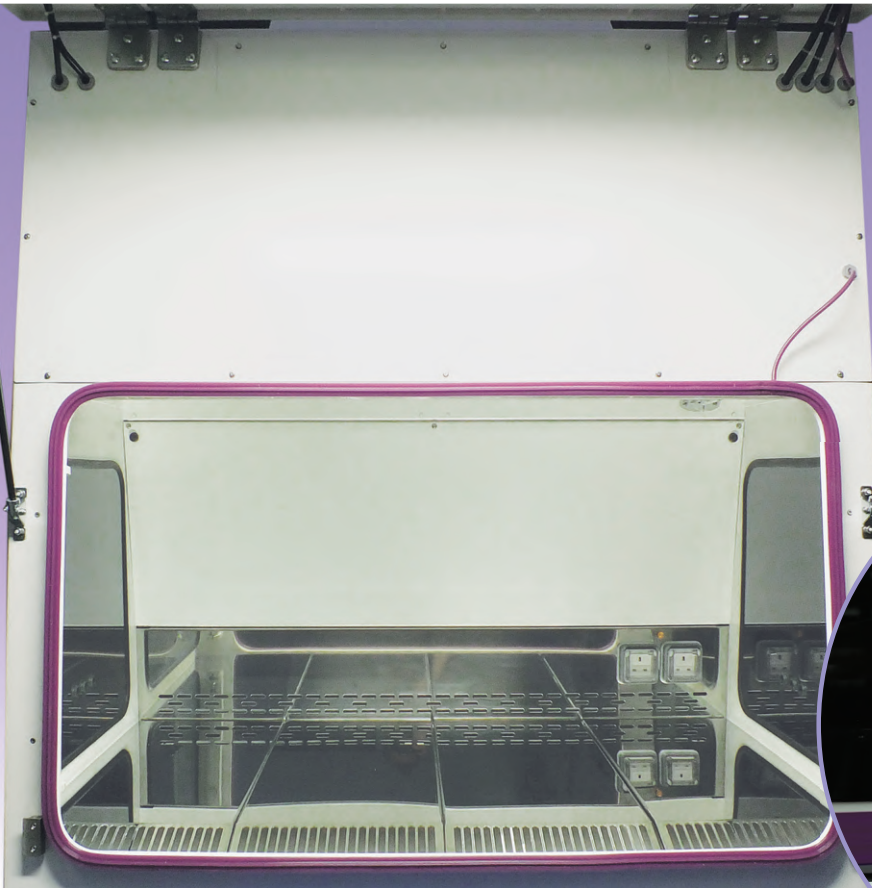
The unit is also designed to cater for low ceiling rooms (2300mm ceiling height); at only 2298mm including a base stand (830mm) and allowing for 100mm clearance for exhaust airflow.

Providing environmentally friendly ultra low power usage of 0.5Kw (2Amps), combined with quiet operation EC / DC 24 volt fans with less than 55dB(A) noise level. The ergonomically and aesthetically modern design ensures enhanced operator comfort during prolonged usage.

The full colour 5½" touch screen control panel offers digital monitoring of both the air flow into the cabinet and the laminar air flow within the unit. Alerting the operator to any safety or maintenance requirements via both audible and visual alarms. The touch screen also controls the operation of all ancillary features such as Electrical Sockets, Gas & UV Lighting.

In addition the Labcaire Genesis Cabinet is pre-configured for use with VHP (Vaporised Hydrogen Peroxide) and Formaldehyde fumigation, for total flexibility, as standard.

## UNIQUE FEATURES



### INFLATABLE GAS TIGHT DOOR SEAL FOR FUMIGATION

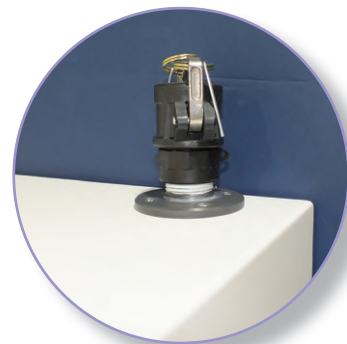
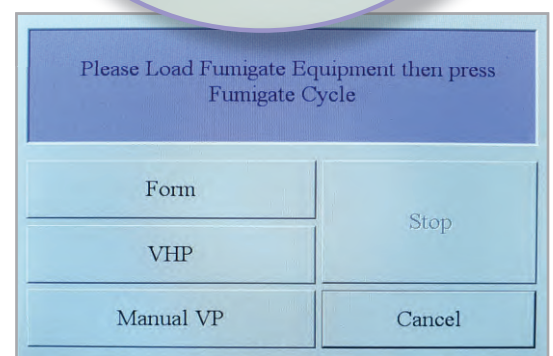
#### “No More Taping of Night Door and Seals”

The unique inflatable gas tight door pressure seal effects a new level of simplicity in door sealing and total safety when fumigating with either Formaldehyde, VHP (Vaporised Hydrogen Peroxide) or Manual VP.

