

SAFETY CABINETS

Product & Microbiological Protection Cabinets



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LABORATORY EXCELLENCE, MADE IN ITALY

More than 40 years of experience

We have been manufacturing biohazard and laminar airflow cabinets since the early 1970s.

Our machines are designed to provide technicians with the **highest level of safety** during use, according to GLP/GMP standards in their respective environments.

100% Made in Italy

Our products are designed and manufactured in Italy, drawing on the long standing tradition and high quality production that is recognised internationally.

The best equipment for your safety

All BioAir-Tecnilabo products are designed with user safety in mind, where even the smallest details are important.



PRODUCTS

We believe simplicity is key for a better experience. This is why all our products are studied and manufactured to provide optimal levels of safety as well as comfort for both operator and product.

Customised models and cabinets designed for specific applications can be produced by our team of skilled engineers and operators. Together, we meet your highest standards.

Microbiological Cabins

- Class II
- Class II for the handling of cytotoxics
- Class II Type B
- Class III

Product protection cabins

- Vertical laminar flow
- Horizontal laminar flow
- PCR



MICROBIOLOGICAL CABINETS

CLASS II

SAFEMATE EZ

MICROBIOLOGICAL PROTECTION CABINET
CLASS II

The SafeMate EZ series makes it easy to stay safe:

- **Easy access to the work area** thanks to the electrical front door
- **Ergonomic design** without armrests limiting the working position thanks to a 'V'-shaped front grill
- **Effective sterilisation** thanks to compatibility with VHP



Performance & Efficiency

- State-of-the-art AC fan that improves **energy efficiency**, reducing operating costs
- Fully **compliant** with **EN 12469**
- **UV light** on the back wall
- Front opening tilted by 5° to offer **greater working comfort**
- **Reporting** of air velocities in real-time
- Chamber and work surface in **stainless steel** for **maximum cleanability**

Technical Specifications

	MODEL 1.2	MODEL 1.8
Supply voltage (V~)	220-240 V ~ 50/60 HZ	
Power consumption (W) * [light and fan]	465	774
Label of conformity	CE	
Dimensions W x D x H (mm) [without supporting platform]	1380 x 795 x 1450	1990 x 795 x 1450
Workspace dimensions W x D x H (mm)	1230 x 600 x 700	1840 x 600 x 700
Weight (kg) [without supporting platform]	256	360
Filter efficiency class [EN 1822-1]	H14**	
Global MPPS efficiency [EN 1822-1](%)	99.995	
UV-C Lamp	Included	
Auxiliary sockets	2	
Service valves for Gas, Air, Vacuum	Optional	
Sound [EN ISO 3744] (dB[A]) ***	<56	<60
Vibration [EN 12469] (mm RMS)	<0.0005	

* Motor and lights on (flow 0.28m/s, LED lights)
** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001
*** Measured under test conditions. Values at customer level may differ within different facilities. A value of <65 is guaranteed under all conditions

MICROBIOLOGICAL CABINETS
CLASS II

SAFEMATE ECO+
MICROBIOLOGICAL PROTECTION CABIN
CLASS II TYPE A2

Safety

- The interior design, aerodynamics and airflow monitoring, and the integrated safety devices ensure the **highest performance in compliance with the most stringent safety levels**
- Optimal flow during use thanks to the **V-shaped front anti-obstruction grill** without the need for armrests
- **Front gasket and closing mechanism** of the sealing glass prevent air leakage during work and facilitate cleaning when the machine is closed

Performance & Efficiency

- **Silent**
- **Optimum performance and low consumption** thanks to single-motor ventilation system with electronic inverter
- **Easy cleaning** thanks to stainless steel chamber and worktop



Design ergonomico

- Side windows and front glass inclined by 5° for **optimal lighting and visibility** of the work area
- Reduced consumption and noise thanks to ECO mode during periods of non-active use,
- Gas and vacuum tap sockets to allow wall installation and avoid accidental contact

