



KRIRA TECH

AIR STERILIZATION SYSTEMS FOR PLANTS



ENHANCING AIR QUALITY IN PLANT CONTROL PANELS FOR BETTER HEALTH



MONITORING

Real-time AQI data helps ensure compliance and safety standards for operations.



STERILIZATION

Advanced systems effectively reduce airborne pollutants, enhancing air quality in the workplace.



EFFICIENCY

Systems integrated for maximum performance and minimal disruption to operations.

BENEFITS

Improved health, safety, and compliance for all personnel on-site.

Why Choose Air Sterilizer System?

1. Industrial Areas

Air Pollution Control: Industrial environments often contain airborne pollutants, dust, smoke, and harmful chemicals. ASM advanced filtration, including HEPA-14 and activated carbon, captures these particles, creating a healthier workspace.

Safety Compliance: Meets high standards for air quality, helping industries comply with health and safety regulations.

Durability and Efficiency: Built to handle continuous use in demanding conditions, ASM is efficient and long-lasting, ideal for industrial applications.

2. Hospitals and Healthcare Facilities

Elimination of Pathogens: Hospitals require sterile environments, and AiROX's UV-C light and HEPA-14 filter eliminate bacteria, viruses, and other pathogens, reducing infection risk.

Allergen and Pollutant Reduction: Reduces airborne allergens, smoke, and chemical odors to create a comfortable, safe environment for patients and staff.

Quiet Operation: Operates quietly, suitable for sensitive areas like patient rooms and examination rooms.

3. Offices

Enhanced Productivity: Clean air reduces symptoms like headaches and fatigue, improving employee well-being and productivity.

Odor and VOC Control: Activated carbon filters absorb VOCs and odors, keeping the office environment fresh and professional.

Smart Technology: The air quality sensor automatically adjusts settings based on air quality, providing continuous filtration with minimal maintenance.

4. Hotels and Hospitality

Guest Comfort and Satisfaction: Provides fresh, odor-free air, which is crucial for guest satisfaction, especially for those with allergies or sensitivities.

Odor and Allergen Elimination: Removes odors from cooking, smoke, or cleaning chemicals, ensuring rooms remain fresh and inviting.

Aesthetic Design: AiROX's compact and sleek design blends into hotel decor seamlessly while delivering powerful purification.

Effective Air Sterilisation Solutions

Benefits of Air Sterilisation

Our air sterilisation machines provide a reliable solution for maintaining cleanliness and safety, ensuring sensitive equipment operates efficiently while significantly reducing the risk of airborne contaminants and pathogens in controlled environments.