The seal is manufactured from a chemically resistant medical grade silicone and is inflated by a miniature air compressor within the unit controlled with a pressure regulation system linked to the touch screen controller.

The cabinet is fitted as standard with VHP connections (see picture) and can be fitted with an optional Carbon After Filter Box (adds 60mm to cabinet height) for the removal of Formaldehyde Vapours.

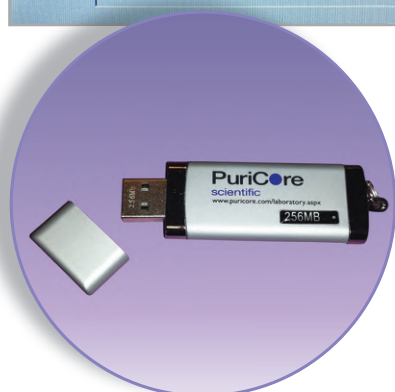
Unique pre-determined software offers automated control of the cabinet during decontamination cycles to simplify the procedure.



| Administration Menu        |            |          |
|----------------------------|------------|----------|
| Fumigate                   | Edit User  | Add User |
| Inflate Door Seal          | Copy Files | Engineer |
| Set Time                   | Auto On    | Auto Off |
|                            |            | Exit     |
| Labcaire Reserved #MASTER# |            |          |

| Auto On                         |          |           |          |
|---------------------------------|----------|-----------|----------|
| Monday                          | Tuesday  | Wednesday | Thursday |
| Off                             | Off      | Off       | Off      |
| Friday                          | Saturday | Sunday    |          |
| Off                             | Off      | Off       |          |
| <div>OK</div> <div>Cancel</div> |          |           |          |

| Copy: From Cabinet to USB Disk                 |              |
|------------------------------------------------|--------------|
| <input type="checkbox"/> Operator List         | <div>?</div> |
| <input type="checkbox"/> Deleted Operator List | <div>?</div> |
| <input type="checkbox"/> Log Information       | <div>?</div> |
| <div>OK</div> <div>Cancel</div>                |              |
| Status:                                        |              |



## UNIQUE FEATURES

### AUTOMATIC START-UP / SHUT-DOWN

Enabling immediate use of the cabinet when you arrive, therefore maximising the working day with an automated initial purge and shut-down, saving 40mins per day.

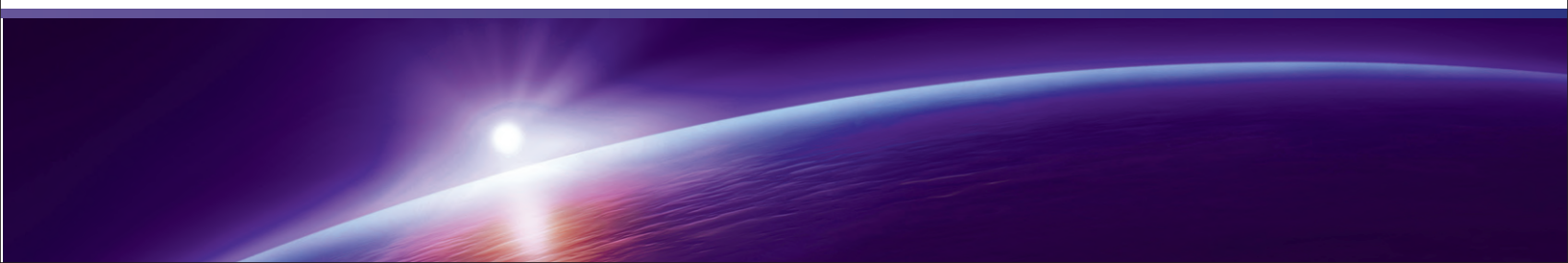
The start-up cycle opens the electric sliding sash from its sealed night position, turns the lights and fans on and brings the air flow up to the correct working conditions. At the end of the day the process is carried out in reverse to shut the cabinet down for the night.

