

# STERION-II Static Electricity Neutralizer

For use in hand held mode or placed in stand

Samples or containers that easily become electro-statically charged can cause instability in balance measurement values due to static electricity.

The STERION-II ionizer uses an AC corona discharge to generate ions with good ion balance; these ions are emitted from the emission port to quickly reduce the static charge on samples and containers. The electrodes, which are subject to high voltages, are located safely inside the unit, out of the operator's reach.

The STERION-II is especially useful for improving measurement stability when measuring extra-small samples (particularly for measurements using an analytical balance) or samples that easily become electro-statically charged.

## Removes static charge

AC-ionisation delivers a good ion balance, and:

- does not cause reverse charge
- can remove charge from large areas

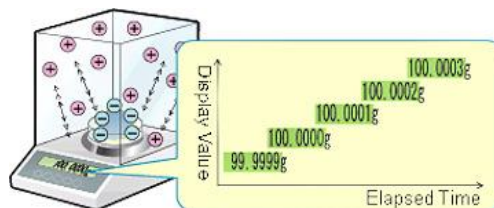
Air flow can be switched on/off

- air flow can be switched off to remove charge from powders and other easily scattered samples
- compact design, requires minimal space
- stable performance over long periods; due to AC ionization, there is no worry of the ion balance changing as electrodes deteriorate over time
- can be used at any angle or in confined spaces

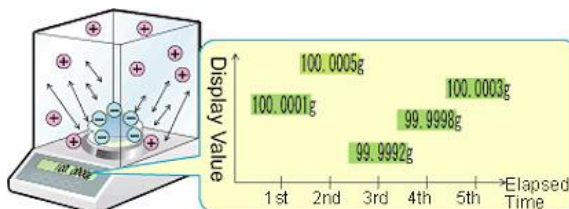


### Due to static electricity:

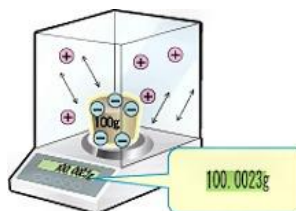
... measurement values can fluctuate or gradually change,



... repeatability of measurement values is poor,



... display values are stable but inaccurate.



**The STERION-II ionizer is very effective for symptoms such as these!**

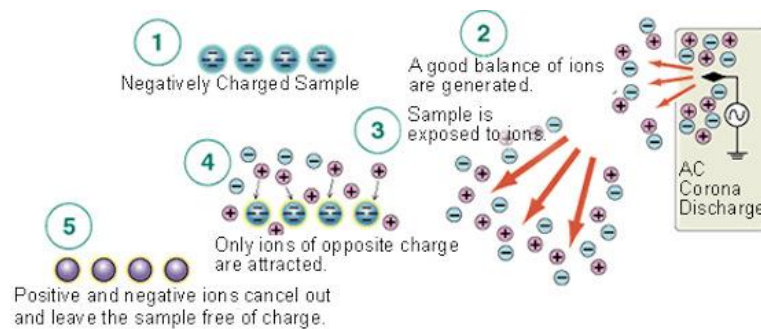


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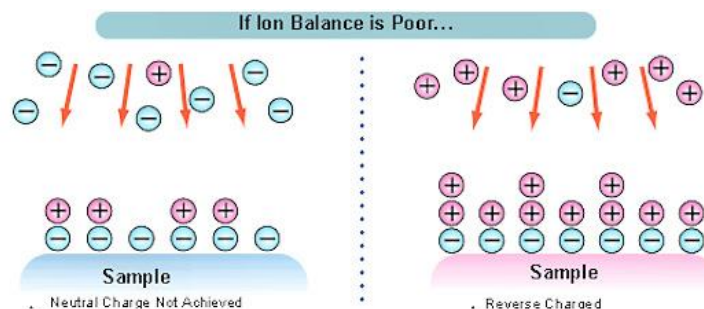
## Technical data

<b>Ion Generation Method</b>	AC corona discharge method
<b>Ion Balance</b>	±10V
<b>Effective Static Removal Range</b>	50 - 400 mm from the outlet
<b>Static Elimination Time (approx.)</b>	1 second (Typical value) (from ±1000 V to ±100 V)
<b>Ozone Concentration</b>	0.06 ppm
<b>Electrode Probes</b>	Tungsten (durability: 30,000 hours)
<b>Weight</b>	Approx. 710 g (Main unit: 395 g, Stand: 315 g)
<b>Operating Temperature and Humidity</b>	0 °C to + 40 °C, 25 % RH to 85 % RH (non-condensing)
<b>Rated Electric Power Supply</b>	DC 24 V, 1.0 A

### How static electricity is removed?



If the ionizer supplies a poor balance between positive and negative ions, it could prevent achieving a neutral charge or cause a reverse charge.



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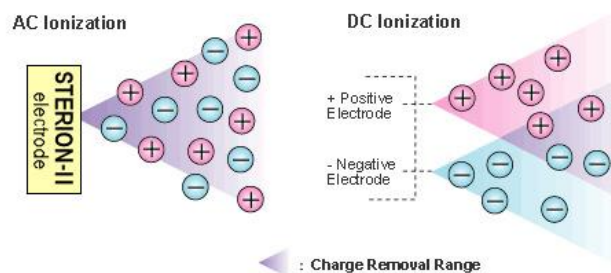
### Good ion balance using AC ionization

#### AC-ionization

AC current is applied to an emitter probe to emit both positive and negative ions in equal numbers from a single electrode.

#### DC-ionization

Positive and negative direct currents are applied to two electrodes to emit positive and negative ions, respectively, from each electrode. If electrodes are separated, it limits the charge removal range. Also, once the emitter probes begin deteriorating, ion balance worsens.



### Examples of using the STERION-II



#### On Stand

While being neutralized, charge-prone samples can be injected into a container without being scattered. You can also easily neutralize spatulas and sample bottles in the midst of the work flow.

Samples can be neutralized before weighing measurements.



#### Hand Held

You can neutralize sample static electricity during weighing measurements.

Move the unit freely to any position where static electricity is a concern and then neutralize it.

