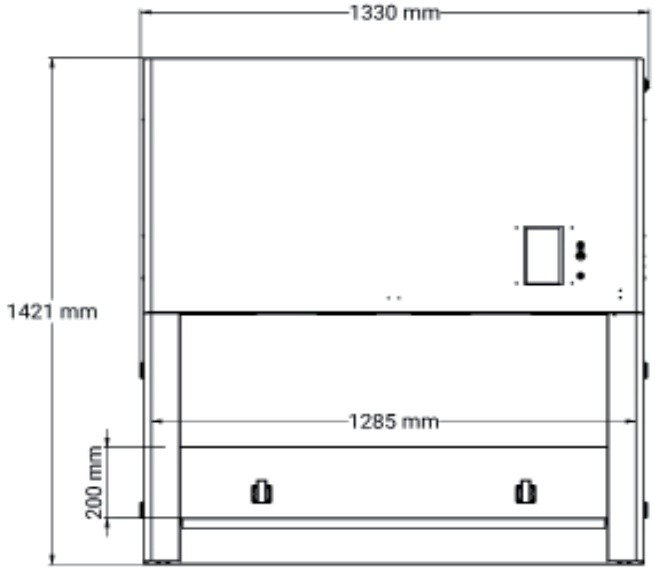
erlab
You can breathe.

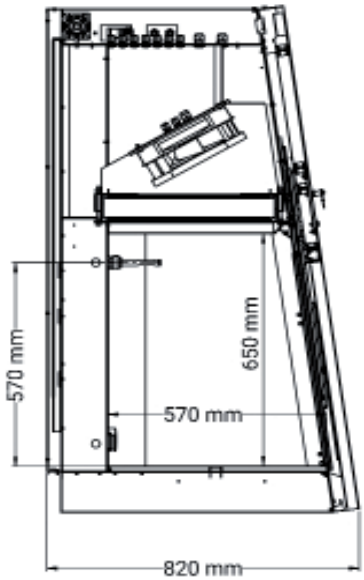
Product datasheet

Solis Premium

Class II microbiological safety cabinet
GMP

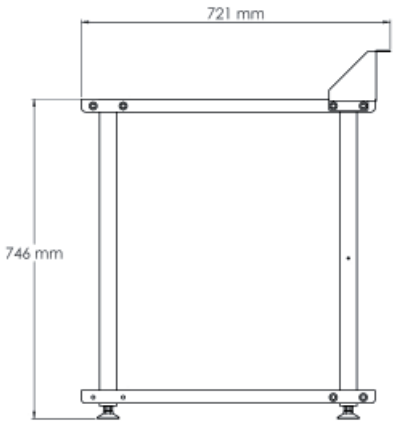
Model Solis Premium 1200



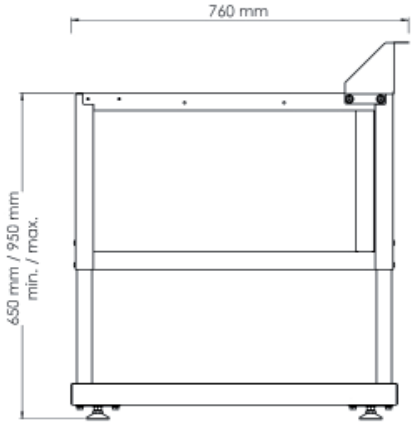


Stands without castors

Fixed stand

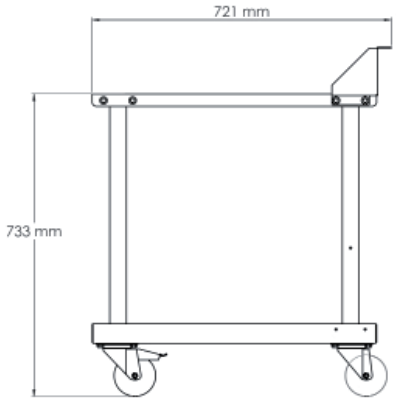


Adjustable stand

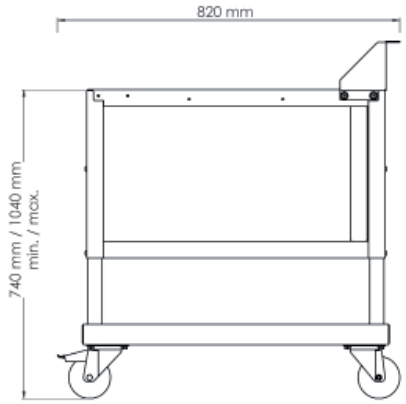


Stands with castors

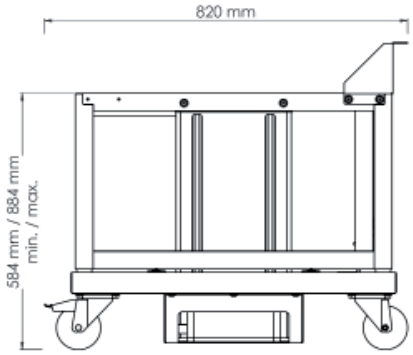
Fixed stand



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, inverter, 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
Conforms with the standard	Protection of the handler: NF EN ISO 12469-2000 Protection of the product: 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 GMP (Good Manufacturing Practice)			
Fans	Double ventilation system: supply and exhaust			
Air flow - supply	770 m^3/h	1000 m^3/h	1240 m^3/h	1480 m^3/h
Air flow - exhaust	> 240 m^3/h	> 320 m^3/h	> 410 m^3/h	> 500 m^3/h
Incoming flow velocity	≥ 0,40 m/s			
Outgoing flow velocity	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)	Right hand controlled outlet - 460 W (2A)			
	2,300 W			
Structural material	Painted steel outer body - white			
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	Electric, controlled via the screen Window with a 10° tilt
Work surface	Monobloc or segmented (optional) Detachable to allow full access to the tank
Touch screen	Flow 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 campatible with lab gloves**
Internal lighting	LED lighting > 750 Lux / 4000k / Adjustable via the screen
Anemometer	Indicator - Air velocity alarm in the workspace
Electrical outlets	2 electrical outlets, with protective cover
Suction protection grill	316L stainless steel - Possibility to install a pre-filter
Webcam	Installed in the device allows you to record videos of your handling, USB port for recording
Voice control	To control the façade glass, UV decontamination, and the use of the webcam