As a safety feature if the cabinet is in use beyond the programmed shut down time an audible and visual alarm is triggered, the cabinet interior lights are switched off and the operator has 2 minutes to cancel the automatic shut-down cycle.

### WATERPROOF USB DATA OUTLET SOCKET

Operator Log In / Log Out audit traceability with alarm and fault logging via a secure pin code unique user ID control.

Downloadable (read-only) .csv format files via waterproof USB data outlet socket. Multiple administration / user levels are available to restrict access to the programming of the cabinet.



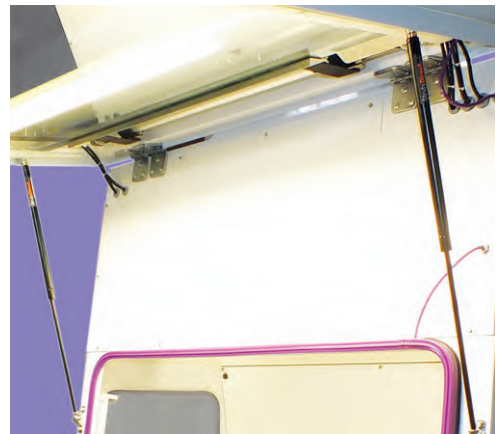
# STANDARD FEATURES

## FEATURES INCLUDE:

- Unique Inflatable Gas Tight Door Seal
- 7° Angled Fascia For User Comfort
- Ergonomically Designed "V" Grille, To Negate Airflow Restriction By Operators Arms
- Easy To Clean Crevice Free Design
- 5½" Colour Touch Screen Controller
- Electronic Sliding Glass Sash
- Glass Side Panels, With Access Ports, Left & Right
- Gas Struts To Support Front Door Module When Cleaning
- Electro-Polished S/S Work Surface
- Unique Modular Work Surface
- Environmentally Friendly
- VHP Connections
- Automatic Start-Up / Shut Down
- Secure PIN Code User ID Control
- Upgradable Software Versions
- Modular Stand, Optional Height Adjustable
- 900, 1200, 1500, 1800mm Widths



Glass Side Panels, With Access Ports, Left & Right



Gas Struts To Support Front Door Module When Cleaning



Electro-Polished S/S Work Surface

# STANDARD FEATURES



Easy To Clean Crevice Free Design

## EASY TO CLEAN CREVICE FREE DESIGN

Removable modular mirror finish 316-grade Stainless Steel work surface (300mm sections) and rear plenum air inlet grille for easy and safe handling / cleaning. Offering high corrosion resistance against aggressive cleaning solutions i.e. Klerecide B and other chlorine based solutions.

## ENVIRONMENTALLY FRIENDLY

Ultra low power consumption with quiet operation EC/DC 24 volt fans resulting in 0.5Kw (2Amps) power consumption.

## ULTRA LOW NOISE LEVEL

<55 dB(A) providing a comfortable working environment even when multiple cabinets are sited in groups.

## ELECTRONIC SLIDING GLASS SASH

Silent action motorised glass sliding sash negates the need for a night door. System is equipped with an "anti-fall" motor, plus the door seal inflates to lock glass in place when in normal working height position.

## GAS STRUTS

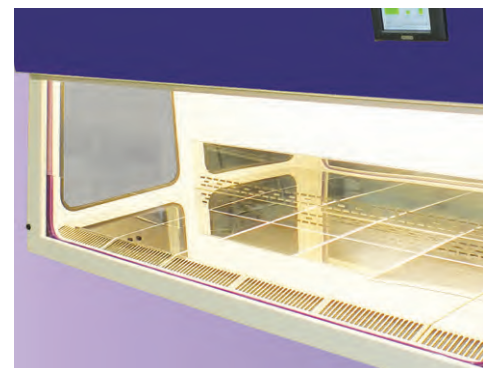
Provides assisted movement of front door module hinged to aid thorough internal cleaning of the cabinet and rear aspect of the glass sash.



