

ENVAIR

Laboratory Equipment



MICROBIOLOGICAL SAFETY CABINETS

ENVAIR ECO SAFE COMFORT PLUS

CLASS II
MICROBIOLOGICAL SAFETY CABINET

www.envairlab.uk

CLEAN TECHNOLOGY FOR A CLEAN ENVIRONMENT

ENVAIR ECO SAFE COMFORT PLUS - THE CLEAN GENERATION

Envair eco safe Comfort Plus Safety Cabinets belong to the latest generation of laminar airflow systems. The high quality choice of materials and construction guarantees conformity to the strictest safety standards.

Envair eco safe Comfort Plus cabinets are class 2, designed and built to performance requirements of BS EN-12469:2000, with 70% of the air re-circulated via the main downflow class H14 HEPA filter and the remaining 30% discharged through the exhaust Class H14 HEPA filter.



- A** Energy saving fan
- B** Multifunctional control panel
- C** LED light technology
- D** Motorised sliding front window
- E** Stainless steel cabinet including electrical sockets, safety service connection for gas and vacuum
- F** Safety glass side windows
- G** Multi-piece stainless steel work surface

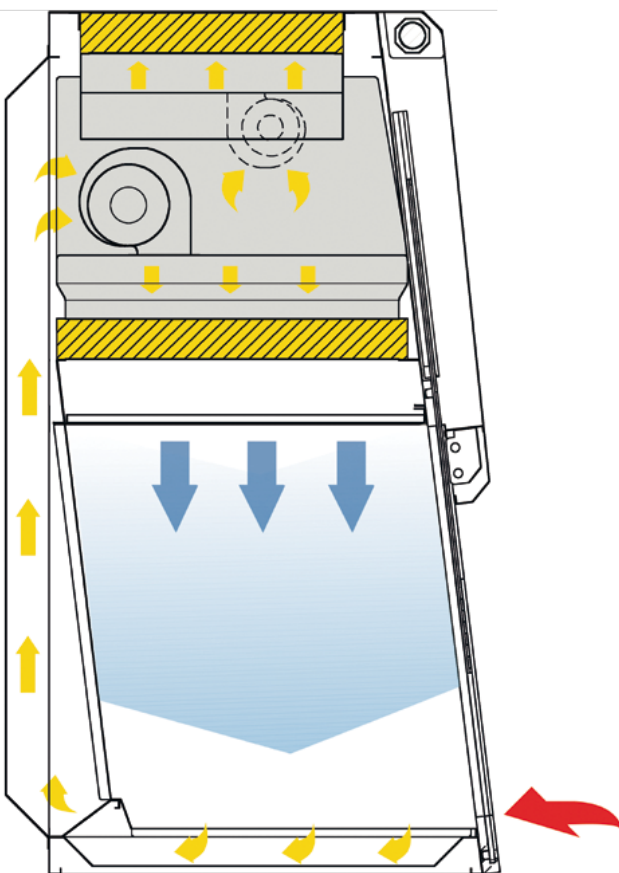
TECHNOLOGY OF TODAY FOR THE WORLD OF TOMORROW

AN EFFICIENT DESIGN

- Certified 'low pressure-drop' HEPA filters providing up to 30% saving on power consumption
- Electronically controlled fan with automatic pressure-drop compensation
- 99% recyclable components
- Innovative technologies such as the new ECS® microprocessor

HARDWARE

- ALESTA® Anti-microbial coating
- Ultra-low noise level
- Stainless steel AISI 316L
- True laminar flow



Airflow

ECO CONTROLLING SYSTEM (ECS)

The new ECS® microprocessor employs the latest innovative methods of integrated management of all the principal functions of ventilation and filtration - self-regulating all the main filtration and ventilation system components - compensating for declining pressure drops and restoring power balance. Combining the use of AC fans and certified low pressure-drop filters, the new ECS® controlling system optimizes power consumption, reducing CO2 emissions into the environment.