Technical Specifications

	0.9	1.2	1.5	1.8
Supply voltage (V~)	220-240			
Mains supply frequency (Hz)	50/60			
Power consumption (W) [light and fan]	200	325	400	625
Mark of conformity	CE			
Dimensions W x D x H (mm) [without supporting platform]	1075 x 795 x 1450	1380 x 795 x 1450	1685 x 795 x 1450	1990 x 795 x 1450
Workspace dimensions L x D x H (mm)	925 x 580 x 700	1230 x 580 x 700	1535 x 580 x 700	1840 x 580 x 700
Weight (kg) [unsupported]	210	245	275	335
Filter efficiency class [EN 1822-1]	H14**			
Efficiency MPPS global [EN 1822-1](%)	99,995			
Lampada UV-C	Included			
Auxiliary sockets	Included (2)			
Sound level [EN ISO 3744] (dB[A])**:	<65			
Available work plans	Solid Sectors, Hollow Sectors, One-piece liquid retention			

*Motor and lights on (flow 0.28m/s, LED lights)

**Efficiency higher than ULPA (Class F) as per IESP-RP-CC001

*** Measured under test conditions. Values at customer level may differ within different facilities. A value of <65 is guaranteed under all conditions

MICROBIOLOGICAL CABINETS
CLASS II

SAFEMATE CYTO
CYTOTOXICS HANDLING
BOOTH

Designed and manufactured according to DIN12980 and EN12469:2000 standards, the Safemate Cyto provides the highest level of safety **against the inhalation of aerosols** generated during reconstitution protocols:

- **Easy access to the work area and optimal air tightness** thanks to the electrical sliding front door
- **Ergonomic design** with 'V'-shaped front grill and without armrests limiting the working position
- **Safe filter change** thanks to bag-in bag-out system



Performance & Efficiency

- State-of-the-art AC fan that improves **energy efficiency**, reducing operating costs.
- Hood fully **compliant** with **EN 12469**
- Front opening tilted by 5° to offer **greater working comfort**
- **Reporting** real-time air velocities
- Chamber and work surface made of **stainless steel for maximum cleanability**

Technical Specifications

	MODEL 1.2	MODEL 1.8
Supply voltage (V~)	220-240 V ~ 50/60 HZ	
Power consumption (W) * [light and fan]	465	774
Mark of conformity	CE	
Dimensions W x D x H (mm) [without supporting platform]	1380 x 795 x 1450	1990 x 795 x 1450
Workspace dimensions W x D x H (mm)	1230 x 600 x 700	1840 x 600 x 700
Weight (kg) [without supporting platform]	256	360
Filter efficiency class [EN 1822-1]	H14**	
Efficiency MPPS global [EN 1822-1](%)	99.995	
UV-C Lamp	Optional	
Auxiliary sockets	2	
Service valves for Gas, Air, Vacuum	Optional	
Sound [EN ISO 3744] (dB[A]) ***	<56	<60
Vibration [EN 12469] (mm RMS)	<0.0005	

* Motor and lights on (flow 0.28m/s, LED lights)
** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001
*** Measured under test conditions. Values at customer level may differ within different facilities. A value of <65 is guaranteed under all conditions

MICROBIOLOGICAL CABINETS

CLASS II

SAFEMATE TOTAL

MICROBIOLOGICAL PROTECTION CABINET

CLASS II TYPE B2

For all processes involving the use of a limited amount of chemicals, but requiring the same level of transverse protection provided by a Class II enclosure.

Designed and manufactured according to the airflow specifications for NSF49 Class II Type B2 cabinets, the SafeMate Total is a total expulsion model.