2 x IP56 Rated Sockets - As Standard



Low Power EC / DC 24 Volt Fans



Electronic Sliding Glass Sash

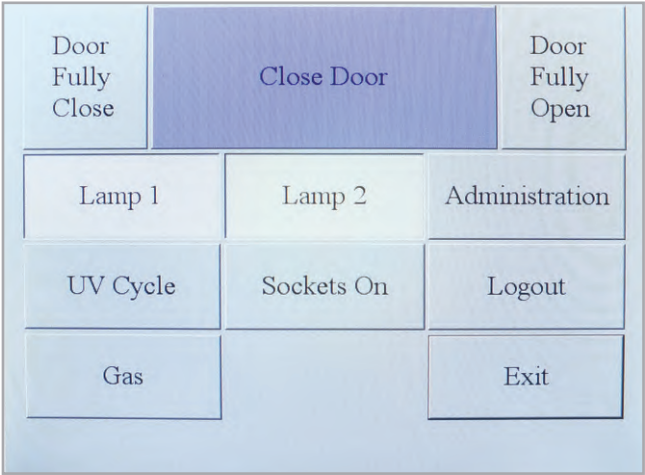
# TOUCH SCREEN CONTROLLER

## PC BASED TABLET CONTROLLER

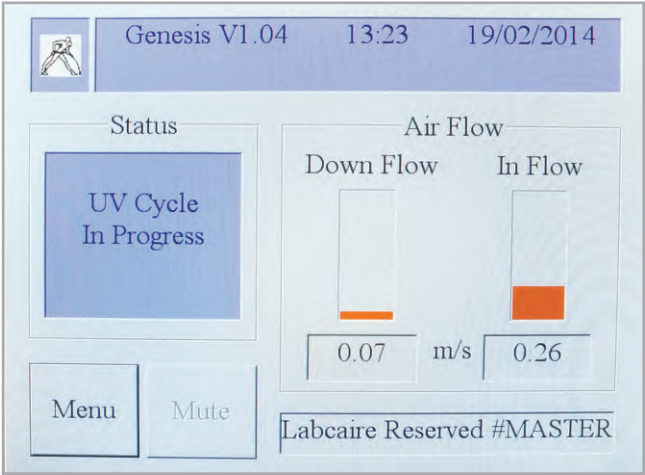
A large 5½" colour touch screen display enables clear user interface, and display of all parameters, plus increased functionality and control never before seen in a Class II Cabinets



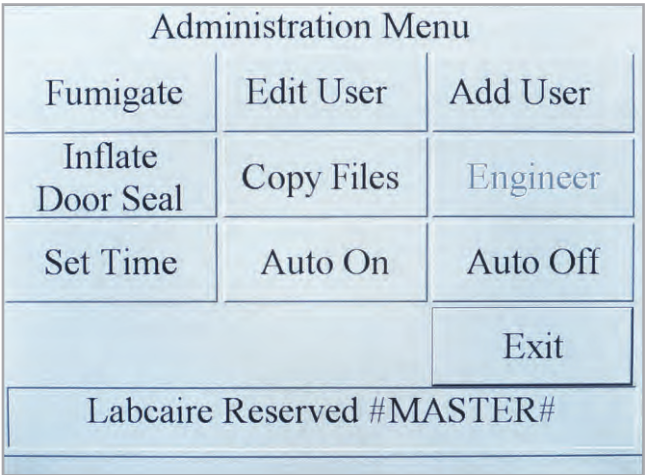
Offers full monitoring of both air flow into the cabinet and the laminar air flow within the unit. It will alert the operator to any safety or maintenance requirements with both audible and visual alarms. The panel also contains the operation of all ancillary features such as Electrical Sockets, Gas and UV Lighting. Secure pin code user ID for control of cabinet operation and automatic Start Up / Shut Down system are also within the panel.