SOFTWARE

- Instant management and monitoring of operational parameters and automatic compensation system control by the new ECS® microprocessor
- Software features easily programmable replacement regime of spare parts and filters
- Countdown-Timer integrated within the control board
- Permanent record of all alarms and anomalies memorized by the control-board for the entire life-cycle of the cabinet
- One touch restore menu, to reset the original factory calibration data



Cabinet services fixtures



Electrical upwards opening frontal screen for easy cleaning

TECHNICAL SPECIFICATIONS

Envair Eco Safe Comfort Plus		
Unit type:	1.2m	1.8m
Overall dimensions WxHxD ^[1]	1350x1500x860mm	1960x1500x860mm
Useful dimensions WxHxD	1192x740x580mm	1802x740x580mm
Working aperture	160mm	
Max front aperture	440mm	
Net weight	205kg	260kg
Exhaust flow rate	390m ³ /h	585m ³ /h
Noise level ^[2]	<42.5dB(A)	<49dB(A)
Lighting level	>1200 lux	>1300 lux
Electrical data	1Ph+E 230V 50Hz	
Power consumption ^{[2], [3]}	84.4W	171W
Current consumption	0.6A	1.2A
Electrical class / IP	1 / 20	
Internal electrical outlet	6A	
Heat emission	240W	360W

