

erlab

You can breathe.

Product datasheet

Solis Premium

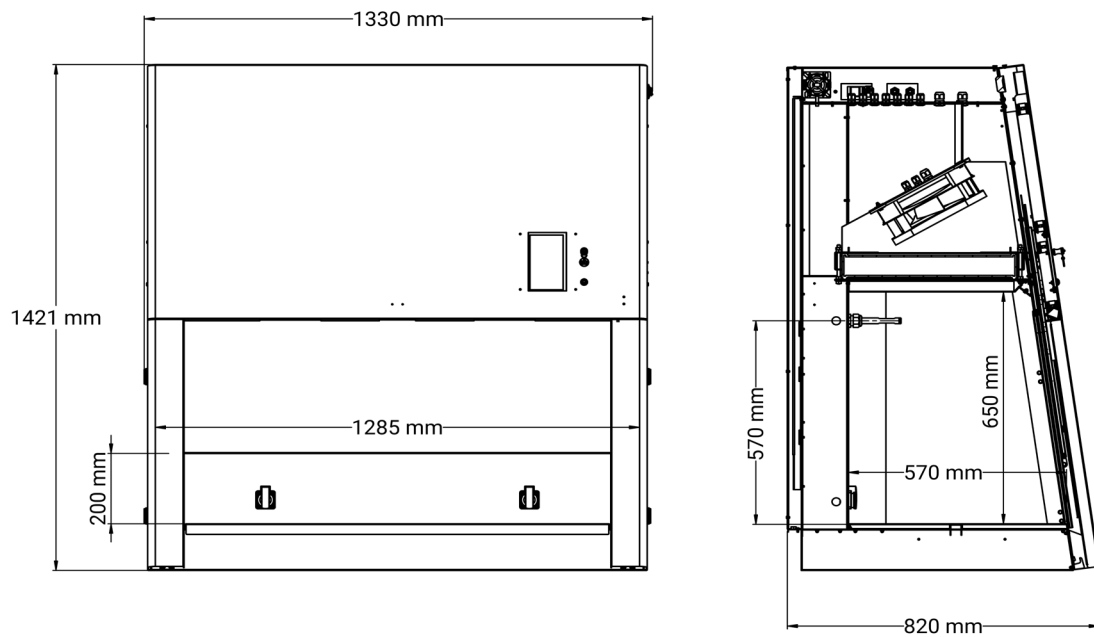
Class II microbiological safety cabinet
GMP



