Increase Weighing Accuracy by Eliminating Electrostatic Charges

Electrostatic charges on weighing containers and samples can result in false readings or instability as they create attractive and repulsive forces. The ION-100A is designed to be used in conjunction with an OHAUS balance to neutralize electrostatic charges that can lead to inaccuracies.

Standard Features Include:

- **Increases the Accuracy of Lab Measurements**
  The ionizer neutralizes the electrostatic charge between the test tube and the balance, increasing the accuracy of measurements—particularly with low-volume samples.

- **Fan-Free Technology Neutralizes Static with No Sample Disruption**
  ION-100A's electrodes generate positive and negative ions that are delivered through fan-free technology that doesn't disturb fine samples.

- **Compact and Versatile Design**
  The ionizer can be adjusted for optimal alignment with the balance, and its small footprint takes up minimal space. The durable electrodes can be easily replaced and have an operating life of 15,000 hours.

ION-100A *Ionizer*

How does static affect your weighing results?

When the ambient relative humidity (RH) is below 45%, insulators such as plastics are typically charged with static electricity. This can cause errors of several milligrams, and impact weighing results. For example, powdery substances with a static charge might stick to to the edge of the test tube—making it difficult to weigh and to clean up.
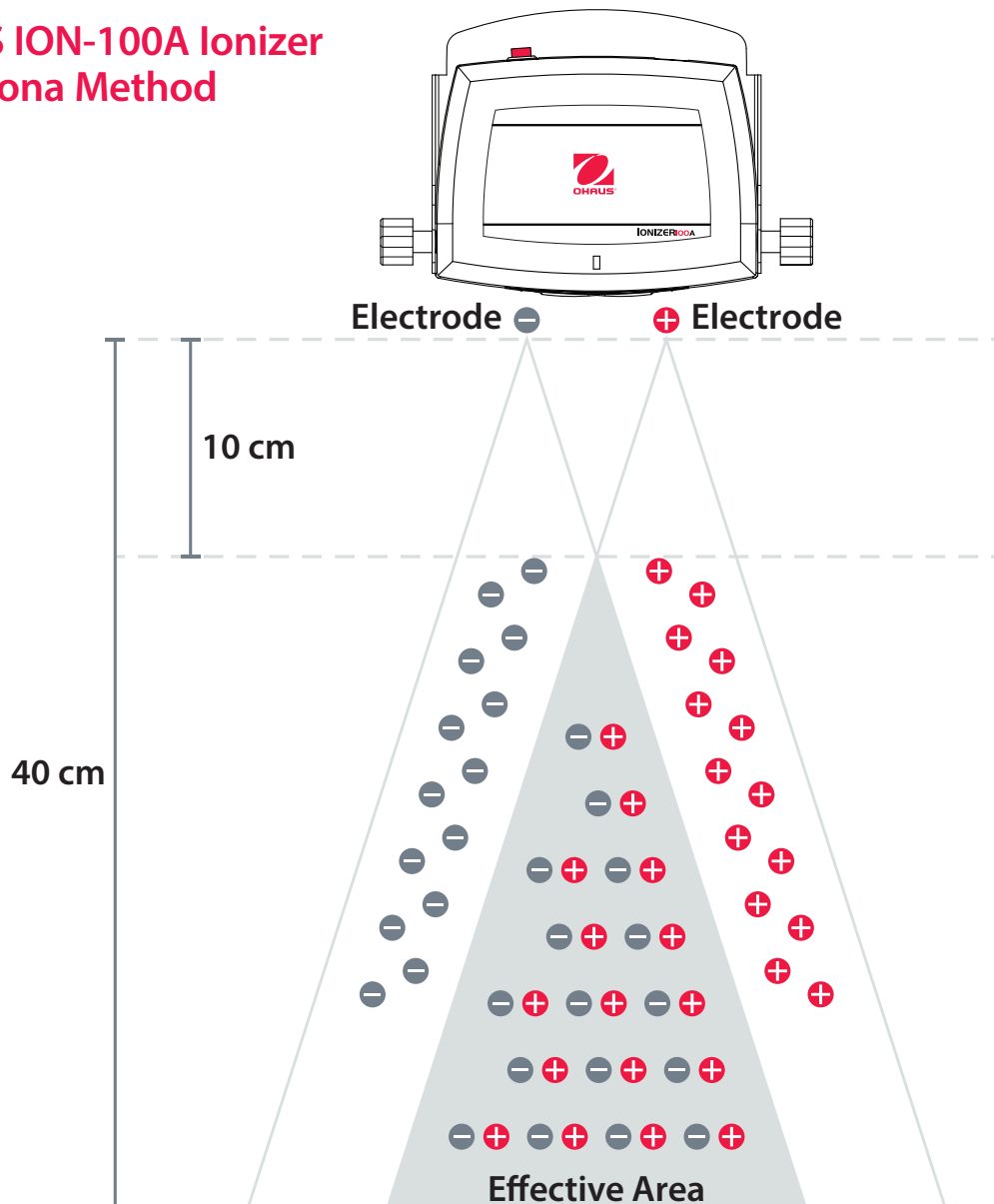
DC Corona Method

