



MICRO CLIMA-SERIES™
ECONOMIC LUX CHAMBER





ECONOMIC LUX CHAMBER

When it comes to in-vivo plant growth, plant tissue culture, in-vitro, seed germination or insect breeding, the ECONOMIC LUX is universally employed.

Snijders Labs has manufactured and developed climate chambers in The Netherlands since 1988. Our extensive experience is gained from working directly with scientists to help create design solutions for their needs. This program has helped evolve the ECONOMIC LUX.

We control all aspects of manufacture which allows us to react flexibly and quickly to new developments in scientific research. This evolution of design allows for a high degree of uniformity of light, temperature and humidity (optional) across the entire chamber; controlled in day/night cycles by a "real time" clock.

FEATURES ECONOMIC LUX CHAMBER

- + A broad temperature range of -5°C up to + 50 °C.
- + Large capacity of 432 litres confined to a small foot print of 0,77 m².
- + Growth surface of not less than 1,8 m², thanks to 5 height adjustable shelves.
- + Adjustable day and night cycles for temperature and lighting.
- + Solid cabinet with a scratch resistant coated exterior, solid steel frame.
- + Stainless steel panels with grids, painted white, to maximise light diffusion.
- + Vertical lighting is mounted outside the chamber and on two sides.
- + Cable entry port.
- + On heavy duty castors of which 2 with brakes: easy to move.
- + Potential (voltage) free contact.
- + Accurate with reproducible results.

HOW TO CONTROL?

The controller is easy to program and the digital readout is easily read. Illumination and temperature is controlled by a 24 hour clock in a day/night cycle. If a degree of humidity control is required without active control the base can be flooded. Accurate additive humidity control is optional. If an alarm is detected the potential free contact, optical and acoustic alarm will be activated.

ILLUMINATION

The fluorescent tubes are mounted vertically behind double thermal glass, switched in 4 levels and adjustable by means of a timer. Both sides of the cabinet have 7 fluorescent tubes; 14 in total. This design also allows for periodic maintenance to be executed quickly and easily.



Fig.1 Air circulation

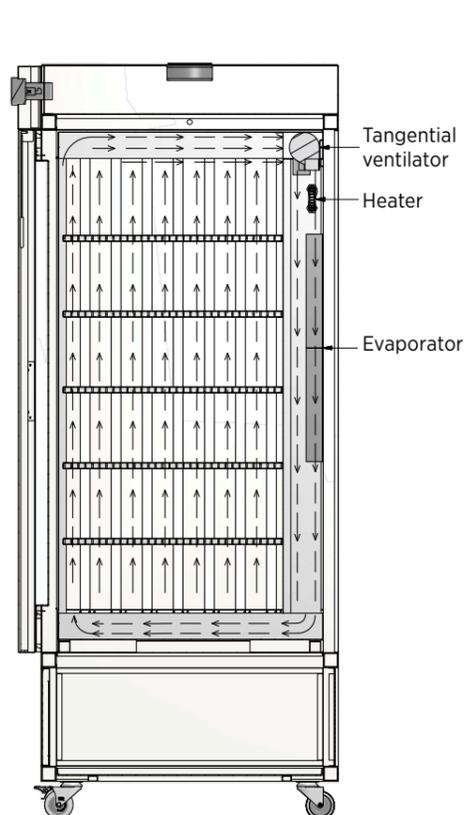


Fig. 4 Front view

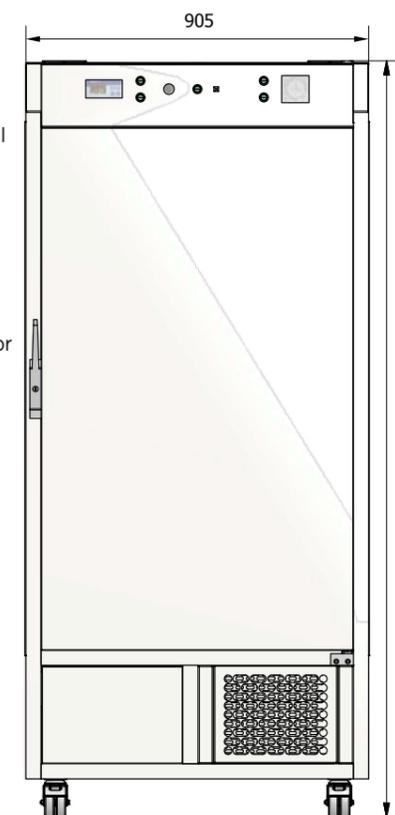
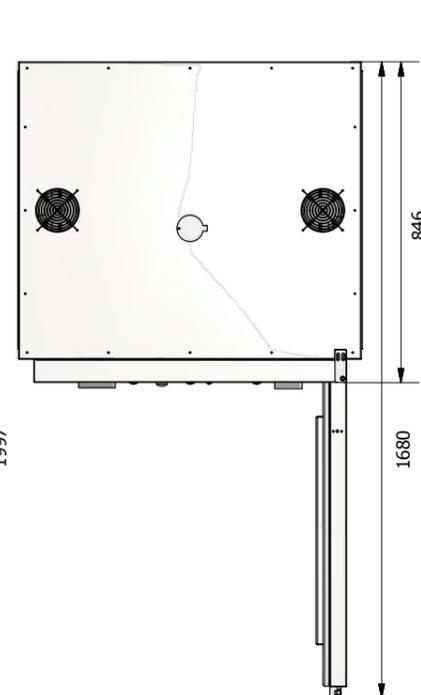