Technical Specifications

	MODEL 1.2	MODEL 1.8
Supply voltage (V~)	220-240 V ~ 50/60 HZ	
Power consumption (W) * [light and fan]	600	1080
Mark of conformity	CE	
Dimensions W x D x H (mm) [without supporting platform]	1380 x 795 x 1640	1990 x 795 x 1640
Workspace dimensions W x D x H (mm)	1230 x 580 x 700	1840 x 580 x 700
Weight (kg) [without supporting platform]	280	400
Filter efficiency class [EN 1822-1]	H14**	
Efficiency MPPS global [EN 1822-1](%)	99.995	
UV-C Lamp	Included	
Service valves for Gas, Air, Vacuum	Optional	
Sound [EN ISO 3744] (dB[A]) ***	<65	
Vibration [EN 12469] (mm RMS)	<0.0005	

* Motor and lights on (flow 0.28m/s, LED lights)
 ** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001
 *** Measured under test conditions. Values at customer level may differ within different facilities. A value of <65 is guaranteed under all conditions

Performance & Efficiency

- Front door tilted by 5° for **greater comfort and optimal cleanliness** of surfaces
- **Electric sliding door** and automatic recognition of correct working position
- **Easy to clean** thanks to AISI 304 **stainless steel** with SB finish chamber and worktop, compliant with EN12469:2000
- Air decontamination provided by **H14 HEPA filters**, with >99.995% efficiency
- **Ergonomic design** without armrests limiting the working position thanks to a **'V'-shaped front grill**

MICROBIOLOGICAL CABINETS

CLASS III

SAFE³

MICROBIOLOGICAL PROTECTION CABINET
CLASS III

This series offers **the highest level of containment**, enabling the safe handling of pathogens **up to risk group 4**.

The Safe³ cabinet is designed according to the most stringent parameters of **EN12469:2000** and includes a unique four-filter system for even greater protection of operators and the environment.



Technical Specifications

Expected service life of the machine (years)	10
Power consumption (W) * [light and fan]	1500
Microbiological safety	EN 12469:2000
Dimensions W x D x H (mm)	2015 x 1295 x 810
Workspace dimensions W x D x H (mm)	1200 x 675 x 695
Weight (kg)	220
Filter efficiency class [EN 1822-1]	H14**
Efficiency MPPS global [EN 1822-1](%)	99.995
Glove holder	2
Workspace air cleanliness class [EN 14644-1]	ISO 3
Sound [dB(A)] *	<56
Vibration (mm RMS)	<0.005

* Motor and lights on (flow 0.28m/s, LED lights)
** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001
*** Measured under test conditions. Values at customer level may differ within different facilities. A value of <65 is guaranteed under all conditions

Safety & Comfort

- **Controls** conveniently located **at eye level**
- **Self-calibration** and **internal control cycle** before reaching 'SAFE' condition
- **High airflow stability** both in case of transient disturbances and progressive filter clogging
- **Automatic restoration** of initial conditions in the event of a power failure
- **High-speed rinse at start-up**

PRODUCT PROTECTION CABINS

HORIZONTAL LAMINAR FLOW

AURA HZ

PRODUCT PROTECTION CABIN
CROSS-FLOW

The internal design, aerodynamics and airflow monitoring, and the special H14 filter with downstream Micromesh equalisation plenum all guarantee the **highest performance** to the strictest levels of operator safety and comfort.

Performance & Efficiency

- **Automatic airflow monitoring**
- **H14 Filter** with downstream Micromesh equalisation plenum for maximum uniformity of airflow velocity
- **Maximum cleanliness of the ISO3 work area** where maximum product safety is achieved
- **Highly efficient washable polyurethane prefilters** which remove the coarsest particles before the air reaches the H14 filter
- **Tempered glass side walls** to prevent any outer leakage



Technical Specifications

	MODEL 48	MODEL 72
Supply voltage (V~)	230 V ~ 50/60 HZ	
Power consumption (W) * [light and fan]	650/700	1150/1200
Reference Standard	EN 61010-1	
Dimensions W x D x H (mm)	1270x1050x1360	1920x1050x1360
Workspace dimensions W x D x H (mm)	1130x620x740	1790x620x740
Weight (kg) [without supporting platform]	130	195
Filter efficiency class [EN 1822-1]	H14**	
Efficiency MPPS global [EN 1822-1](%)	99.995	
Average air flow velocity (m/s)	0,40 ± 10%	
LED light	Optional	
Sound (dB(A)) ***	<63	

* Motor and lights on (flow 0.28m/s, LED lights)
** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001
*** Measured under test conditions. Values at customer level may differ within different facilities. A value of <65 is guaranteed under all conditions

PRODUCT PROTECTION CABINS
VERTICAL LAMINAR FLOW

AURA VIP

Designed to the strictest quality standards to provide maximum protection and reduce the release of allergens and irritants into the environment.

