

DIMLUX XTREME SERIES LED

FEATURES EXPLAINED

ABOUT OUR NEGATIVE IONIZER + COLD PLASMA GENERATOR

WHAT IS IT AND IS THIS COMPLETELY NEW?

Our integrated ionizer with cold plasma technology significantly reduces disease pressure by effectively neutralizing airborne pathogens. This results in healthier crops and a greatly enhanced yield quality. The use of an ionizer with cold plasma technology for this purpose within agriculture is common and not new. What's new and boundary breaking, is that Dimlux has now integrated this patented technology within a fixture.

HOW DOES IT WORK IN PRACTICE?

The extremely powerful negative ions flow is created and expelled from the ionic optics and sends out electrically charged negative ions into the air that bond with pathogens. Once a bond is made, these particles become too heavy to stay in the air. This results in the contaminants falling to the floor. It is also possible to create positive ions which in combination with negative ions bond to pathogens and because of the energy that comes free the pathogen will be destroyed. The ratio between the negative and positive ions can be selected based on the pathogen that's needs to be neutralized. Ions have a very short lifespan from a few seconds to multiple seconds, because of this the ions must be generated as close to crop as possible to get the desired result. Due to the ionic optics that are close to the crop and the fact that each fixture covers its own micro area, the ions are at full strength when they reach the crop and are therefore extremely effective. This placement across the entire crop field and close to the plants, makes the built-in ionizer in the fixture far more effective than usual standalone ionizers which don't have this spread and coverage.

CUSTOMIZABLE IONIZATION FOR PRECISION CONTROL

The Dimlux Xtreme Series MKII ionizer allows you to easily adjust the balance of positive and negative ions to suit your specific cultivation needs.



With simple, user-friendly controls, you can fine-tune the ion ratio for optimal air quality and disease prevention. Additionally, you have the flexibility to turn off the ionizer completely if desired, giving you full control over your growing environment.

SAFE AND PROVEN: IONIZATION AND COLD PLASMA TECHNOLOGY IN AGRICULTURE

Ionization and cold plasma technologies are safe and proven. They are well-researched and have already been safely applied in agriculture to reduce airborne pathogens without harming workers or crops. These technologies function by generating ions that neutralize contaminants, similar to natural ions found in forests and mountains. Studies show that when properly implemented, ionization meets OSHA and other health standards, ensuring that ozone levels remain safe for human and plant exposure.

The Dimlux Xtreme Series MKII uniquely integrates this proven technology into its lighting and in accordance with OSHA standards, combining air purification and optimal lighting in a proven safe way. For more information and research about the effectivity and the absolute safety for humans and crops we recommend to read this research on using this technology in agricultural fields:

www.mdpi.com/852108