1. The total depth of the cabinet can be easily reduced to 780mm by removing the back panel

2. At operational conditions according to EN12469:200

3. Clean filters, lighting activated, internal outlet load excluded

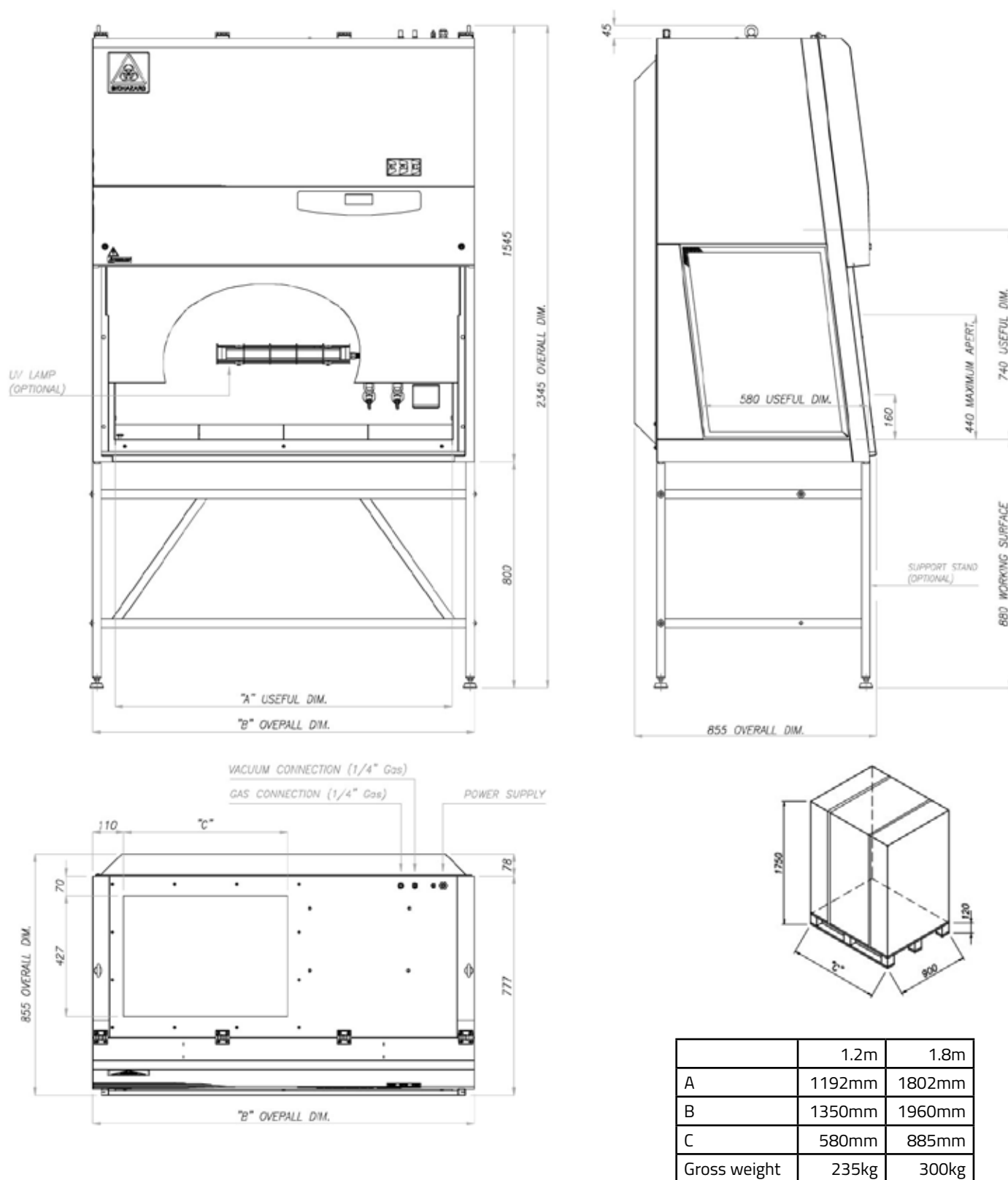
OPTIONS AND ACCESSORIES

- | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> ▪ Single piece work surface ▪ UV light ▪ Additional taps for gas, vacuum, nitrogen ▪ Additional electrical outlet ▪ IV bar | <ul style="list-style-type: none"> ▪ Armrest ▪ Anti-blow back valve ▪ Direct duct exhaust connection kit ▪ Additional exhaust HEPA filter ▪ Additional exhaust carbon activated filter | <ul style="list-style-type: none"> ▪ Support stand 800mm ▪ Electric adjustable support stand (800-1100mm) ▪ Support stand with lockable castors |
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ENVAIR ECO SAFE COMFORT PLUS

MODEL DIMENSIONS



OUR TECHNOLOGY PROTECTS HUMAN AND ENVIRONMENT

USER-FRIENDLY CONTROL PANEL

ECS® is a Microprocessor based monitoring system that provides a full status report provided via 2-line digital display. All functions and safety alarm systems are controlled ensuring that performance characteristics are maintained to the EN12469:2000 standard. A battery backup system stores safety data to the ECS system in the event of a power outage. The user-friendly control panel and the LCD display will continuously display the necessary data, keeping the user constantly informed of the cabinet conditions in operations and in particular:

- Display of laminar airflow velocity and inflow velocity
- Display of internal and external temperatures
- Display of residual lifetime of HEPA filters, UV Lamp (if fitted)
- Display of total operational usage hours
- Display of saturation level of HEPA filters



AUDIO VISUAL ALARMS PROVIDED FOR

- Incorrect airflow velocities
- Incorrect position of front window
- Saturation of HEPA filters
- End of life cycle of UV lamp (if fitted)
- Blockage in the exhaust duct
- Fan malfunction
- Power failure

CERTIFICATION

- ISO 9001 certified
- Tüv Rheinland Certified
- BS EN 12469:2000

MAIN FEATURES

- Motorised sliding front window
- Vacuum connection
- Safety service connection for gas
- 1 electrical socket for 3ft and 4ft cabinets
- 2 electrical sockets for 6ft cabinets
- Energy saving fan
- LED light technology
- Overnight operation mode for reduced energy consumption

TAYLOR-MADE CABINETS

*"We can manufacture special cabinets to meet your requirements.
Please get in touch for details."*

APPLICATIONS

Envair eco safe Comfort microbiological safety cabinets have been adopted worldwide in use for product, personnel and environmental protection while handling harmful agents pathogenic to human beings and/or animals as defined in the appropriate International Standards, in a wide range of disciplines in applications such as:

Microbiology, Virology, Haematology, Cell culture, Genetics, Handling of hazardous agents to human beings or animals.

SERVICE IN PURE CULTURE

Envair offers service in pure culture. We do not simply sell our units to you but will assist you gladly from A to Z.



DELIVERY

Delivery, siting, commissioning and validation



SERVICE

- Service contracts available



SPARE PARTS GUARANTEE

- Stock held in the UK



MAINTENANCE

Envair Laboratory Equipment can provide service contracts to conform to the current standards.

- Microbiological Safety Cabinets DIN 12469
- Cytotoxic Dispensing Cabinets with KI-discus test DIN 12980
- Product Protection Cabinets
- Laboratory Fume Hoods
- Cytotoxic Dispensing Isolator EN 14644-7
- Isolator EN 14644-7
- Cleanrooms



SERVICE CONTRACT

To ensure ongoing reliability of your products and to take the nuisance out of maintenance, we can provide service contracts.



GUARANTEE AND WARRANTY

Combined with an Envair maintenance contract, we offer a 2-year warranty. Terms and conditions Apply.



QUALIFICATIONS

- IQ/OQ
- GMP
- GAMP
- 21 CFR Part 11



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