

Electrostatic Spraying vs. GEIA Dry Misting

1. Technology Overview

Electrostatic Spraying (ES)

- Uses a charged liquid droplet that wraps around surfaces.
- Relies on directional spraying and operator technique.
- Produces **wet droplets** that land on surfaces and require time to dry.
- Coverage depends on **line of sight** and the operator's ability to spray all areas.
- Not designed to treat air or airborne particulates.

GEIA Dry Misting

- Produces a **micron-level dry fog** that behaves like a gas.
- Fills the entire room uniformly—**air and surfaces**.
- Leaves **no residue** and, while still a wet application at the microscopic level, does **not dampen surfaces**—they remain dry to the touch.
- Reaches complex spaces, cracks, HVAC returns, fabrics, high-touch surfaces, and airborne particulates.
- Designed for **rapid deployment** and high repeatability.

2. Particle Size & Coverage

Electrostatic Spraying

- Droplets typically 40–80 microns.
- Heavy enough to fall quickly, limiting air coverage.
- Wraps surfaces only where sprayed.

GEIA Dry Misting

- Particles are typically **1–3 microns**, small enough to remain suspended.
- Completely fills the atmosphere of a room.
- Uniform coverage without operator dependency.

3. Air Treatment vs. Surface-Only Treatment

Electrostatic Sprayers

- Designed for **surface-only** application.

- Droplets settle quickly onto floors, desks, and equipment.
- Do **not** meaningfully treat the air or airborne particulates.

GEIA Dry Misting

- Treats **air and surfaces at the same time**.
 - Fine 1–3 micron fog stays suspended, contacting airborne particulates.
 - Fills the entire room, including upper air, vents, and hard-to-reach areas.
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4. Impact on Operations

Electrostatic Sprayers

- Slower deployment.
- **Requires active labor**—an operator must physically point and spray every surface.
- Rooms often must be re-entered to spray missed areas.
- Operator fatigue and spraying technique impact consistency.
- Wet application may affect electronics, papers, fabrics.

GEIA Dry Misting

- **Rapid deployment:** a room can be fogged in minutes.
 - No line-of-sight spraying; once the unit is placed and started, the fog does the work.
 - Ideal for routine, repeatable protocols and after-hours treatment.
 - Safe for electronics, furniture, books, fabrics.
 - Leaves the space dry to the touch.
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5. Safety & Chemical Use

Electrostatic Sprayers

- Often use quats, bleach, or harsher chemicals.
- Increased PPE requirements.
- Strong odors or residues.

GEIA Dry Misting

- Uses **hypochlorous acid (HOCl)**—a human-safe, non-irritating disinfectant.
 - No PPE needed for standard 300 ppm HOCl protocols.
 - No residue or harmful VOCs.
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6. Maintenance & Cost Considerations

Electrostatic Sprayers

- Pumps, nozzles, and lines clog.
- Frequent maintenance.
- Requires manual spraying labor.
- Residue buildup over time.

GEIA Dry Misting

- Minimal maintenance (coin replacement periodically).
- Low operational costs.
- Faster treatment = lower labor costs.
- Compatible with multiple HOCl tablet brands.

7. Summary Table

Feature	Electrostatic Spraying	GEIA Dry Misting
Primary Use	Surface-only	Air + surfaces
Coverage	Operator-dependent; must spray all surfaces	Uniform, room-filling coverage
Particle Size	40–80 microns	1–3 microns
Residue	Wet, may leave film	Dry; no residue
Chemicals	Often quats/bleach	300 ppm HOCl
Operator Skill Needed	High	Low
Ideal For	Targeted surface sanitizing	Whole-room treatment — surfaces, air, and odors

8. When Customers Ask: “What’s the Difference?”

A simple answer:

Electrostatic sprayers coat surfaces. GEIA’s dry misting fills the entire room like a gas—air and surfaces—without leaving anything wet. Dry misting is faster, safer, more consistent, and treats the air as well as the surfaces.

9. When to Recommend GEIA Dry Misting

- Schools, classrooms, and campuses
- Hotels, resorts, casinos
- Stadiums, arenas, public venues
- Restaurants, kitchens, food service
- Healthcare, urgent care, assisted living
- Offices, conference rooms, transportation
- Odor removal, mold reduction, air treatment

Note: GEIA Dry Misting does **not** replace standard cleaning practices. It should be used **in conjunction with your existing cleaning and operational procedures.**

10. Contact GEIA for More Information

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