

AURA PCR™ DNA CARRY-OVER BLOCKING CABINETS

Cod. PC20100

Technical Specifications

- Passive (non-ventilated) PCR cabinet.
- Automatic switching from UV-neutralising mode to operational mode (LED white light)
- Easy to use 60 min timer with 1 min intervals.
- Fully transparent work chamber, (robust and safe 6mm tempered glass, blocking >98% of UV light)
- Microswitches to ensure UV light can stay on only when the front glass is closed
- 100% UV-safe work chamber
- 3-sectors hinged front window
- Internal hinged glass shelf for higher comfort and maximum space availability
- Polyethylene work surface for the highest chemical resistance



These state-of-the-art PCR cabinets are specially designed for pre-amplification sample preparation in controlled environment in order to prevent DNA carry-over. Any aerosol generated during the handling of the post amplification samples cannot enter the cupboard; any molecule of DNA herein contained is subsequently neutralised with the help of UV radiations.

Operating mode: AURA PCR is a very easy-to-operate cabinet. When the normal working procedures have been completed, the tempered glass front panel is closed, and a timer is activated in order to expose all internal surfaces and tools to UV radiation for a preset period of time.

The outer tempered glass body of AURA PCR, acting as a filter to UV radiations is safely protecting the external environment from dangerous exposure of personnel to those radiations.

The PCR cabinet complies with the electromagnetic compatibility "EMC" according to 89/336EC.

The cabinet also complies with safety requirements for electrical equipment for laboratory use as per EN 61010-1.

A complete and user friendly tool for the protection of highly sensitive procedures that only experienced European design with over 35 years of know-how and accurate quality manufacturing, can provide.

Main specifications

1. AURA PCR is a DNA carry-over blocking cabinet, preventing cross-contamination inside the workingchamber and for the neutralisation of DNA fragments contained in aerosols herein generated.
2. Operating mode: at the end of the procedure, the operator will close the front window, automatically starting the UV-neutralising mode. When the pre-set neutralisation cycle has been completed the timer will automatically turn off the UV light.
3. LED white light turn on automatically when opening the front glass or when UV lights turn off (user selectable)
4. Digital timer for UV lights with memory of the last setpoint
5. Electrical equipment according to International Standards and EMC directives
6. Lighting > 600 lux
7. Cabinet upper part made of painted steel.
8. Working surface made of polyethylene
9. Side panels made of tempered glass (6mm thick)
10. CE marked

Technical Features AURA PCR

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:	F2A L, 250V
LED lamps (W):	2x 7
CRI (Color Rendering Index)	80
Lamp colour temperature (K)	4000
Average life at 90% yield (h)	40000
UV-C lamps (W):	3x 15 T8
Required power line (W):	100
Absorbed power (W):	100
Sustained impact maximum energy of the glass [EN 61010-1, clause 8.2.2] (J):	4
Window glass UVC radiations retention (%):	98
1.2 USE ENVIRONMENTAL CONDITIONS	
Use:	indoor
Altitude (m):	up to 2000
Temperature (°C):	from 10 to 35
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
Transient overvoltage category:	II
Pollution degree:	2
1.3 TRANSPORT AND STORAGE CONDITIONS	
Ambient temperature (°C):	from -5 to 45
Relative humidity (%):	up to 90
Atmospheric pressure (mbar):	from 800 to 1060
1.4 PESO E DIMENSIONI	
Weight (kg):	41
Overall L x D x H (mm):	650 x 545 x 730
Maximum front aperture L x H (mm) :	555 x 430
Working space L x D x H (mm):	550 x 470 x 570

1.5 MATERIALS

Upper structure:	cold rolled steel, epoxy powder coated
Central structure, front panel and service tray:	tempered safety glass - 6 mm
Working surface:	PE

1.6 PERFORMANCES

Illuminance [EN 12469] (lux):	>600
Sound level [EN ISO 3744] (dB[A]):	NA
Surface power density of single UV-C lamp at 1 m ($\mu\text{W}/\text{cm}^2$):	49,0
UV-C spectral peak (nm):	253,7
UV-C lamp average life (h):	8000