

# HORIZONTAL LAMINAR FLOW CABINET

## STERIL HELIOS – CLASS 3

Images herein provide are intended for illustration purpose only. The specifications can change without notice.



## Introduction

Helios cabins are of the horizontal laminar flow type. They are used in all those situations in which it is necessary to protect the product from harmful effects deriving from the uncontrolled diffusion of airport contaminants during its handling.

## Applications

They are normally used in Microbiology laboratories.

It finds an ever increasing use in different research fields and in particular for the handling in sterility of:

- Quality control in the food industry
- Micromechanical assemblies
- Preparation of parenteral nutritional therapies
- In vitro fertilization

## Performance

- Product protection: sterility of the work area above ISO 4 EN 14644-1

**As they are not biological safety cabins, they CANNOT be used for handling pathogens.**

## Specifications

- ✓ **External structure in epoxy powder coated cold-rolled steel** for excellent corrosion resistance to the attack by aggressive common chemicals
- ✓ **Work surface in stainless steel AISI 304L** fixed in one piece
- ✓ **Filtration:** H14 HEPA/ULPA filter with an efficiency better than 99,995 % MPPS (EN-1822)
- ✓ **Prefiltration:** Inlet G3 pre-filter efficiency  $80 \leq AM \leq 90$  according to EN 779 and UNI 10339
- ✓ **Operation Condition:** Air cleanliness in Class ISO 3 as per ISO EN 14644-1
- ✓ **Motor blower:** direct coupled motor, electronic speed controlled to maintain a constant laminar air flow of 0,45m/sec, and compensate for a partially clogged filter up to a maximum plenum pressure of 40 mm of water
- ✓ **Servicing side glass with ports** for service taps installation
- ✓ **The user-friendly practical keyboard** and the rear-lit LCD (optional) will continuously display all required data keeping the user constantly informed of the cabinet conditions in operation, and in particular:
  - ✓ display of laminar airflow velocity
  - ✓ display of inside and outside temperature
  - ✓ display of residual lifetime of HEPA/ULPA filter, UV Lamp.
  - ✓ display of total number of hours of operation
  - ✓ display of saturation level of HEPA/ULPA filter
- ✓ **Audio-visual alarms (optional) provided for:**
  - ✓ out of range or incorrect laminar airflow velocity
  - ✓ front window opened
  - ✓ clogging of HEPA/ULPA filter
  - ✓ end of lifecycle of UV lamp
  - ✓ fan-motor malfunction
  - ✓ power failure
- ✓ **Lighting:** fluorescent tubes in built-in housing, placed outside the sterile area.
- ✓ **D.O.P.-DEHS inlet port** for testing the HEPA/ULPA filters
- ✓ **UV sterilizing lamp** (optional) complete with a flexible front shutter in order to close the working area from dust and for the safety of operators.

## Testing

Each cabin is individually tested at the quality department of our production site with certified instrumentation in SIT centres and in accordance with internal procedures included in the ISO 9001 quality manual.

## Standard equipment

- Power socket
- 100% DEHS port
- N. 3 19 mm diameter through holes on each side glass for any tap installation

## Optional accessories

- Floor stand
- Automatic air speed regulator with digital display
- Chest of drawers on wheels, with three drawers
- Gas / nitrogen / air / vacuum taps
- UV lamp, complete with front curtain screen
- Front curtain screen (WITHOUT UV lamp)

## Maintenance

The filters are replaced from the front of the booth and any extraordinary maintenance operations (checking the electronic card, replacing fluorescent lamps) are carried out from the top.

## Technical data

Description	Unit	HELIOS 36	HELIOS 48	HELIOS 60	HELIOS 72
Code		14594	14595	14596	14597
External dimensions LxPxH	mm	945x925x1195	1250x925x1195	1555x925x1195	1860x925x1195
Internal dimensions LxPxH	mm	885x600x734	1190x600x734	1495x600x734	1800x600x734
Frontal working aperture	mm	735			
Weight	kg	104	122	171	194
Noise	dB(A)	<60			
Power	kW	0,70	0,90	1,40	1,40
Electric data		230V / 1 + T / 50Hz			

Product name	<b>HELIOS</b> series. STERIL™ brand is full property of Angelantoni Group
Manufacturer	Angelantoni Life Science S.r.l. Loc. Cimacolle, 464 06056 Massa Martana (PG) - Italy
Voltage	208 – 253 VAC 50 Hz
Environmental conditions - operations	Temperature: +2° ~ +50° C RH%: 30 ~ 85% without condensation
Environmental conditions - storage	Temperature: +2° ~ +50° C RH%: 20 ~ 80% without condensation
Alarms	Acoustic and visual
In case of black-out	System shuts down
Warranty	12 (twelve) months