Performance & Efficiency

- **Microprocessor-controlled motor blower**, with volumetric sensor for exhaust air flow monitoring
- **Automatic restoration** of initial conditions in the event of a power failure
- **Front design inclined by 5°** for maximum operating **comfort**
- Inclined back side of the working chamber for **better flow distribution**
- **ISO 3** (ISO 14644-1) internal cleanliness level
- Electrically operated **multi-layer sliding safety glass**



Technical Specifications

	MODELLO 0.9	MODEL 1.2	MODEL 1.8
Supply voltage (V~)	230V 50/60Hz		
Dimensions W x D x H (mm)	1074x795x1450	1380x795x1450	1990x795x1450
Workspace dimensions L x P x H (mm)	1130x620x740	1790x620x740	1990x795x1450
Weight (kg)	206	240	340
Sound dB(A) *	<58	<60	<61
Filter efficiency class HEPA	>99,995% @ MPPS (test MPPS according to EN1822.1 – H14)		
Internal cleanliness (ISO14644-1)	ISO 3		
Prese interne	2		

* Measured under test conditions. Values at customer level may differ within different facilities.
A value of <65 is guaranteed in all conditions



PRODUCT PROTECTION CABINETS

VERTICAL LAMINAR FLOW

AURA MINI

Compact bench-top laminar flow series offering everything necessary to ensure **cleanliness and protection**, without taking up space in the laboratory.

The internal design, aerodynamic airflow, the special H14 filter and the Filtrete® exhaust filter (or prefilter) ensure maximum performance at the most stringent levels of safety and comfort.

Performance & Efficiency

- **Two operating modes:** inward and outward air curtain
- Centrifugal motor with **digital inverter for optimum performance**
- Fluorescent lamp and elapsed time counter
- Removable perforated work surface and AISI 304 stainless steel work chamber back wall for **easy cleaning**



Technical Specifications

Supply voltage (V~)	220-230 V~ 50/60 Hz
Power consumption (W) * [light and fan]	200
Mark of conformity	CE
Dimensions W x D x H (mm)	850 x 590 x 820
Workspace dimensions W x D x H (mm)	735 x 420 x 480
Weight (kg) [without supporting platform]	65
Filter efficiency class [EN 1822-1]	H14**
Efficiency MPPS global [EN 1822-1](%)	99.995
Sound [EN ISO 3744] (dB[A]) ***	>65
Vibration [EN 12469] (mm RMS)	NA

* Motor and lights on (flow 0.28m/s, LED lights)
** Efficiency higher than ULPA (Class F) as per IESP-RP-CC001
*** Measured under test conditions. Values at customer level may differ within different facilities. A value of >65 is guaranteed under all conditions