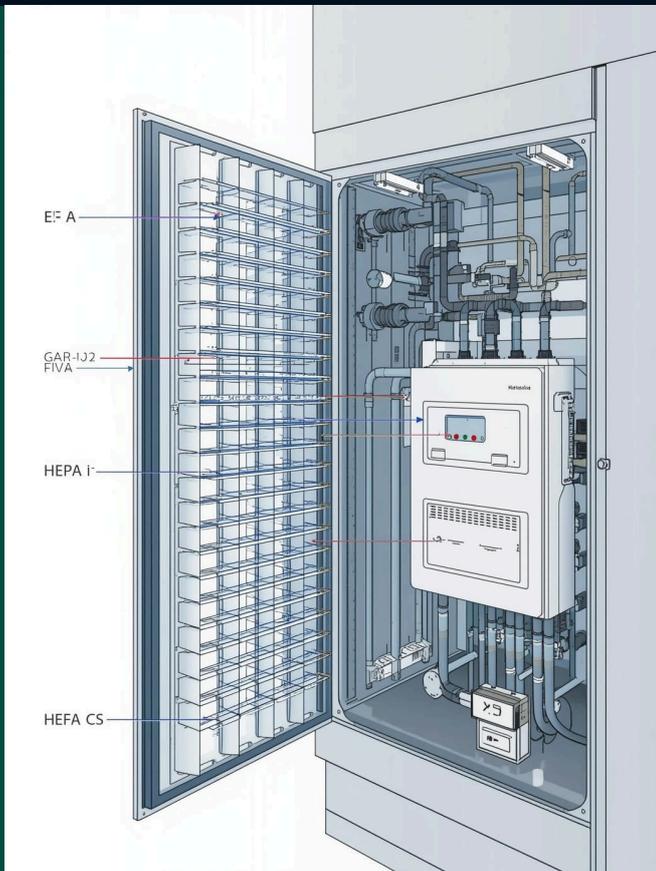
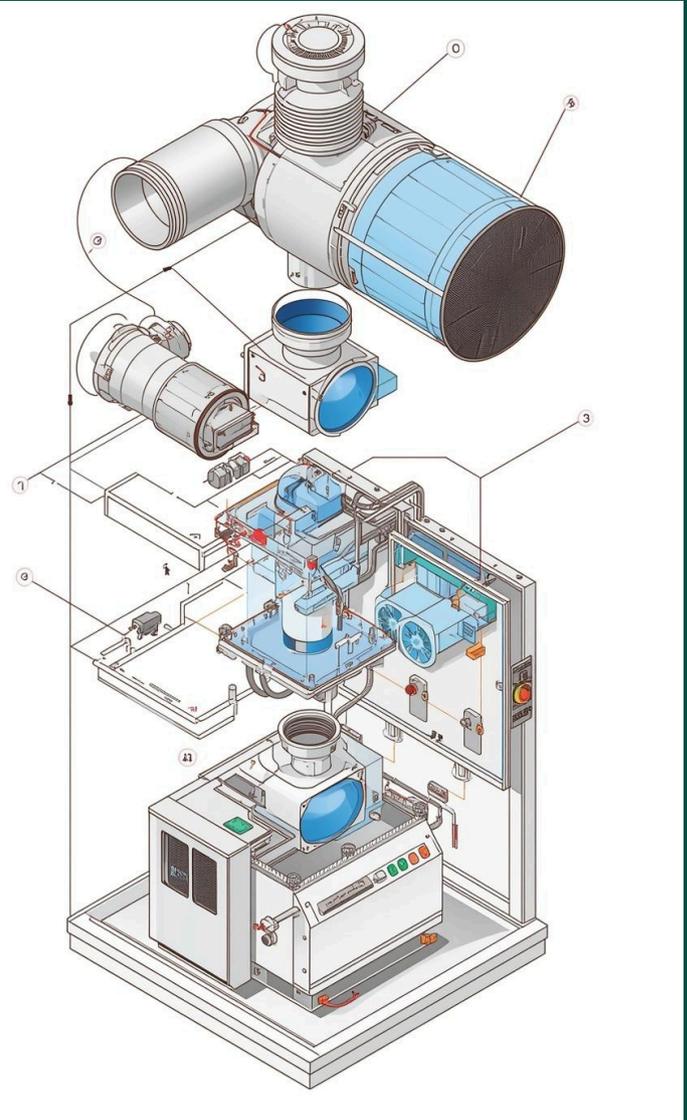
Maintenance & Downtime

Extend equipment life and minimize manual cleaning requirements.