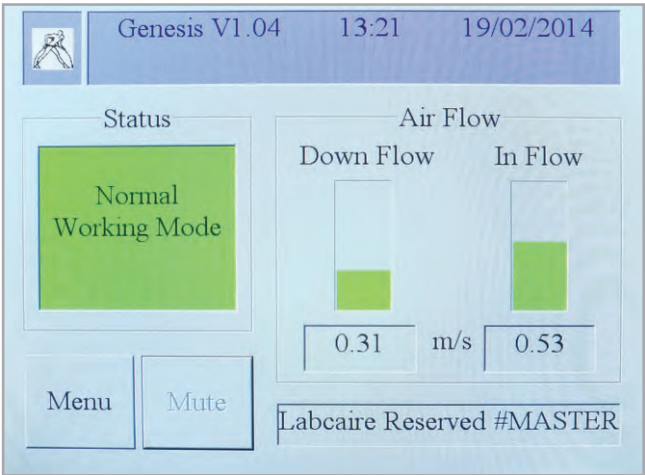
Menu Screen



UV Cycle Screen



Administration Menu Screen



Normal Working Mode



## TRUSTED BY

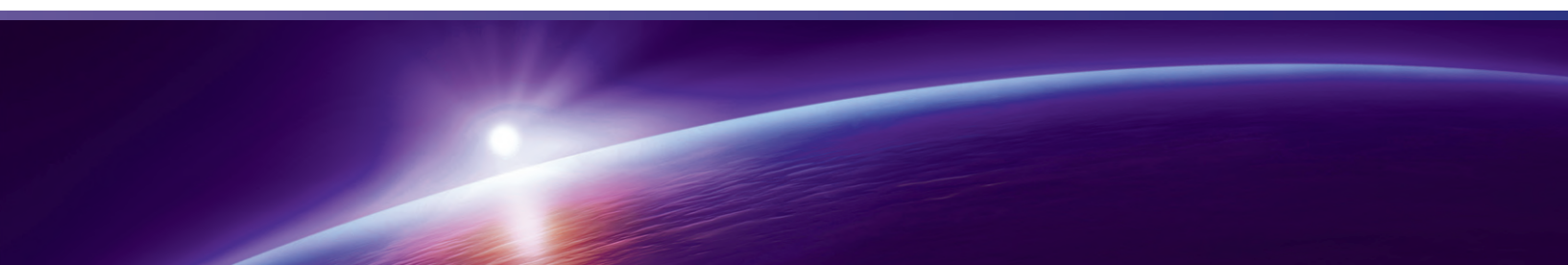
The National Blood Service have selected the Labcaire Genesis Cabinets as their preferred system for use in their UK wide multiple Stem Cell Laboratories. The NHSBT customised Cabinets are manufactured in full 316-Grade Stainless Steel offering high corrosion resistance against aggressive cleaning solutions i.e. Klerecide B and other chlorine based solutions.

The Pirbright Institute (Institute of Animal Health)

## BESPOKE CABINETS

Many of our customers have unique applications and considerations when purchasing a Class II Microbiological Safety Cabinet, we are able to accommodate these, utilising our experienced In-House Design and Manufacturing Teams. Please contact us to discuss your requirements.

Novartis Pharmaceuticals (Virus Seed Laboratory - CAT 2 Containment Suite) have chosen multiple bespoke designed Labcaire Genesis Cabinets to fulfil their needs.



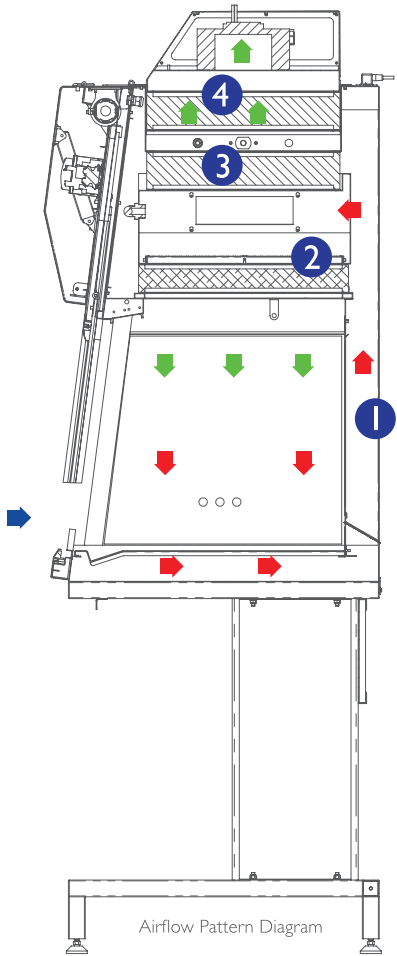
# AIR FLOW

Airflow through our Labcaire Genesis Microbiological Safety Cabinets follows a very specific format to maximise containment. Room air is drawn in through the front aperture in a uniform manner via the unique “V” grille configuration at a speed exceeding 0.6m/sec. In conjunction with the laminar downflow this provides full protection to the operator to BSEN 12469:2000 enabling the operator to work with up to and including CAT 3 pathogens.

