

## **Emitter Point Maintenance**

Routine maintenance of ionizers is essential to ensure continued protection against the damaging potential of ESD. One of the most crucial aspects of this task is emitter point cleaning or replacement to optimize ionizer performance.

Over time, deposits may form on the emitter points which can be removed using an emitter point cleaner brush, with a swab, or using a wipe pre-wetted with IPA solution. Maintenance requirements are heavily dependent on the individual environment, and in terms of most ionizers emitter point maintenance includes either cleaning or replacement.

## **Degradation over Time**

Buildup of deposits and erosion of emitter points can result from a variety of environmental characteristics including the presence of airborne contaminants, emitter point material, and how protected the emitter points are. If gone unchecked, buildup can eventually lead to ion emission interference, leaving your application unprotected. Emitter point tips should also be periodically inspected for breakage and discoloration.

## **Cleaning Precautions**

Certain precautions are necessary to ensure proper emitter point maintenance:

- Turn off power to the unit or revert to standby mode before cleaning emitter points, as this may result in further contamination.
- At least one minute should pass prior to cleaning emitter points once power is turned off, and again before repowering the unit once cleaning is complete. Allow 30 minutes for QuadBars. This practice ensures any cleaning solvent residues have dried before voltage is applied.
- Use appropriate cleaning materials, including cleanroom compatible wipes and swabs, cleaning solution of 50% electronic grade IPA/50% de-ionized water, emitter point cleaner or ionized air gun if possible.
- Mechanical cleaning using a swab or cloth should be performed with gentle rotation around the emitter point until contamination is removed.
- Silicone emitter points require extra care, as they are brittle and prone to breakage.

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