Ionizer ION-100A uses the DC Corona Method to eliminate static charges. Two polarity electrodes continuously generate positive and negative ions. These ions are attracted to ions of the opposite polarity, neutralizing the sample within a charged environment.

Eventually, 99% of the static charge will be removed from the container. The most effective area is 10–40 cm away from the charged body.
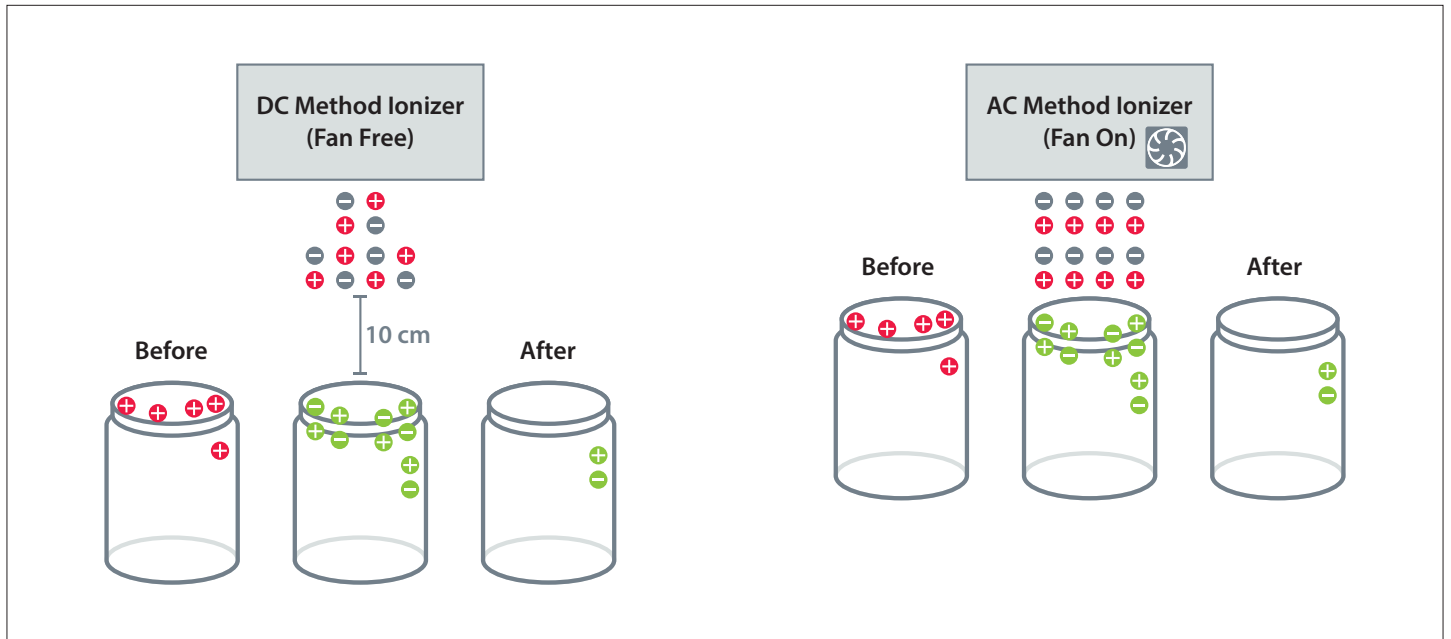

