

- Superior Alternative to Dead-Air Boxes And Passive Chambers At Economical Prices.
- Ergonomic Sloped Front Design



Unlike other PCR solutions from the competition, a unique feature of these models is that every unit produced is **rigorously tested and certified** at our in-house laboratory after production for performance, in accordance with the latest clean air standards. For your assurance, each cabinet also ships complete with a factory commissioning report detailing the tests performed and results obtained. Experience the benefits of proven product and cross-contamination protection based on Esco's **experience of more than 20 years** with laminar flow and HEPA / ULPA filtration technologies.

The built-in UV lamp decontamination system in the cabinet functions effectively, using a proven protocol, for sterilisation of contaminant DNA / RNA in between applications. By eliminating contamination these compact enclosures increase productivity at a low initial cost, while preserving valuable space in your laboratory. **Double-flap safety cover** protects the user while allowing safe access to work zone.

IMPORTANT NOTICE: Esco PCR Vertical Laminar Flow Cabinets only provide product (sample) protection. When both operator and product protection is required during the PCR process, Esco Class II biohazard safety cabinets are recommended. Please refer to our website for further information and catalogs: biotech.escoglobal.com

MAIN FILTRATION AGENTS

- **True vertical laminar airflow** with a large filter covering the entire work zone within the cabinet for better protection against cross contamination, as compared to conventional dead-air boxes.
- High-quality polyurethane pre-filter and main **H13 HEPA filter with a typical efficiency of 99.9995% at both 0.3 and 0.12 microns** provide the best product protection in the world; typical HEPA filter lifespan is more than 3 years depending on ambient operating conditions and total number of hours in usage.

UV DECONTAMINATION FEATURES

- A powerful 253.7 nanometer 20-watt UV lamp is placed behind the front panel out of the operator's direct line of sight, ensuring maximum operator comfort and safety; This unique placement design eliminates "dead zones" and ensures all exposed interior surfaces are decontaminated effectively.
- Easily accessible adjustable UV-timer (from 0 - 60 minutes) for precise decontamination cycle control.
- Integral safety cover (constructed of 5mm / 0.2" UV-absorbing beta radiation resistant polycarbonate - superior to conventional materials such as acrylic) with two operating positions; fully open (self-supporting with spring hinges) during normal use and fully closed during UV decontamination of interiors.
- Effective safety features to prevent operator exposure to harmful UV rays; interlock system ensures UV lamps do not

Esco® PCR Vertical Laminar Flow Cabinet has been designed specifically for polymerase chain reaction (PCR) applications. Unlike conventional dead air boxes, this enclosure features **ISO Class 4 (US Federal Standard 209E Class 10)** product protection within the work zone by vertical laminar airflow. It is a unique, superior and economical alternative to conventional dead-air boxes and passive chambers traditionally used for PCR applications.

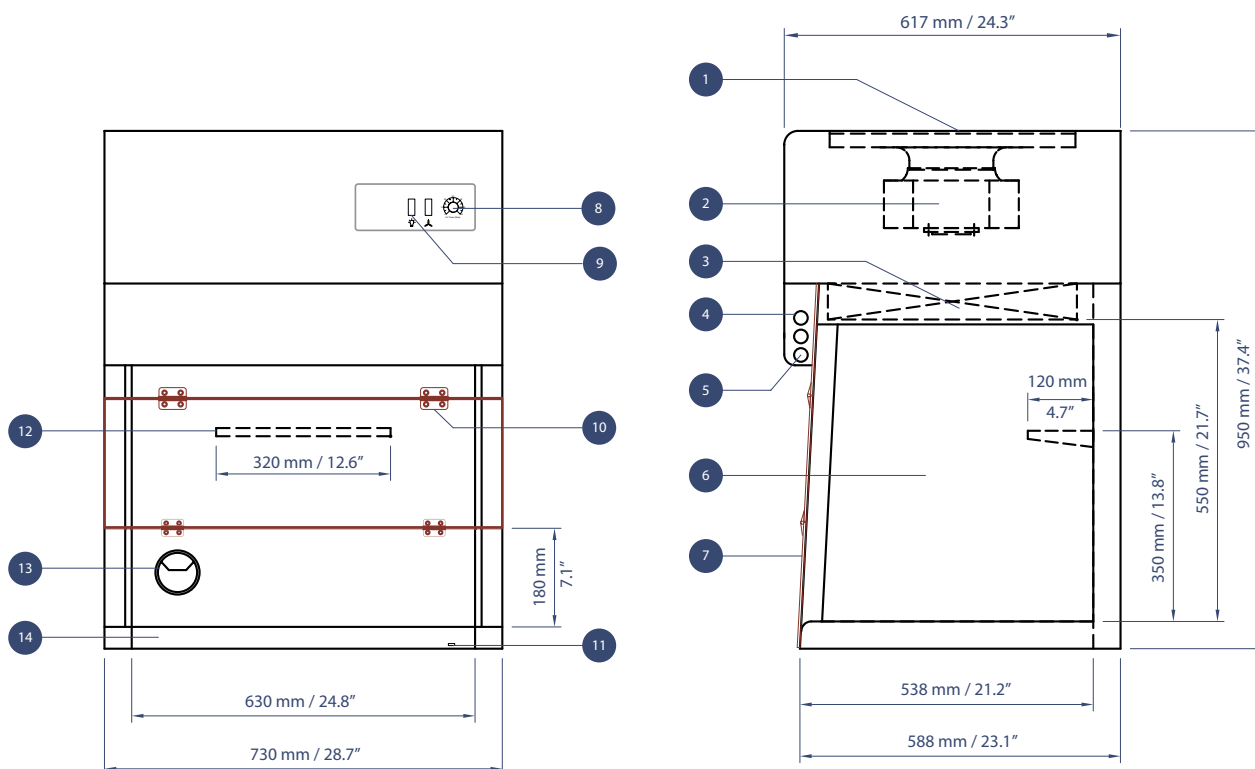
By providing a particulate-free work environment, these cabinets isolate critical steps in the PCR process from contamination present in the ambient environment, and can be operated effectively as "mini-environments" in the laboratory. True vertical laminar flow in the interior also prevents cross contamination within the work zone. Other features typical of laminar flow cabinets, such as a positively pressurized interior, also ensure that contamination from the ambient environment cannot enter the work zone.

activate unless safety cover is closed; in case the cover is accidentally opened the UV lamps will also automatically deactivate.