Solis Premium

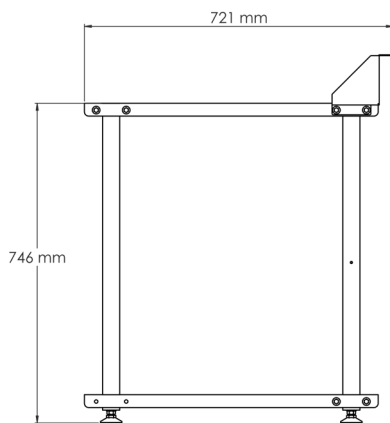
Class II microbiological safety cabinet

Model Solis Premium 1200

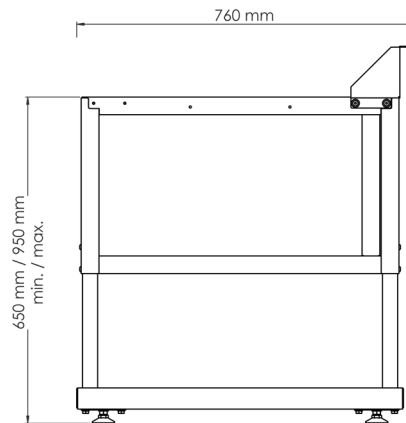


Stands without castors

Fixed stand

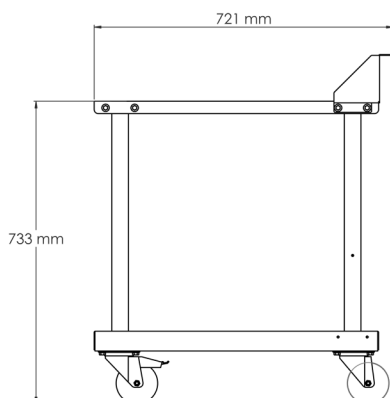


Adjustable stand

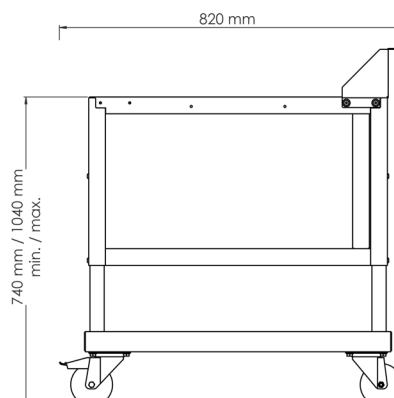


Stands with castors

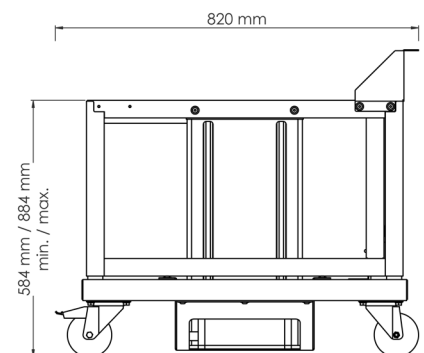
Fixed stand



Adjustable stand



Electrical stand



Dimensions

Model		Solis Premium 900	Solis Premium 1200	Solis Premium 1500	Solis Premium 1800
External (side panel closed)	Width (mm)	1025	1330	1635	1940
	Depth (mm)	820			
	Height (mm)	1421			
External (side panel open)	Width (mm)	1215	1520	1825	2130
	Depth (mm)	780			
	Height (mm)	1421			
Please note that dimensions may vary depending on configuration (activated carbon or HEPA filter for extraction, UPS, hydrogen peroxide bio-decontamination system for the workspace)					
Internal	Width (mm)	980	1285	1590	1895
	Depth (mm)	570			
	Height (mm)	650			
Usable workspace	m ³	0,22	0,31	0,40	0,49
Work surface	Width (mm)	800	1105	1410	1715
	Depth (mm)	440			
Window opening	Height (mm)	200			

Technical specifications

Model	Solis Premium 900	Solis Premium 1200	Solis Premium 1500	Solis Premium 1800
Compliance	User protection: NF EN ISO 12469-2000 Handling protection: Class ISO 5, according to standard NF EN ISO 14644-1:2015 HEPA H14 filters - eliminates 99,995% of MPPS, in compliance with the EN 1822-1:2019 standard Configuration GMP (Good Manufacturing Practice) = air downflow in work chamber between 0,36 and 0,54 m/s BSC fitted with a low pressure HEPA H14 filter and a larger extraction fan			
Fans	Two continuous flow fans type EC: downflow and extraction airflow			
Downflow	770 m ³ /h	1000 m ³ /h	1240 m ³ /h	1480 m ³ /h
Extraction airflow	> 240 m ³ /h	> 320 m ³ /h	> 410 m ³ /h	> 500 m ³ /h
Air barrier velocity	≥ 0,40 m/s			
Air velocity within the work zone	Between 0,36 and 0,54 m/s (according to GMP standard)			
Voltage / Frequency	230 V (± 10%) / 50 Hz			
Electrical data - power in standby mode / work mode (excluding electrical outlets)	80 / 160 W	85 / 170 W	105 / 300 W	110 / 310 W
Electrical data - maximum power (including electrical outlets)	460 W (2A)			
	2,300 W			
Structural material	White polyester powder coated steel body			
Sides and front window	Laminated glass (provides UV protection)			
Handling chamber - workspace	316L brushed stainless steel			
Weight	200 Kg	225 Kg	260 Kg	290 Kg

