Application area includes fruits, vegetables and flowers.

LEDFAN TOPLIGHT

Food Autonomy is convinced that the key to success is the application of new technologies.

Having in-depth knowledge in the field of lighting techniques, we are focusing specifically on greenhouse lighting and vertical farms.

Our aim is to offer world-class quality LED lighting and smart-solutions to growers and farmers for use in their precision indoor farming operations.

“We control lighting directly via our climate computer since the integration of the CultiMesh Lighting Control Platform and HLP.”

Leo van der Lans,
co-owner of Lans Group

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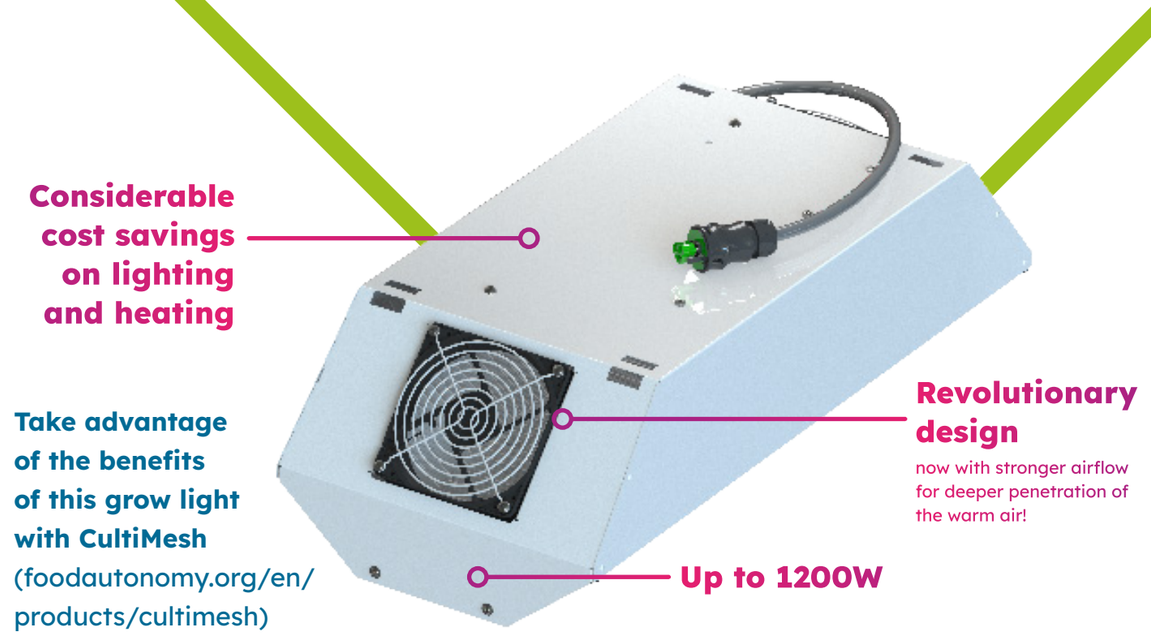
FOOD AUTONOMY
Horticultural lighting

WHY IS LEDFAN UNIQUE?

LEDFan Toplight has been co-developed with growers for cultivation of fruits, vegetables and flowers in high tech greenhouses. It is the best one to one replacement for the traditional high pressure sodium lamps (HPS) as it combines the advantages of LED and HPS.

- Reduces not only lighting costs, but it provides considerable savings (more than 15%) on heating costs compared to HPS and even more compared to normal LED fixtures, which are producing about 6% less heat than HPS
- Increases yield by providing more µmol/s to the plants vs HPS
- Improves evaporation stimulating photosynthesis
- Dimmability further increases efficiency while maintaining light uniformity
- Switchable spectrum ensures optimal light for people and plants.



NEW FEATURES

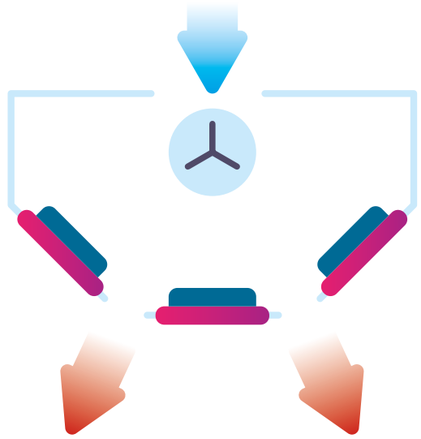
- Controllable 4-channel
- Wireless dimming via climate computers
- Supports automatization

KEY BENEFITS OF LEDFAN

- Luminous efficacy up to 3.8 umol/J
- PPF up to 4300 µmolt/s
- High uniformity
- 50k lifetime
- Unlimited spectral variations
- Stimulates evaporation
- Less plant disease
- Better working conditions

HOW IT WORKS?

- Cold air is drawn from the top, warmed up by the heat loss of the LED and drivers
- The warm air lowers humidity and stimulates evaporation, which improves the photosynthesis
- Meanwhile, it ensures that screens and windows can be further closed, which result in lower energy usage



A warm air blanket forms around the top of the plants, creating an invisible energy screen.