Air travels underneath the work surface and behind the rear panel of the cabinet. The air is then drawn into the plenum chamber (1) by the internal fan where 70% of the air is recirculated back into the cabinet via the Main Downflow HEPA Filter (2) at a speed of 0.4m/s to create a laminar airflow effect, providing clean conditions to better than EU GMP 2008 Grade B (equivalent to Federal Standard Class 100) within the work area for sample protection.

The remaining 30% is expelled through the Primary Exhaust HEPA Filter (3) sited at the top of the cabinet where any hazardous pathogenic material is filtered out. On ducted cabinets, the air will pass through the anti-blow back valve (not shown) and be expelled through the duck work.

If the cabinet is a recirculating model, the remaining 30% will pass through the Primary Exhaust HEPA Filter (3) before passing through a Secondary Exhaust HEPA Filter (4) and then be safely returned to the Laboratory. The Secondary Exhaust HEPA Filter ensures that there is no possibility that any pathogenic material may escape for complete peace of mind.



## AIRFLOW IMAGE LEGEND

- Blue Arrow Room Air
- Red Arrow Contaminated Air
- Green Arrow Clean / Sterile Air

- 1. Rear Plenum Chamber
- 2. Main Downflow HEPA Filter & Plenum
- 3. Primary Exhaust HEPA Filter
- 4. Secondary Exhaust HEPA Filter



KI Discuss Testing

# SPECIFICATIONS

| CABINET SPECIFICATION                                                                           | GE9                                                                                                                                                                                                                            | GE12                                         | GE15                                          | GE18                                          |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| External Dimensions<br>mm (w x h x d)                                                           | 925 x 1368 x 745                                                                                                                                                                                                               | 1225 x 1368 x 745                            | 1525 x 1368 x 745                             | 1825 x 1368 x 745                             |
| External Dimensions<br>with after filter box<br>mm (w x h x d)                                  | 925 x 1426 x 745                                                                                                                                                                                                               | 1225 x 1426 x 745                            | 1525 x 1426 x 745                             | 1825 x 1426 x 745                             |
| Internal Dimensions<br>mm (w x h x d)                                                           | 921 x 592 x 645                                                                                                                                                                                                                | 1221 x 592 x 645                             | 1521 x 592 x 645                              | 1821 x 592 x 645                              |
| Overall Height with<br>Stand (including 100mm<br>Gap Required Above Unit)                       | 2298<br>STAND 830mm                                                                                                                                                                                                            | 2298<br>STAND 830mm                          | 2298<br>STAND 830mm                           | 2298<br>STAND 830mm                           |
| Overall Height with<br>Stand & after filter box<br>(including 100mm<br>Gap Required Above Unit) | 2356                                                                                                                                                                                                                           | 2356                                         | 2356                                          | 2356                                          |
| Inlet Face Velocity                                                                             | >0.6m/s                                                                                                                                                                                                                        | >0.6m/s                                      | >0.6m/s                                       | >0.6m/s                                       |
| Laminar Flow Velocity                                                                           | >0.35m/s                                                                                                                                                                                                                       | >0.35m/s                                     | >0.35m/s                                      | >0.35m/s                                      |
| Internal Lighting                                                                               | 2 x 30 Watt<br>Fluorescent Tubes<br>>750 Lux                                                                                                                                                                                   | 2 x 30 Watt<br>Fluorescent Tubes<br>>997 Lux | 2 x 30 Watt<br>Fluorescent Tubes<br>>1002 Lux | 2 x 30 Watt<br>Fluorescent Tubes<br>>1392 Lux |
| Power Consumption                                                                               | 0.5Kw / 2Amps<br>(excluding sockets)                                                                                                                                                                                           | 0.5Kw / 2Amps<br>(excluding sockets)         | 0.5Kw / 2Amps<br>(excluding sockets)          | 0.5Kw / 2Amps<br>(excluding sockets)          |
| Noise Level                                                                                     | <55dB(A)                                                                                                                                                                                                                       | <55dB(A)                                     | <55dB(A)                                      | <55dB(A)                                      |
| Construction                                                                                    | Epoxy powder coated steel head section and frame, toughened glass side and front glazing panels, removable 316-grade electro-polished modular stainless steel work surface<br>(Optional Full Stainless Steel Models Available) |                                              |                                               |                                               |

PuriCore Scientific now offers a 5-Year limited parts and labour warranty (extendable to 7-years) on all Labcaire Clean-Air Equipment, providing commissioning and annual servicing is carried out by a PuriCore engineer; see our terms and conditions for full details.



Made in UK



Certificate No: 0954499

