

EGCS LED | SERIES: ERS INOX ALG LED (ECOLine)

CLIMATE CHAMBER WITH HUMIDITY AND LIGHT CONTROL
FOR ALGAE CULTIVATION

CONFIGURATION

GROSS CAPACITY IN LITERS: 150 | 250 | 450 | 850 | 1340



GENERAL SPECIFICATIONS

Designed for the study of growth of all types of Algae, Cyanobacteria, Microalgae, Algae Toxicity, Zebra Fish, Aquaculture, Daphnia and marine studies with different production capacities.

Uniform vertical air flow on all shelves, with speed regulation approx. 0.2 – 0.8m/s.

TEMPERATURE CONTROL
ERS ALG INOX LED MODELS
Temperature range from +10°C to +55°C, with lights on/off.

TEMPERATURE AND HUMIDITY CONTROL
ERS ALG HR INOX LED MODELS
Humidity control: Working range from 30% to 95% R.H (+/- 3%). With lights off and on. .

TECHNICAL SPECIFICATIONS

Temperature control panel and other parameters with 7.0 "TFT touch screen.

Ultrasonic humidity generator and horizontal airflow recirculation system. (EGCS ALG HR)

Safety thermostat, avoids exceeding the temperature.

Electronic probe to measure humidity (4-20 mA) with precision / stability of +/- 3%.

TECHNICAL SPECIFICATIONS OF THE LIGHTS

Possible light positions: on door (LED), on door and rear (2S) or on trays (1/2/3/4 L).

2 independent LED light channels with one-to-one regulation: Channel 1 warm white light. Channel 2 cool white light.

Light intensity control from 5 to 180 µMol/m² x s PAR. Optionally up to 1,800 µMol/m² x s

CONTROL

4500 series controller, with graphical temperature and/or humidity display, intuitive and simple user control.

7.0" TFT backlit graphic display.

Acoustic and visual alarm.

3 levels of numerical password protection (user, supervisor, technical service), with reprogrammable PIN codes.

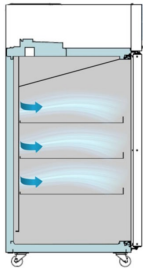
Back-up battery, with automatic recharge, guaranteeing autonomy for 48 or 72 hours.

CONSTRUCTION

EXTERIOR	Epoxy coated steel. 4 wheels and height-adjustable feet.
INTERIOR	AISI304 stainless. Rounded corners and interior drainage.
DOOR	Blind door with handle and key lock. 6mm thermal glass internal door.
POWER	220-240V /1 F/ 50 Hz. 1.5 m cable with Schuko connector.
ISOLATION	60mm CFC-free high-pressure injected polyurethane. Density of 40 kg/m3
SHELVES	In stainless steel. perforated + height-adjustable guides. Max load 100 kg/m2.
COOLING	Forced air ventilation. Cold control controlled by solenoid valve.

AN EQUITEC'S SOLUTION |

DETAILS



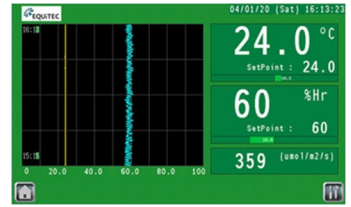
Air flow view



Interior shelves



Detail: lights on door and sides



Detail: control

OPTIONAL ACCESORIES

Tubes in interior trays independently regulated at each level, with the possibility of regulating light intensity, via the microprocessor.

Daylight tubes for algae growth.

Day growth tubes for plant growth.

LED tubes with different day growth LED diode configurations for plant growth according to different applications.

Lights on the sides or rear of the chamber, with protected glass window.

UV light tube for sterilization.

Thermal decontamination system at +70 °C.

Bio-decontamination with hydrogen peroxide: allows the connection of an H₂ O₂ atomizer system.

Optional negative temperatures: +4°C / 0°C / -5°C / -10°C / -20°C / -30°C / +70°C / +80°C

Extended drying capacity up to +10% RH, with additional air dryer.

Water cooled condensing unit.

CO₂ control and supervision units.

CO₂ scrubber to reduce carbon dioxide below ambient levels.

Fog or spray simulation.

Automatic irrigation valve.

Phenolic resin coating for entomology/insect breeding applications.

20 liter external water tank with electric pump and safety valve for the humidifier feed water.

Continuous demineralization system for the humidifier feed water.

Digital printer for temperature and/or humidity.

Potential-free output for remote alarm control (4-20 mA).

RS485/232 remote communication system.

Additional grommet for cables and tubes.

Internal sockets.

Ethernet output for remote connection via WiFi network and dedicated website, makes it possible to read and change parameters.

GSM alarm module.

Communication software for PC on request.

7-day circular temperature/humidity recorder, with independent battery to work even in case of power failure. Includes 100 charts (approx. for 1.5 years).

Additional data loggers.

Aeration kit for algae research and hydroponic crops.

DETAILED INFORMATION ABOUT THE PRODUCT

Through the following link. [Click aquí.](#)

Phone call. [Click aquí.](#)

Contact via email. [Click aquí.](#)