

Biosecurity Equipment

Part of a healthy grow room means having clean air to avoid an outbreak of mold or pests. As growers, we understand that contamination within a grow, especially an outbreak of powdery mildew, can mean the end of a crop. Surna has partnered with AiroClean to provide technology to help grows eliminate breakouts.

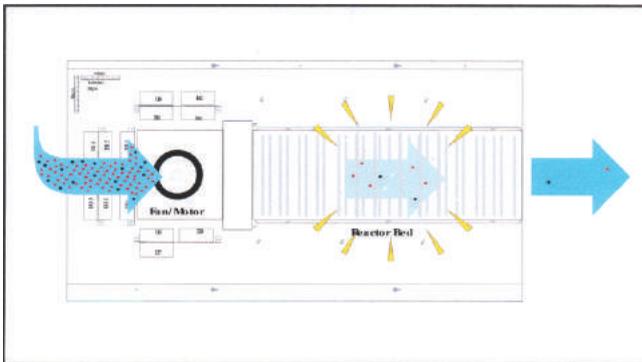


Features of AiroClean biosecurity:

- Kills airborne fungi, bacteria, and viruses
- Oxidizes VOCs
- Uses Photocatalytic Reactor instead of filters
- Increased precision in eliminating molds and mildews than traditional air filters or UV lights
- Energy efficiency
- Listed and certified as a FDA medical device

Benefits:

- Easily integrated into built-out grows
- Safe alternative to pesticides
- Infestation prevention
- No harmful materials released back into the room (ozone)
- Cross-contamination prevention
- Non-invasive biosecurity
- Little maintenance compared to filters & UV



The Technology

Originally developed by NASA, this biosecurity technology is completely different than traditional air filters or ultraviolet lights.

Contaminated air is continuously processed through the unit, via a patented bio-conversion reactor bed. This reactor bed, integrated with Photocatalytic Oxidation, works to destroy harmful airborne microbes without the production of by-products.

What is Photocatalytic Oxidation?

Inside the unit lies the reactor bed and a series of ultraviolet (UV) lights. The reactor bed is filled with small glass rings coated with Titanium Dioxide, which acts as the catalyst. As the UV light shines onto these glass rings, the TiO_2 triggers a reaction in which water in the air is converted into a form that turns molecules of pollution into less harmful substances, such as water or CO_2 . These small rings work in tandem with ultraviolet lights (UV) to kill bacteria, fungus, and mold spores.

How is this biosecurity different than traditional UV?

Traditional UV is ineffective against many spore-forming molds and are unable to eliminate volatile organic compounds (VOCs).

