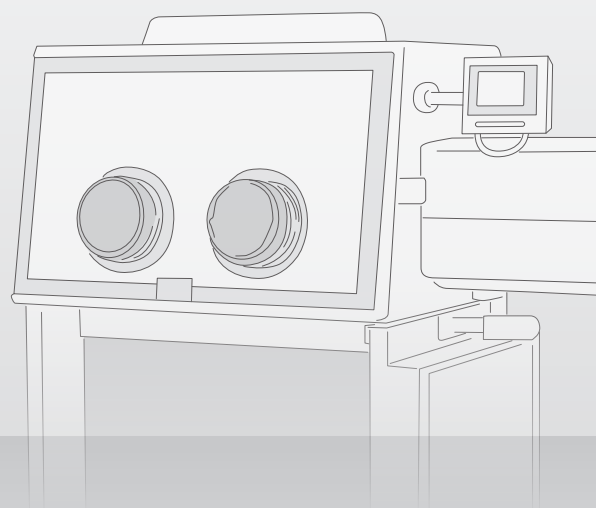


STABLO-AP Ar STABLO-AP N₂ STABLO-AP DRY AIR

Achieves safe and efficient static elimination!

Benchtop
Corona discharge-type
An industry
first!*



* Based on Shimadzu research as of April 2026

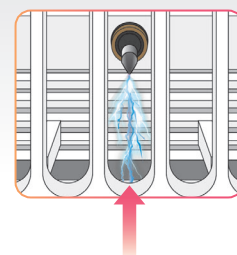
Corona Discharge-Type Ionizer Safe in Argon Gas, Nitrogen Gas and Dry Air Environments

- Suitable for static elimination of powder samples such as battery materials, as well as films, weighing paper, and containers, using a fanless ionizer.
- Ion balance optimization ensures safe operability by eliminating worry of sparking
- Optimal corona discharge is achieved by adjusting the positive/negative discharge voltage and duration according to the gas environment.



Long-Life and Low-Cost Design Provides Consistent Static Elimination Performance

- Guideline for replacing discharge needles is every 30,000 hours (can be used for about 10 years at 8 hours of ion emission per day)
- Corona discharge models are significantly less expensive than radiation-type models (vacuum UV rays or soft X-rays)
- Space-saving design can be operated three ways: Hand-held, on a stand, or in combination with an AP series analytical balance



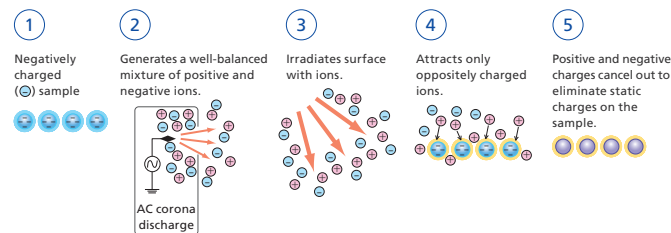
If a corona discharge ionizer for air atmospheres is used in an argon gas environment:

- Sparking might occur during ionizer operation.
- If sparking occurs, static charge might not be eliminated properly or an opposite static charge might be applied.

STABLO-AP <Principle of Static Removal>

Static Electricity Removal by Ion Irradiation

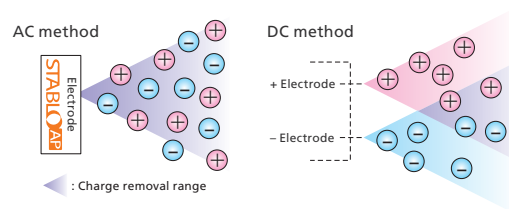
For samples and containers prone to static charging, especially when weighing them in a laboratory-class analytical balance, static electric charge can cause display value instability or other symptoms. The STABLO-AP enables accurate and stable measurements by emitting a good balance of ions generated by an AC corona discharge for reducing static charge.



AC Method Produces Good Balance of Ions

AC method: Applies an AC current to the discharge needle to emit equal quantities of positive and negative ions from a single electrode.

DC method: Applies either a positive or negative DC voltage to each of two electrodes to emit corresponding ions. If the electrodes are too far apart, the charge removal range is limited. Also, any discharge needle deterioration can result in a worse balance of ions.