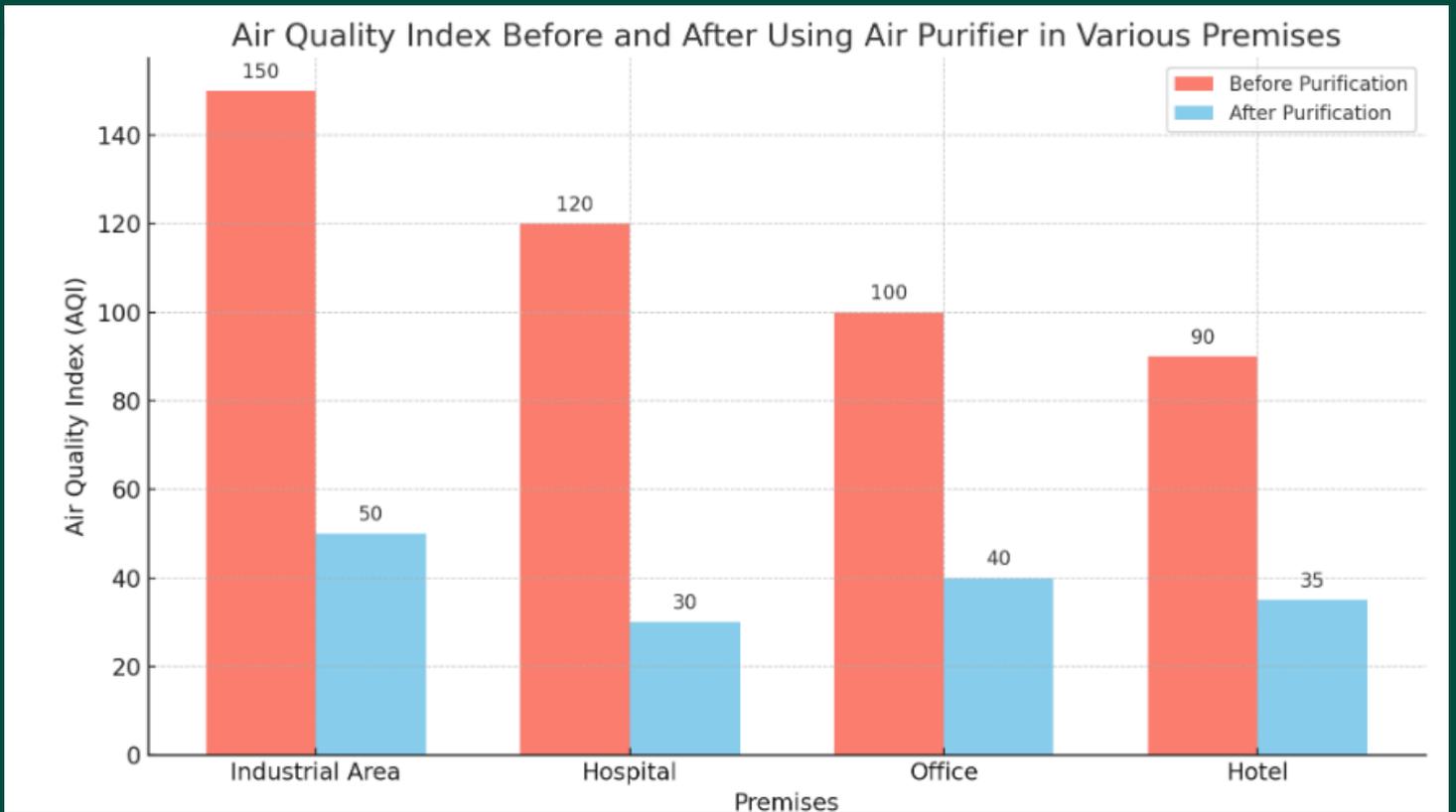
Advanced Air Sterilization System

Technical Solutions for Safety

Our innovative air sterilization system enhances safety and efficiency in electrical control panels, ensuring a cleaner operational environment by eliminating harmful airborne contaminants effectively and reliably.



Prevent contamination and dust accumulation on Control panels, PLCs, sensors, and instruments.



Graph shows the air quality index (AQI) before and after using the air purifier across different premises. The "Before Purification" values (in red) represent AQI levels prior to using the purifier, while the "After Purification" values (in sky blue) show the improved AQI levels after purification. This visualization highlights the purifier's effectiveness in significantly reducing pollutants across industrial areas, hospitals, offices, and hotels.