OHAUS ION-100A Ionizer
DC Corona Method

Electrode ⊖   ⊕ Electrode

10 cm

40 cm

Effective Area

DC Corona Method

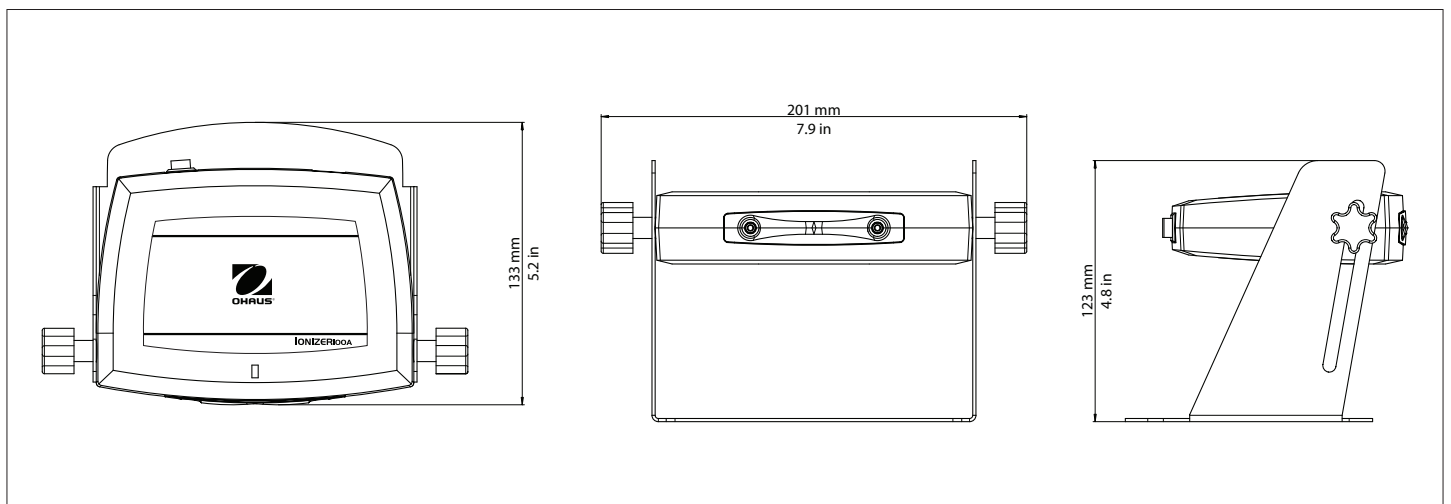- **Two electrodes work simultaneously to generate $1*10^6/cm^3$ bipolar ions**

- **Covers a wide range of effective area**
  Ionization occurs in areas up to 40 cm away from the charged object

- **Fan-free technology**
  No need to worry about fine samples such as powders being blown away

Conventional Method

- **One discharge needle generates a single type of positive or negative ions at intervals**

- **Static is removed most effectively in areas closest to the electrode only**

- **Requires a ventilator or an electronic fan to blow ions on to the sample**

DC Method Ionizer (Fan Free)

AC Method Ionizer (Fan On)

Before

10 cm

After

Before

After

Dimensions

133 mm
5.2 in

201 mm
7.9 in

123 mm
4.8 in

OHAUS

IONIZER100A

ION-100A *Ionizer*

Model	ION-100A
Item Number	30095929
Power	12V $=$ 0.5A
Ion Generation Method	DC Corona Discharge
Ionic Concentration	>1*10^6 EA/cm^3 (10cm distance)
Effective Static Removal Range	100 to 400 mm from the outlet
Static Elimination Time (approx.)	1s/10 cm, 5s/20 cm (from ±1000V to ±100V)
Ozone Concentration	<0.05 ppm
Electrode Probes	Tungsten (φ2.5 mm/Length: 17.8 mm)(Durability: 15,000 hours)
Fan Speed	Fan-free
Ambient Conditions	Indoor use only
Altitude	Up to 2000 meters
Specified Temperature Range	0 °C to 40 °C
Humidity	Maximum relative humidity 80% for temperatures up to 31 °C (87.8 °F), decreasing linearly to 50% relative humidity at 40 °C (104 °F)
Power Supply Voltage Fluctuations	Up to ±10% of the nominal voltage
Installation Category	II
Pollution Degree	2
Operating Temperature Range	5 °C to 40°C / 41 °F to 104 °F
Net Weight	0.5 kg / 1.1 lb
Shipping Dimensions (W × H × L)	28 × 21 × 15 cm / 11 × 8.27 × 5.9 in
Shipping Weight	1.2 kg / 2.6 lb

Compliance

• **Product Safety:** IEC 61010-1:2010, EN 61010-1:2010

• **Electromagnetic Compatibility:** IEC 61326-1:2012 (Class A emissions, General immunity), EN 61326-1:2013 (Class A emissions, General immunity), FCC Part 15 (Class A), Industry Canada ICES-001 (Class A)

• **Environment:** WEEE, RoHS

Accessory

SP, Replacement Electrode ION-100A 30133391