

## **Vertical Laminar Flow Cabinet - AURA Mini**

## **Technical Specifications**

- Compact, vertical laminar air flow cabinet.
- Reduced size for the easiest installation in small or crowdedlabs.
- Easily convertible inward or outward barrier operating modes.
- Hinged front panel and sidepanels in tempered glass
- H14 downflow filter
- Filtrete® exhaust filter (orprefilters depending on configurations)
- Active PCR version
- Silent and quite operation <65dB(A)</li>



AURA Mini Cabinets are supplied in one compact size only (895mm).

These state of the art compact down-flow cabinets, provide an ultimate cleanliness Class 100work area where the highest safety for the products is achieved.

The internal design, the air flow aerodynamics, the special H14 filter and the Filtrete® exhaust filter (or prefilters) guarantees the highest performances at the most stringent safety levels and operator comfort.

Two operating modes are available: inward air barrier and outward air barrier.

**INWARD** air barrier. In this configuration an air barrier flows through the front opening and is recirculated with the downflow air by a motor blower. 70% of the air is returned to the work area through the main HEPA filter and 30% is exhausted into the environment through a Filtrete® exhaust filter with gravimetric efficiency of 99% on 3µm particles. In this configuration an excellent product protection is ensured, as well as an outstanding containment.

**OUTWARD** air barrier. In this case the air is sucked through the Filtrete® prefilter, mixed with the incoming recirculating air and then filtered through the main HEPA filter into the work area: here 30% of the air is exhausted through the front opening and 70% is recirculated. This configuration ensures the highest product protection.

In the INWARD configuration this unit can easily be used as an "active PCR" cabinet for DNAcarry over blocking.

AURA Mini is a complete and user-friendly tool for the protection of highly sensitive products that only experienced European design with over 35 years of know-how and accurate quality manufacturing can provide.

## Main specifications

- 1. Centrifugal Motorblower with digital inverter for optimal performance.
- 2. Soft-touch keys on the control panel provide control of fan and lighting
- 3. Elapsed time-meter
- 4. Exhaust filter
- 5. Removable perforated work surface and back wall of the work chamber made of AISI 304 stainless steel
- 6. Cabinet outer surfaces made of cold rolled steel with paint finish
- 7. Front and side panels in 5mm thick tempered glass
- 8. H14 class High Efficiency Particulate Air filters guaranteed with 99.995% efficiency on 0.1-0.2 micron particles (MPPS) (EN1822-1)
- 9. Exhaust filter (or pre-filter) type Filtrete® with a gravimetric efficiency higher than 99% on  $3\mu m$  particles
- 10. Standard features includes: fluorescent lamp, elapsed time meter
- 11. Optional cover with UV light (includes safety switch to turn off UV if cover is removed from the cabinet)
- 12. Electrical equipment according to International Standards and EMC directives
- 13. Soft touch keys on the control panel provide control of the lighting, motor blower, UV light
- 14. Lighting >750 lux
- 15. Silent and quite operation <65dB(A) due to the highly vibration-free suspensions of the fan.
- 16. CE Marked



## **Technical Features**

1.1 SPECIFICATIONS	
Marks of conformity:	CE
Reference Standard:	IEC 61010-1:2010 / EN 61010-1:2010 IEC 61326-1:2012 / EN 61236-1:2013
Electrical insulating/protection class [IEC 61140]	I
Mains supply voltage	220-230 V~ 50/60 Hz
Main fuses	F5A H, 250V
Fluorescent lamp (W):	1 x 24 T5 840
Required power line (3A optional service socket included)	950 W
Absorbed power (fan and light on only)	200 W
Sustained impact glass maximum energy (EN 61010-1, clause 8.2.2)	4 J
Window glass UVC radiations retention	98%
1.2 ENVIRONMENTAL CONDITIONS	
Temperature	from 10°C to 35°C
Maximum relative humidity	80% for temperatures up to 31°C, decreasing linearly to 50% at 40°C
Max mains supply voltage fluctuations	up to ±10%
1.3 TRANSPORT AND STORAGE CONDITIONS	
Ambient temperature and relative humidity	from -5°C to 45°C, up to 90% RH
Atmospheric pressure	from 800 to 1060 mbar
1.4 WEIGHT AND DIMENSIONS	
Weight	65 kg
Overall	W 850 x D 590 x H 820 mm
Front aperture	W 735 x H 180/300 mm
Working space	W 735 x D 420 x H 480 mm
Safe work area	W 575 x D 260 mm
Required operational space around [above - left - right - front]	300 - 0 - 200 - 1000 mm
1.5 MATERIALS	
Main structure	Epoxy coated cold rolled steel
Working surface and inner front wall	AISI 304 stainless steel
Front window	Tempered safety glass
1.6 PERFORMANCES	
Laminar Air Flow mean velocity [EN 12469]	0,37 m/s ÷ 0,43
Inflow Air Barrier mean velocity	0,2 m/s ±10%
Exhaust Air flow rate	100 m3/h ±10%
Exhaust Air flow ratio	25% ±10%
Working space air cleanliness class [EN 14644-1]	ISO 3
Illuminance [EN 12469]	>750 Jux
Sound level [EN ISO 3744]	
	<65 dB
Max increase inside cabinet in temperature from the ambient [EN12469]	<5°C
1.7 Filters DIMENSIONS AND FEATURES	W 762 B 225 1162
LAF filter dimensions	W 762 x D 305 x H 68 mm
Filters efficiency class [EN 1822-1]	H14
Filters global MPPS efficiency [EN 1822-1]	99,995%
MPPS diameter [EN1822-1] (μm):	$0,1 \div 0,3$