- Built-in warm white, **5000k electronically ballasted** lighting offers excellent illumination throughout the work zone in order to reduce operator fatigue and is comfortable to the eyes. Light tubes are mounted out of the air stream for better airflow uniformity.

CONSTRUCTION FEATURES

- Built for ergonomics and operator comfort with a **sloped front design** and tempered side glass walls for maximum visibility into the cabinet workzone.
- Rugged all-metal body is superior to less durable plastic construction offered by the competition; high quality, attractive, easy to clean stainless steel work surface for lasting performance. Work surface front edge is rounded for optimum comfort for arms during extended operations.
- Decontamination shelf is provided on the back wall closer to the UV lamp for effective sterilization procedures.
- **Optional Retrofit Kits™:** Support stand available in 28" / 710 mm height with castor wheels.
- Designed to meet the safety requirements of IEC 61010-1 / EN 61010-1 / UL 61010A-1 / CSA C22.2 No. 1010.1-92. Components are UL listed / recognised.
- **12-month warranty** for Esco PCR cabinets excluding consumables and accessories.



- 1.** Pre-filter **2.** Blower **3.** HEPA Filter **4.** UV Lamp **5.** Fluorescent Lamps **6.** Tempered Glass Side Panel
7. Hinged Cover, Polycarbonate **8.** UV Timer **9.** Operating Switches **10.** Spring-loaded Hinge
11. UV Interlocking Switch **12.** Perforated Powder-Coated Shelf **13.** Pass-through Flap
14. Stainless Steel Work Surface With Curved Front Edge

General Specifications		SCR-2AX
External Dimensions (Width x Depth x Height)		730 x 617 x 950 mm 28.7" x 24.3" x 37.4"
Internal Work Zone (Width x Depth x Height)		630 x 538 x 550 mm 24.8" x 21.2" x 21.7"
Air Volume (At Initial Velocity)		557-669 cmh / 328-393 cfm
Laminar Airflow Velocity		Average of 0.50-0.60 m/s or 98-118 fpm measured 150mm / 6" from filter face for 35 air changes / minute
Standards Compliance		Individually performance tested and certified at factory under controlled conditions for: General requirements: IEST-RP-CC002.2 and AS1386.5 Air cleanliness: ISO 14644.1 Class 4, IEST-G-CC1001, IEST-G-CC1002 and other equivalent air cleanliness requirements Filter performance: IEST-RP-CC034.1, IEST-RP-CC007.1, IEST-RP-CC001.3 and EN1822 Electrical safety: IEC 61010-1 / EN 61010-1 / UL 61010A-1 / CSA C22.2 No. 1010.1-92
Air Cleanliness Within Working Area		ISO 14644.1 Class 4, US Federal Standard 209E Class 10 / M2.5, AS 1386 Class 2.5, JIS B9920 Class 4, BS5295 Class D, Class M100,000 as per KS 27030.1 and other equivalent cleanliness classifications of the VDI 2083 and AFNOR X44101
Main Filter Type		HEPA filter with integral metal guards and filter frame gaskets; fully compliant with EN1822 and IEST-RP-CC001.3 requirements Typical efficiency: 99.9995% at 0.3 microns / 99.9988% at 0.12 microns / 99.9987% at MPPS
Pre-Filter		Washable polyurethane fibers with 85% arrestance as per EU3
Noise Level		Typically <67 dBA at initial blower speed setting measured as per IEST -RP-CC002.2, based on 4 feet cabinet, subject to acoustic properties of test environment
Light Intensity		>800 lux / >74 foot candles, measured at work surface level (zero background) as per IEST-RP-CC002.2
Main Body Construction		1.5mmt / 0.06" / 16 gauge electro-galvanised steel with white oven-baked epoxy powder-coated finish
Side Window Construction		Colourless and transparent UV-absorbing 5 mm / 0.2" tempered glass
Work Surface Construction		1.2mmt / 0.05" / 18 gauge stainless steel grade 304
Max Power Consumption / Current	220-240VAC / 50Hz 1Ph	282W / 1.00A
	110-130VAC / 60Hz 1Ph	382W / 3.20A
Net Weight (Approximate)		100 kgs / 220 lbs

ESCO® Esco Biotechnology Equipment Division

Esco Biotech is a highly focused manufacturer of laminar flow, biohazard safety and other HEPA-filtered cabinets for the laboratory with a history of quality cabinets since 1978. We are predominantly oriented towards the international marketplace, with sales in more than 70 countries and 95% of turnover exported. Our products have been independently tested to standards such as AS1807.5 and EN12469. Products are manufactured under an ISO 9001 registered quality system.

21 Changi South Street 1 · Singapore 486 777 · Tel: +65 6542 0833 · Fax: +65 6542 6920 · Email: biotech@escoglobal.com · biotech.escoglobal.com
Global Offices: Philadelphia, USA ~ Leiden, Netherlands ~ Santiago, Chile ~ Shanghai, China ~ Kuala Lumpur, Malaysia ~ Mumbai, India ~ Dubai, U.A.E.

PT Esco Bintan Indonesia



Your local distributor: