

# ECOCLIM

## Technical specifications



### Growth Chamber

<b>Dimensions</b>	106 x 87 x 210 cm (W x D x H) + additional attachments for floor temperature control; on 4 high load castors, 2 of them with brakes
<b>Working height</b>	adjustable up to approx. 900 mm clear height between working level and lighting level; lighting level height adjustable without tools
<b>Empty weight</b>	approx. 280 kg
<b>electrical connected load</b>	230 VAC /approx. 3.0 kW max. with full illumination



### ATMOSPHERE UNIT

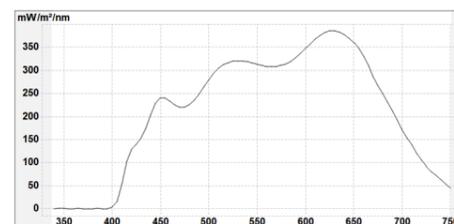
<b>Temperature range</b>	-5°C/-2°C (without/with light) to +30°C, continuously adjustable
<b>Humidification</b>	Humidification and dehumidification system for highly accurate humidity setting

### LYSIMETER UNIT

<b>Recirculation mode with temperature range</b>	-10°C ... 40°C, continuously adjustable
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### ILLUMINATION UNIT

<b>TrueDaylight PLUS</b>	specially developed for plant biology research
<b>Beam angle</b>	120°
<b>Color rendering index</b>	CRI=96
<b>Intensity</b>	up to 2,000 $\mu\text{mol}/(\text{m}^2 \cdot \text{s})$ , dimmable from 0-100%.



Spectral response True Daylight Plus

### Perfect Team: EcoClim + UGT Lysimeter

You can use up to six Lysimeters in the EcoClim.

You tell us what you need and we will select the right Lysimeter for you - also weighable on request.

We are also happy to offer you our proven monolith sampling technology.



# ECOCLIM

## Creates nature - creates climate

The growth chamber for plant biological applications

Control temperature, humidity and CO<sub>2</sub> concentration in two climate zones

# ECOCLIM

## Stable parameters for your research project!

The EcoClim growth cabinet was developed for plantbiological applications that require stable and consistent environmental conditions. It has a horizontal insulation level and two climatic zones.

In the upper atmosphere area you control temperature, humidity and CO<sub>2</sub> concentration. In the separation between the climatic zones there are openings for 6 small lysimeters, which we as UGT can offer you as a complete solution.

The temperature in this lower area can be independently and serves for the regulation of the lysimeters.

The growth cabinet is illuminated by True Daylight PLUS LED panels. This type of LED has a light best suited for plant growth. This light has already been successfully tested by renowned chairs in Europe. You can also adjust this lighting level in its vertical position without tools.

Via the large touch panel you can quickly and intuitively program the chamber parameters and the display of the active set and actual values. You can also have all alarm values sent to you by e-mail or SMS.

The integrated LAN port is used for remote monitoring and programming of the chamber parameters and also enables convenient remote maintenance and remote support.

## The EcoClim at a glance

- ✓ Energy-efficient chiller
- ✓ One lighting level
- ✓ Accommodates 6 small lysimeters
- ✓ Two thermally insulated air conditioning areas
- ✓ Horizontal air conduction
- ✓ 12" touch panel
- ✓ Dehumidification as standard
- ✓ Cable version for lysimeter measurement technology



# ECOCLIM

## Research in the smallest space

### Air conditioning in the atmospheric range (upper climate range)

Air-cooled, very energy-saving refrigeration system with hot gas control and speed-controlled fans.

Humidification via ultrasonic humidification system.

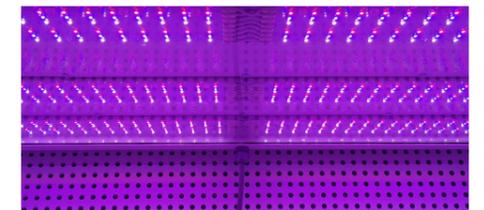


### Lighting TrueDaylight PLUS

LEDs specially designed for plant biology research.

Each LED has a beam angle of 120°, together with the arrangement on area modules the best possible homogeneity on the growing area is created.

Each lighting level is separately switchable and dimmable from 100% to 1%.



### Air conditioning in the lysimeter area (lower climate area)

Recirculating air operation with temperature range: -10°C ... 40°C, continuously adjustable.