PRODUCT PROTECTION CABINETS

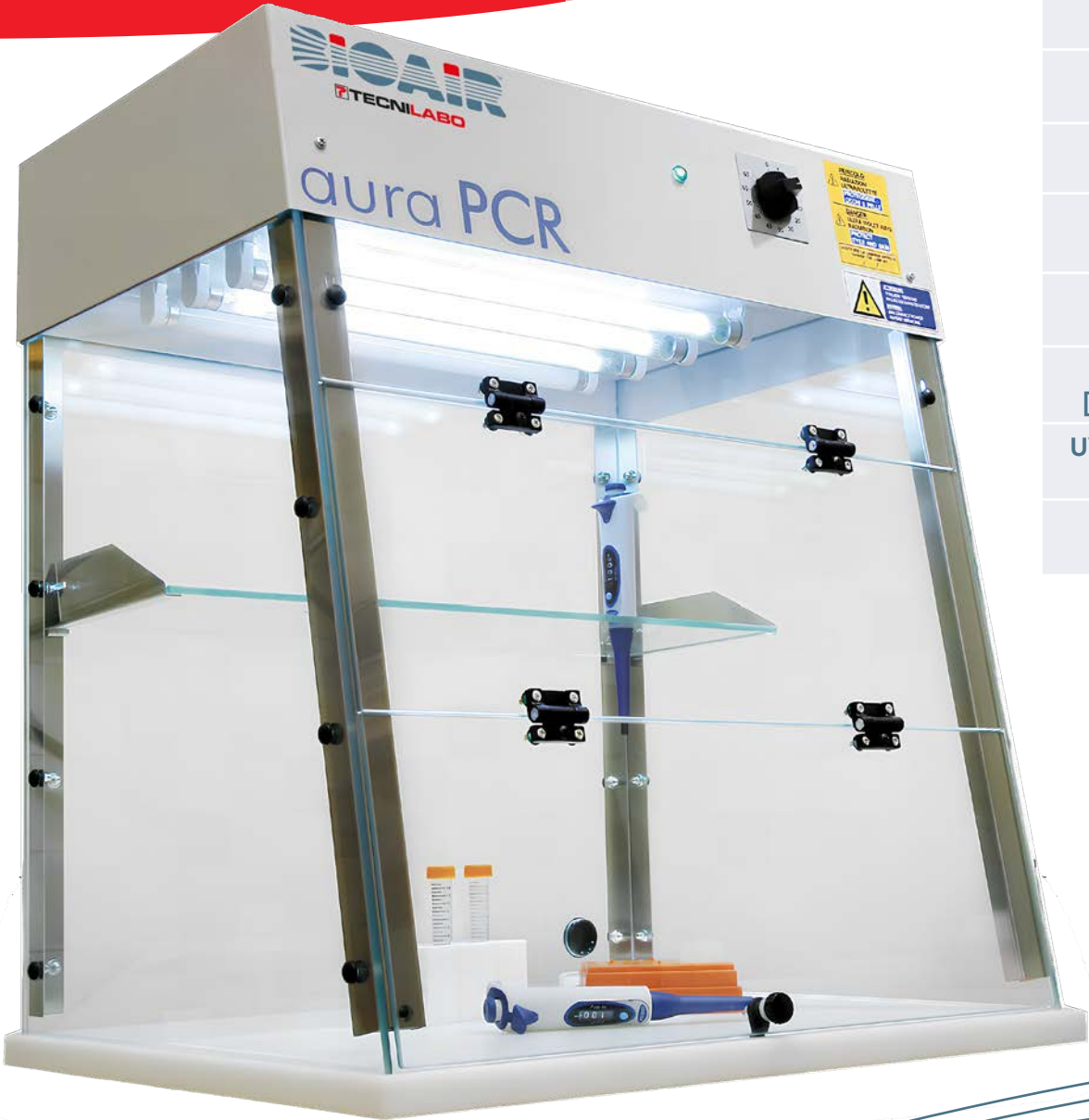
AURA PCR DNA CROSS-CONTAMINATION CONTROL CONTAINER

These cabinets are designed for pre-amplification sample preparation in a controlled environment to avoid DNA carry-over.

No aerosols generated during post-amplification sample handling can enter the booth; any DNA molecules contained are neutralised by UV radiation.

Performance & Safety

- Passive cabin (non-ventilated)
- Automatic switchover from UV neutralisation mode to operating mode (fluorescent light)
- **100% UV-safe** working chamber
- Hinged glass inner shelf for **more comfort and maximum space availability**
- Work surface in **polyethylene** for maximum chemical resistance



Technical Specifications

Supply voltage (V~)	220-230 V~ 50/60 Hz
Power consumption (W)	100
Mark of conformity	CE
Dimensions W x D x H (mm)	650 x 545 x 730
Workspace dimensions W x D x H (mm)	550 x 470 x 570
Weight (kg) [without supporting platform]	41
UVC radiation retention of glass (%)	98
Illuminance [EN 12469] (lux)	>600