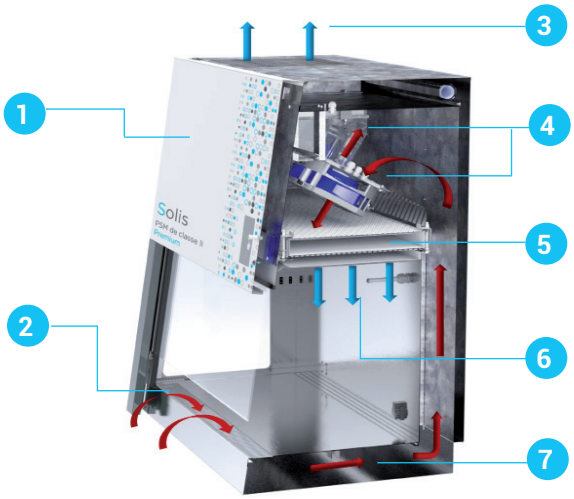
Solis Premium

Class II microbiological safety cabinet

Operating principles

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

The chamber protects the manipulated products from external particles to prevent any contamination.
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 air flow filter
6	Clean filtered laminar air flow
7	Recapture of air contaminated by handling for filtration

Cleaning the window - Solis Twist & Clean©

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

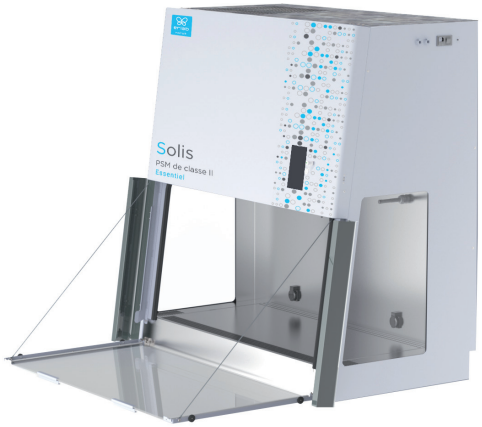
The Solis Premium is equipped with a **unique window tilting feature** so you can **easily clean** the inside of the front window.

Patented

Ergonomics

Security

Simplicity



Options

Fixed stand, with or without castors	Polyester powder coating, white The stand is equipped with castors
Adjustable stand, with or without castors	Polyester powder coating, white Adjustable to installation: working positions spaced 2.5 cm apart The stand is equipped with castors
Electrical stand with castors	Polyester powder coating, white The maximum stroke is 35 cm, 3 work positions may be programmed The stand is equipped with castors
Work surface segmented	3 segments for Solis 900, 1200 and 1500 - 5 segments for Solis 1800
UV decontamination	The duration of the UV cycle can be can be programmed via screen touch 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. 15% content) 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	In two parts to allow easy installation of cables equipped with a large connector Seven inputs: ø8 mm x6, ø12 mm x1
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 MSC by 84 mm
Front window: 2 working positions	20 cm front opening: working position under MSC 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

MSC with activate carbon filter at the exhaust		MSC with double HEPA filter at the exhaust	
Biological and chemical protection The active carbon filter is located downstream the exhaust HEPA filter		**Reinforced biological protection: manipulation of mycobacterium (BK)** The additional HEPA filter is installed downstream the exhaust HEPA filter	
Please note that these 2 configurations increase the height of the MSC by 225 mm. With an indirect extraction bonnet Ø 250 mm, the height of the MSC increases by 375 mm.			
Suction rate - with indirect extraction bonnet			
Solis 900	Solis 1200	Solis 1500	Solis 1800
>340 m^3	>420 m^3	>510 m^3	>600 m^3
Check the height of the room to ensure that the MSC with activated carbon filtration at the exhaust, can be installed.			

MSC with 3 HEPA filter unit	MSC with active carbon filter under the work tray
Reinforced biological protection Filtre HEPA H14 dans la reprise d'air, sous le plan de travail	**Biological and strong chemical protection** The active carbon filter is located upstream the exhaust HEPA filter, to avoid any recirculation of the aerosols
Please note that a MSC with additional filtration under the worktop must include an adjustable base with castors. **Solis MSC can be fitted with an optional electric base.**	

Contrôles

Standard installation checks	Front air barrier inspection Flow mapping in the work space Particle count in the work space Alarm inspection Mechanical inspection	
Filters integrity test	HEPA H14 filters - eliminates 99,995% of MPPS, in compliance with the EN 1822-1:2019 standard	
Installation and operation checks (IQ / OQ)	IQ - Installation checks: Document inspection Inspection of components and compliance with specifications Inspection of touch screen Inspection of electrical installation Management of non-compliance issues	OQ - Operational checks: Commands, signals and alarms tests Inspection of flow 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

The Erlab Research and Development laboratory

About Erlab

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 isotechnology.

4 Our Technology

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