Key Specifications

Model Name	STABLO-AP	STABLO-AP Ar	STABLO-AP N ₂	STABLO-AP DRY AIR
Operating Environment* ¹	Typical atmospheric air environment Temp: 0 to 40 °C Humidity: 25 to max.85 %RH (with no condensation)	Argon gas environment* ^{2*3} Temp: 0 to 40 °C Dew Point: -76 °Cdp (Moisture Concentration 1 ppm) Oxygen Concentration: 1 ppm	Nitrogen gas environment* ^{2*3*4*5} Temp: 0 to 40 °C Dew Point: -76 °Cdp (Moisture Concentration 1 ppm) Oxygen Concentration: 1 ppm	Dry air environment* ^{2*3*4} Temp: 0 to 40 °C Dew Point: -30 °Cdp (Moisture Concentration: 375 ppm)
Static Elimination Method	AC corona discharge			
Ion Balance* ^{6*7}	±10 V			±10 V (Dew Point: -70 °Cdp) ±30 V (Whole operating environment)
Effective Static Removal Range* ⁷	Approx.300 mm from the outlet			
Static Elimination Time* ^{6*7*8}	Approx.1 sec.	Approx.2.5 sec.	Approx.5 sec.	Approx.3.5 sec.
Ozone Concentration	0.06 ppm max. (100 mm from discharge port)	Not applicable* ⁹		0.06 ppm max.* ^{10*11} (100 mm from discharge port)
Discharge Electrode (Material)	Tungsten (durability: 30,000 hours)			
Size (unit)	Approx.120 × 87 × 49 mm (Excluding protruding parts)			
Weight	Approx.710 g (Main unit: 395 g, Stand: 315 g)			
Rated Electric Power Supply	DC 24 V, 0.1 A			
Input Power Supply	AC 100 V-240 V, 0.58 A, 50/60 Hz* ¹²			

*1 : It features an auto-off function to reduce wear on the discharge needle (automatically stops 15 minutes after ion irradiation).

*2 : To achieve the specified performance, allow the ionizer to acclimate in the operating environment for at least 24 hours to ensure moisture dissipates from the ionizer body.

*3 : Pressure reduction in the glove box pass box is permissible down to -0.1 MPa.

*4 : Do not place any conductive materials around the ionizer or in the space between the ionizer and the object for static elimination. The ions may be attracted, causing a deterioration in static elimination performance.

*5 : When installing a nitrogen gas environment model in an AP-AD/AP series balance, we recommend extending the ion irradiation time setting from 10 seconds to 30 seconds.

*6 : This shipping inspection criterion is measured with a 20 pF 150 × 150 mm CPM (charged plate monitor) plate placed at a 100 mm distance from the center of the outlet.

*7 : When using the ionizer in an environment with airflow, such as a purge-type glove box, make sure to direct the ionizer outlet along the direction of the airflow.

*8 : Time for 1 kV of static charge to decrease to 100 V or less (at 100 mm distance)

*9 : STABLO-AP Ar and N: do not generate ozone, because oxygen does not exist in an Argon gas and Nitrogen gas environments.

*10 : Please ensure adequate ventilation, as ozone concentrations may increase near the irradiation port (within 50 mm) and in enclosed spaces, which may cause irritation to the nose and throat.

*11 : When using it installed on AP-AD/AP series balance, the ozone concentration will be even higher inside the draft shield due to the enclosed space. Please leave the ion irradiation time at the default setting of 10 seconds, and do not perform continuous ion irradiation for more than 10 seconds.

*12 : The input power supply may change without notice.

STABLO is a trademark of Shimadzu Corporation or its affiliates in Japan and/or other countries.



Shimadzu Corporation

www.shimadzu.com/an/

For Research Use Only. Not for use in diagnostic procedures.

This publication may contain references to products that are not available in your country. Please contact us to check the availability of these products in your country.

Company names, products/service names and logos used in this publication are trademarks and trade names of Shimadzu Corporation, its subsidiaries or its affiliates, whether or not they are used with trademark symbol "TM" or "®".

Third-party trademarks and trade names may be used in this publication to refer to either the entities or their products/services, whether or not they are used with trademark symbol "TM" or "®".

Shimadzu disclaims any proprietary interest in trademarks and trade names other than its own.

The contents of this publication are provided to you "as is" without warranty of any kind, and are subject to change without notice. Shimadzu does not assume any responsibility or liability for any damage, whether direct or indirect, relating to the use of this publication.