

Static Remover (Ionizer)

Special 3-Way Ionizer for Electronic Balances

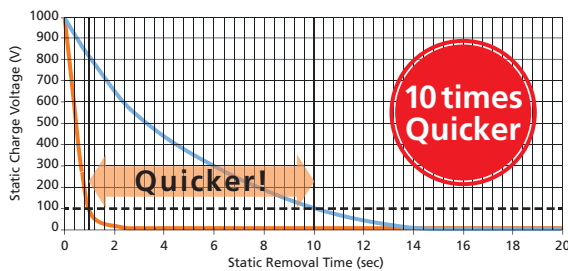


Shimadzu's proprietary 3-Way ionizer for analysts troubled by static charging of samples or containers
One-touch attachment and removal adds even more convenience

— an excellent solution against **static electricity.**

STABLO-AP provides reliable measurement by removing static electricity.

■ Comparison of Static Removal Time (Typical Examples)



Measurement Conditions
 · Time from ±1000 V to ±100 V
 · 150 × 150 mm CPM (20 pF) used
 · Distance between CPM and ionizer: 100 mm



- ▶ AC corona discharge method enables excellent ion polarity balance
- ▶ Wide angle static removal
- ▶ High performance maintained over a long period of use
- ▶ No inverse charging
- ▶ Shimadzu's unique 3-Way Ionizer: hand-held / on stand

Hand-held/On stand

Shimadzu's unique 3-Way positioning

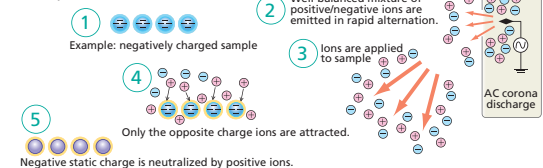
Features of STABLO-AP

Static Electricity Removal by Ion Irradiation

With the high-frequency AC corona discharge method, Shimadzu's STABLO-AP ionizer provides a stable ion balance and excellent static removal performance on samples and containers.

Precision weighing work becomes remarkably efficient. Electrodes are safely housed inside the unit.

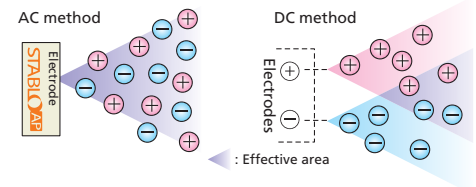
Concept of static removal



AC Method Produces Excellent Ion Balance

AC method: AC voltage is applied on the discharge needle and a well-balanced mixture of positive/negative ions is emitted in rapid alternation from one electrode.

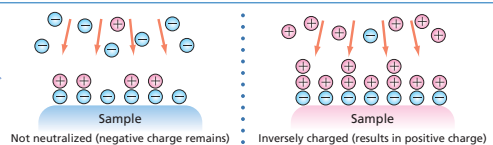
DC method: DC voltage is applied to a couple of electrodes. One is positive and the other is negative. Each electrode emits ions of one polarity only. An effective static removal angle is limited if the two electrodes are distanced. As electrodes deteriorate, initial ion balance is lost.



What is "ion balance"?

Ion balance is the balance of positive and negative ions that are supplied by an ionizer. If ion balance is poor, static electricity is not removed or inverse charging may result.

If ion balance is poor.....



Mount the STABLO-AP in the balance and use it as a built-in model



Application

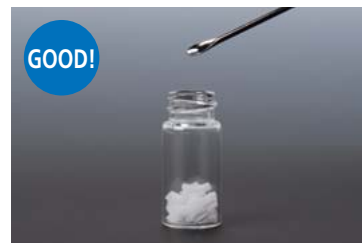
Static electricity keeps the sample out of the ampoule



The sample is hard to handle because it adheres to the ampoule inlet and sides.



STABLO-AP removes the charge from the ampoule.



The static charge is gone in seconds. This improves productivity.

Plastic wrap sticks to rubber gloves



Plastic wrap adheres to rubber gloves, making it difficult to work with.



Fasten STABLO-AP to the stand, and remove the static from the gloves.



The static is removed in about 10 seconds, and the plastic wrap no longer sticks.

■ STABLO-AP is convenient when using an electronic balance



When the powder in the Petri dish is electrically charged, and the numerical value fluctuates



When the powdered medicine paper is electrically charged, and the numerical value is unstable



When the measurement spoon is electrically charged, and bringing it near the pan affects the numerical value

Specifications

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