Fig. 4 Top view



SUSTAINABLE

The ECONOMIC LUX is built in a ISO9001 accredited factory and meets all the latest European environmental and safety requirements, e.g. CE marking, RoHS compliant, a HCFC and CFC free cooling system with economic and silent Danfoss/ Secop compressors, type Optyma.

The chamber is:

- + highly energy efficient
- + very quiet due to silent Optyma compressors.

OPTIONAL

- + Additive humidity control by ultrasonic humidification.
- + Webbased multi-step controller.
- + Various software options.

- + Other fluorescent light sources available (e.g. UVa&b).
- + LED modules + LED tubes.
- + Adjustable safety thermostat for minimum temperature.
- + Dimmable lighting.
- + Extended temperature range.
- + Extra cable entry port.
- + Splash watertight power point.
- + Transparent Perspex inner doors.
- + Viewing window in door.
- + Door hinged left or right.
- + Single glass with 81% UV-permeability.
- + Stainless Steel evaporator system (when using aggressive substances).
- + Stainless steel platforms, runners.
- + Other options on request.



ECONOMIC LUX CHAMBER

TECHNICAL INFORMATION

PHYSICAL	ECONOMIC LUX
Volume	432 liter
External dimensions (w x d x h)	935 x 863 x 1997 mm
Internal dimensions (w x d x h)	600 x 600 x 1200 mm
Growth area per shelf	0,36 m ²
Shelves	5 standard/ 20 max.
Airflow	Vertical (max. 0,2 m/sec)
SPECIFICATIONS	
Temperature range (lights off)	-5°C till +50°C
Temperature range (lights on)	0°C till +50°C
Temperature fluctuation	± 0,3°C
Variation (one shelf, light on)	± 1,0°C
Humidity level	80-85% RH (lights on) approx. 90% RH (lights off) depending on temp.
Light level in the middle of the chamber (measured in an 90° angle)	0 - 10.000 lux 0 - 120 μmol m ⁻² s ⁻¹
Light level in the middle of the chamber (measured in an 180° angle)	0 - 20.000 lux 0 - 240 μmol m ⁻² s ⁻¹
FACILITIES	
Temperature controller	electronically PID, Jumo
Temperature sensor	PT 100 Ω
Illumination	14x 36W Sylvania Brite Gro type 2084 electronical ballasts
GENERAL	
Power supply	220-240V, 11A, 1ph, 50Hz
Weight	310 kg

*Specifications subject to change

SNIJDERS LABS: EXPERIENCED INNOVATORS

SNIJDERS LABS forms part of the Snijders Group, which actively delivers equipment and products for scientific research & development as well as internal transport systems and examination couches for the health care sector under SNIJDERS CARE. All design, manufacture and testing is held in house to assure high quality production and investment in new technologies for the production of all Snijders products. The total control of the manufacturing line means that Snijders can offer total quality, in-depth knowledge and detailed assistance to all of their clients.

vijfde druk 2018



SERVICE AND WARRANTY

Contact your local distributor who will guarantee quality and service (if necessary check our website for distributor details).

VISIT OUR WEBSITE

WWW.SNIJDERSLABS.COM

There you'll find all the latest information about:

- + ULT freezers (-86°C) with datasheets of any type, racking systems, boxes and other accessories
- + a variety of climate cabinets for plants, seed germination, fungi, snails and insects research with temperature-, light- and humidity control
- + (cooled) incubators and incubator walls, designed for general microbiological research of among others food, water and medical laboratories.



Office and Production

Laurent Janssensstraat 105
5048 AR Tilburg
The Netherlands

Showroom and Testfacility

Gebroeders Salastraat 40
5048 AL Tilburg
The Netherlands

T +31 13 750 15 55
F +31 13 463 86 35

info@snijderslabs.com
www.snijderslabs.com