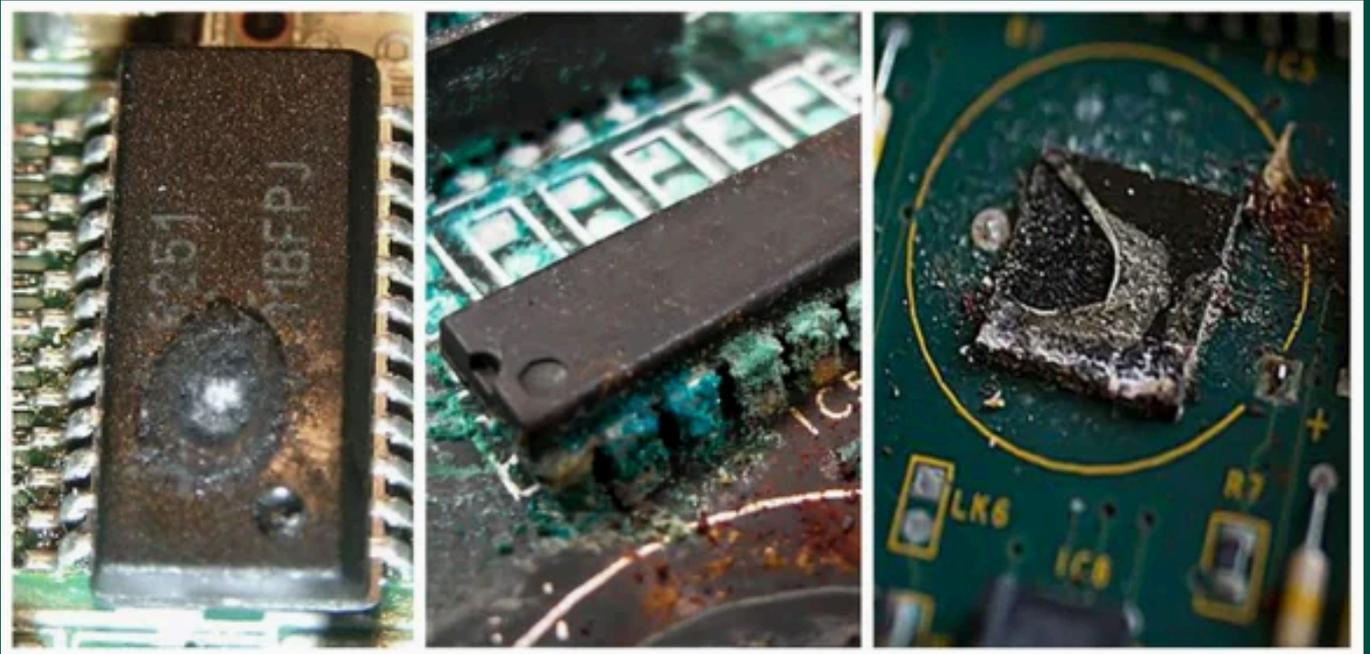
Corrosion Control

Control Rooms & Process Control Environments

ASM understands the need to provide gas-phase and particulate filtration systems for process control environments. Employing such systems can:

- Eliminate process shutdown due to control equipment failures
- Maintain high process efficiency
- Extend circuit board life and reduce replacement cost

Control rooms are utilized by large-scale industrial plants to monitor and control plant operations. Examples of such plants are geothermal power plants, petrochemical refineries, and pulp and paper plants. The control room and network of control equipment are essential to plant operation and enable the plant to maintain the highest efficiency possible. If the control room malfunctions, it can cost a plant tens of thousands of dollars per hour .



Corrosive gases in industrial environments (ammonia, chlorine, hydrogen sulfide, mercaptans, nitrogen oxides, sulfur oxides) can cause corrosion of control equipment circuitry, as shown in the circuit board picture on the right. Corrosion products form random circuit paths and nonconductive layers, which result in false signals and loss of process control.

The only way to meet this requirement in many industrial environments is to protect the control room with gas-phase and particulate filtration.

Key Features:

- 1. Pre-Filter:** Captures large particles like dust, pet hair, and pollen, protecting and prolonging the life of other filters.
Feature: Washable and reusable for cost-effective maintenance.
- 2. Electrostatic Precipitator:** Uses an electrostatic charge to capture smaller particles, reducing airborne contaminants without clogging. Feature: Effectively traps fine dust, smoke, and allergens.
- 3. HEPA-14 Filter:** Hospital-grade HEPA filter captures 99.995% of particles as small as 0.3 microns, including viruses and bacteria.
Feature: Provides high-efficiency filtration for maximum purification.
- 4. Activated Carbon Filter:** Absorbs odors, smoke, and harmful chemicals like VOCs, refreshing and deodorizing the air.
Feature: Ideal for eliminating unwanted smells and improving indoor air quality.
- 5. Ionizer:** Releases negative ions that bond with airborne particles, causing them to fall out of the breathable air.
Feature: Improves air quality by reducing allergens, dust, and fine particles.
- 6. UV-C Light Sterilization:** UV-C light kills airborne bacteria, viruses, and mold spores for safer, cleaner air.
Feature: Chemical-free sterilization, effectively reducing pathogens.
- 7. Smart Air Quality Sensor:** Continuously monitors air quality and adjusts fan speed automatically for optimal filtration.
Feature: Provides real-time air quality feedback with LED indicators for convenience and control.
- 8. Low Noise Operation:** Engineered to operate quietly, with noise levels below 30 dB.
Feature: Perfect for bedrooms, offices, and other quiet environments.
- 9. Energy-Efficient Design:** Consumes minimal power while delivering high air-purification performance.
Feature: Eco-friendly, designed for continuous use without high energy costs.

6-IN-1 FILTRATION SYSTEM

H13 True HEPA Filter

H13 True HEPA filter captures 99.97% of airborne particles down to 0.3 microns

Washable Pre-Filter

Capture dust, lint, hair and pet hair

UV Tube

UV lights sterilized the bacteria in AIR

Ionizer

Negative ions can neutralize and remove Odors

ESP

Remove over 99% of particulates, even in large volumes

Activated Carbon Filter

Activated carbon pre-filter reduce household awful smell from pets, cooking and smoking



System Configuration Options for Power Plant

Area	Recommended Configuration	Installation Type
Main Control Room	HEPA + UV-C + Carbon Filter + Pre-Filter + Semiconductor Filter	Integrated with HVAC return ducts
Electrical Panel Room	HEPA + UV-C + Pre-filter + Ionizer + Carbon Filter	Wall- or ceiling-mounted standalone unit
Server/PLC Room	HEPA + UV-C + Pre - Filter + Carbon Filter	In-duct sterilization module
Air Handling Unit (AHU) Room	Pre-Filter + HEPA + UV-C module inside AHU coil section	In-line installation



K R I R A T E C H

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