PLASMAIR™
Mobile Air Decontamination Units
for Healthcare environments

NOW AVAILABLE IN CANADA
The standard for air decontamination in 50+ countries

SciCan | Your Infection Control Specialist™
PLASMAIR™
Mobile High Efficiency Air Decontamination Units
with HEPA-MD™ technology

Air contamination: a major risk for patients
Air contamination is due to the presence of microorganisms and aerosolized particles that can carry them. Among these, *Aspergillus spp.* is responsible for invasive aspergillosis, a potentially life-threatening condition for immunocompromised patients. Immunocompetent patients undergoing deep surgery (cardiac surgery), as well as burn and ICU patients, are also at risk. MERS-Cov, MRSA, and multi resistant *Mycobacterium tuberculosis* are of great concern to clinicians because of their high pathogenicity and the difficult, costly treatment they involve.

Today, mobile air decontamination units have demonstrated their ability to effectively replace deficient or inappropriate air treatment systems in hospitals’ high risk areas. Scientific studies have demonstrated that PLASMAIR™ units equipped with HEPA-MD™ significantly reduced the occurrence of Invasive Aspergillosis (IA) in neutropenic patients with hematologic malignancies1.

Principle of HEPA-MD™ technology:
a 4 stages reactor

![Diagram of the 4 stages reactor](image)

**Destroy microorganisms with cold plasma**
Microorganisms trapped in module 2 are directly and continuously exposed to ions and oxidizing compounds generated by the upstream plasma module. If organic material is not fully inactivated while passing through the plasma stage, it is destroyed by oxidation in the collection media. No microorganism can survive in the HEPA-MD™ reactor. This feature allows the PLASMAIR™ to eliminate one of the major risks of mechanical filters, which can allow bacteria and fungi, under some conditions, to grow and eventually release viable contaminants.

**Coanda effect**
This airflow pattern enables a continuous and optimized mixing of the room’s air volume.

Advantages of HEPA-MD™ technology
- Improve mechanical filtration efficiency with the addition of the electrostatic effect
- Inactivates microorganisms through oxidation
- Reduces particle load in the room
- No accumulation of viable bioburden in HEPA filters
- No release of toxic compounds
- Reduces unpleasant odours

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1. The PLASMAIR™ Decontamination System Is Protective Against Invasive Aspergillosis in Neutropenic Patients
PLASMAIR™ Guardian and Sentinel are considered a standard for air treatment in hematology, bone marrow transplants units, operating rooms and departments receiving high risk patients.

How to choose an air treatment unit?

- Lowest noise
- Technology adapted to the nature of the elements to eliminate
- No release of toxic substances
- High flow rate adaptable to room volume and standard
- Intuitive controls
- Mobile
- Easy to maintain
- Performance validated by independent and published studies

High capacity

- Very fast particle and microorganism reduction kinetic
- High flow rate 2 500 m³/h

Quiet

- Very quiet
- Day & Night Preset ventilation programs

Compact

- Small footprint makes it easy to move and maintain
- Ideal for rooms up to 50 m³

Efficient

- Fungi < 1 CFU/m³
- Reduce from ISO 9 to ISO 7/ISO 6 in a few minutes

Connection availability to Central Management System.

Easy access to the menus by touching the relevant graphics.
5 available languages.

Decontamination of a 35 m³ room from ISO 9 to ISO 7 in 10 min
24 air changes per hour (ACH)

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Air quality in hospitals: a standard regulated area

ISO 14 644-1 standard: define particulate cleanliness class of the room.

<table>
<thead>
<tr>
<th>Activities**</th>
<th>Risk Class*</th>
<th>Particle Class</th>
<th>Particle decontamination kinetic</th>
<th>Microbiological Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burn patients, hematology, drug preparation, bone marrow transplants, operating rooms*</td>
<td>4</td>
<td>ISO 5</td>
<td>CP 5</td>
<td>M1 &lt; 1 CFU/m3 for Aspergillus spp.</td>
</tr>
<tr>
<td>Transplants, post graft patients, interventional imaging, in-vitro fertilization, operating rooms*</td>
<td>3</td>
<td>ISO 7</td>
<td>CP 10</td>
<td>M10</td>
</tr>
</tbody>
</table>

* Depending on surgery profile
** As per NF S90-351:2013

Activities and associated risk classes are commonly used in hospitals and are provided for reference only. They are not defined in ISO 14 644-1. Please refer to national and provincial standards and guidelines.

Contact SciCan today and discover how our experts in air treatment can support you in assessing your existing installation.

Installation: once machines are delivered, our technical team is available to support technical and medical staff with product installation and startup assistance. We provide Functional Qualification (FQ) on site and fully train end users.

Maintenance and after sale service: maintenance is easy and cost effective. We offer several options and our contracts are valid during the whole lifecycle of the product.