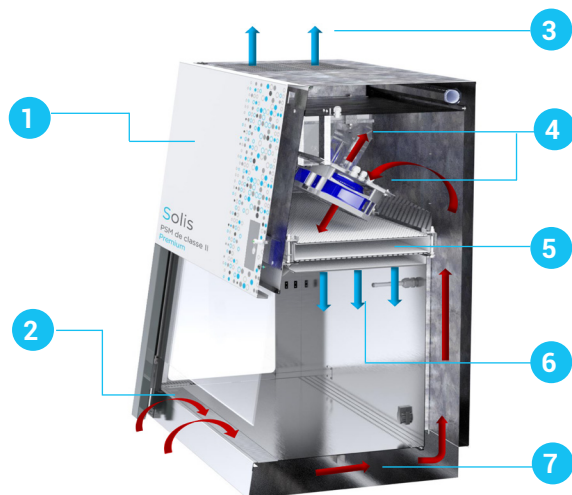
Equipments

Front window	User friendly 10° inclined window Electronically controlled on the touch screen
Work surface	Monobloc or segmented (optional) Detachable to allow full access
Touch screen	Airflow velocity display in m/sec, alarms Available applications: calculator, timer to control the electrical outlet, MP3 player Personalisation and monitoring of operation of the MSC: installation date, date for the next check, etc Touch screen compatible with lab gloves
Internal lighting	LED light > 750 Lux / 4000k / Adjustable via the screen
Anemometer	Real time air flow velocity monitoring
Electrical outlets	2 electrical outlets, with protective cover Internal right side power socket that can be connected to the timer (controlled via the touch screen)
Suction protection grill	316L stainless steel - Possibility to install a pre-filter Prevents elements being sucked into the ventilation system
Camera	Allows you to record videos of your handling. Recordings to be transmitted through USB connection
Voice control	Change window height, start UV cycle or start camera recordings

Operating principles

The class II microbiological safety cabinets Solis Premium are designed to protect handling, the operator and the environment.

A laminar airflow is blown through the handling chamber, protecting the samples from the risk of external and cross contamination. The air barrier on the front of the device protects the user against all contamination risks arising from handling pathogens. The front air barrier protects the user against inherent biological risks of manipulating pathogenic agents.



1	HEPA H14 extraction filter
2	Air barrier
3	Clean air extraction (25%)
4	Two fans
5	HEPA H14 downflow filter
6	Clean filtered laminar air flow
7	Dirty air flow directed to the HEPA H14 filters

Cleaning the window - Solis Twist & Clean©

When the cleaning of a Biological Safety Cabinet is not done correctly, it may lead to microbial or bacterial growth, which may contaminate the manipulations or badly affect the analysis.

The Solis Premium is equipped with a **unique window tilting feature** so you can **easily clean** the inside of the front window.

Patented

Ergonomic

Safer

Easy to use



Options

Fixed stand, with or without castors	White polyester powder coated
Adjustable stand, with or without castors	White polyester powder coated Adjustable upon installation: working positions spaced 2.5 cm apart The stand is equipped with castors
Electrical stand with castors	White polyester powder coated The maximum stroke is 35 cm, 3 work positions may be programmed
Segmented work surface	3 segments for Solis 900, 1200 and 1500 - 5 segments for Solis 1800
UV decontamination	UV cycle time can be programmed via touch screen The application displays the overall UV working time for changing used tubes
Hydrogen peroxide bio-decontamination system for the workspace	An integrated hydrogen peroxide decontamination system, which ensures effective biocontamination control. Increases the width of the MSC by 85 mm Attention: hydrogen peroxide (max. concentration of 15%) not supplied.

