# climalux

### Full-LED grow light systems

with integrated vertical ventilation



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Climalux focuses entirely on the development and production of high-quality full-LED grow light systems for vegetable and ornamental crops based on Plant Empowerment, in which energy-efficient cultivation and optimal production are central. The development and production of the patented system takes place in the Netherlands.





#### CLX-2 full-LED grow light

The CLX-2 grow light series consists of a dimmable LED lighting unit and a vertical ventilation system, which evenly distributes heat and moisture in a greenhouse. The unit creates a microclimate around each plant, caused by the vertical air movement in combination with the adjustable light intensity.

 The CLX-2-3ch grow light is switchable on 3 channels. One main channel and two subchannels. The total power of the lamp is 750W (just like the CLX-2-1ch), with the main channel accounting for 80-90% of the total power. An example of a color distribution per channel: 85% Red (Ch1), 5% Blue (Ch2), 10% Far Red (Ch3); The exact color distribution per channel can be adjusted to the customer's wishes.

Including boost function, the maximum available power of 750W can be distributed over 1, 2 or 3 channels. When switching off one or both subchannels, the main channel can be controlled up to a maximum of 750W.

• The CLX-2-1ch grow light has a fixed spectrum. There is a choice of 10 different basic spectra, in addition it is also possible to supply a custom spectrum.

#### **Horticulture Control Unit**

The Horticulture Control Unit is the heart of the Climalux full-LED grow light system. The module provides a connection between the horticultural computer and the grow light system. It allows the user to quickly adjust the lights and fans to any desired level and to anticipate weather conditions. Multiple group layouts can be made, with their own light intensity and air circulation. In this way it is possible to realize an even light level and an even greenhouse climate throughout the entire greenhouse, also along the gables.

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### PLANT EMPOWERMENT

Energy-efficient cultivation and optimal production are the starting points of Plant Empowerment. Based on this vision, Climalux has developed the CLX-2 full-LED grow light, but the environment and healthy working conditions also have full attention in the further development of the full-LED grow light system.

#### **Optimal production**

The Climalux full-LED grow light system consists of a dimmable LED lighting unit and vertical ventilation system. Heat and moisture are evenly distributed, resulting in a better, stronger and more stable crop in all areas of the greenhouse. The grow lights ensure higher crop yields due to the application of diverse light spectrums.

#### **Energy savings**

The application of the Climalux full-LED grow light system results in significant savings on electricity and gas, up to 35%. The heat from the lamp is used optimally and the application of the unique vertical ventilation system creates a stable climate in a closed environment around each plant. This significantly reduces the need for heating or cooling.

#### Environmentally friendly

The vertical airflow repels diseases and fungi, minimizing the use of pesticides. Due to the combination of saving on pesticides and fossil raw materials, higher production and an almost complete exclusion of the use of inhibitors, the CO2 footprint per product drops considerably.

#### Safe working conditions

Unfavourable lighting conditions can cause tiredness and health problems. This can have an impact on the wellbeing of employees working in the greenhouse, and can lead to dangerous situations. By applying diverse light spectrums, employees can continue to work under Climalux lights for longer periods, without adverse health effects.

- Better and stronger crop.
- Even quality of cultivation.
- Higher crop γield.
- Less pesticides.
- Less inhibitors.
- Lower CO2 load.
- Lower production costs.
- No health risk.

The CLX-2 creates an optimal and stable microclimate around each plant, anywhere in the greenhouse.

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#### Made in Holland

The patented full-led grow light system from Climalux was developed in the Netherlands and is also produced in the Netherlands. As a result, developments from the market or specific requirements of the client can be responded to quickly and Climalux has full control over production and production times.

Do you have any questions about the Climalux full-led grow light system? Then please contact us.

#### Climalux

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