Options

Electrical outlets	Up to 2 additional electrical outlets (max. 4)
Pedals to control the front window	To raise/lower the front window simply by pressing with your foot
Vacuum tap, Gas tap	Installed on one side of the workspace
Cable passages	Easy cable pass through to connect your equipment Seven inputs: ø7mm x3, ø12mm x1, ø9mm x3
Armrests	In brushed 304L stainless steel
Inverter	This device serves to maintain the operation of the safety cabinet for 10 minutes in the event of a power cut This allows you to secure your manipulations before the device stops permanently Increases the height of the BSC by 84 mm
Front window: 2 working positions	20 cm front opening: working position under BSC 30 cm front opening: facilitates the entry of bulky material inside the handling chamber
Binocular bellows integrated in front glass	Soft PVC Adaptable to all types of microscopes If UV germicidal decontamination is used, a cover glass is integrated into the front panel

Extended range

BSC with indirect extraction thimble			
Ø 250 mm Increases the height of: 150 mm			
BSC with activate carbon filter at the exhaust		BSC with double HEPA filter at the exhaust	
Biological and chemical protection The active carbon filter is located downstream the exhaust HEPA filter Increases the height of: 225 mm		Reinforced biological protection: manipulation of mycobacterium (BK) The additional HEPA filter is installed downstream the exhaust HEPA filter Increases the height of: 225 mm	
With additional indirect extraction thimble			
Ø 250 mm Increases the height of: 375 mm			
Suction rate - Solis 900	Suction rate - Solis 1200	Suction rate - Solis 1500	Suction rate - Solis 1800
>340 m ³	>420 m ³	>510 m ³	>600 m ³
Check the height of the room to ensure that the BSC can be installed.			

Qualification and testing

Standard installation checks	Airflow barrier is checked, using a smoke generator Airflow mapping in the work space Particle count in the work space Checking of the alarms Mechanical inspection	
Filters integrity test (Emery test)	HEPA H14 filters - eliminates 99,995% of MPPS, in compliance with the EN 1822-1:2019 standard	
Optional IQ OQ qualification	<p>IQ - Installation qualification</p> <p>Documentation inspection Inspection of components and compliance with specifications Inspection of touch screen Inspection of electrical installation Management of non-compliance issues</p>	<p>OQ - Operational qualification</p> <p>Commands, signals and alarms tests Inspection of airflow velocity in the work space Inspection of dust control levels User protection: smoke test Integrity of the absolute filter during air supply Integrity of the absolute extraction filter</p>



About Erlab

The Erlab Research and Development laboratory

Since 1968, Erlab has been a specialist, inventor and world leader in ductless, zero-emission filtering fume hoods for laboratories to provide total safety in chemical handling.

Today, Erlab is expanding its offer. The company designs, manufactures and markets protective equipment against the risks of biological contamination, mainly in the fields of health, research, industry, etc...

1 Standards

Erlab's biological devices comply strictly with current standards.

EN 12469-2000	Guarantee protection for the operator.
EN ISO 14644-1:2015	Guarantee protection of handling
	Guarantees the classification of particle cleanliness in dust-controlled areas
EN 1822-1:2019	Guarantee an H14 HEPA filtration, 99,995% MPPS
EN 10648-2:1944	Guarantees the tightness of containment vessel

2 R&D department

Erlab and its engineers have acquired in-depth knowledge of products, biomedical constraints and applicable standards. Erlab is able to develop a range of products in line with market expectations and offer customised solutions that are truly tailored to the needs of laboratories.

3 Our Expertise

Erlab offers customised solutions for all non-standard industrial applications. Its technical expertise enables it to meet all protection requirements, including the most complex, particularly in the field of isototechnology.

4 Our Technology

Touchscreen	For easy control of your appliances!
Twist & Clean» device	For easy cleaning of the front glass of the BSC Solis!
H2O2 bio-decontamination	For effective decontamination of the BSC Solis work volume!
Inverter	To keep the BSC running in the event of a power cut, in complete safety!
Voice control	For easy operation of the BSC Solis's electric front window!

5 The maintenance

Erlab can offer you a preventive and/or corrective maintenance contract.

Erlab's technicians will carry out maintenance on your equipment.

The aim is to check the general condition of the equipment and, above all, to check the operating parameters, which guarantee the effectiveness of the protection.

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